

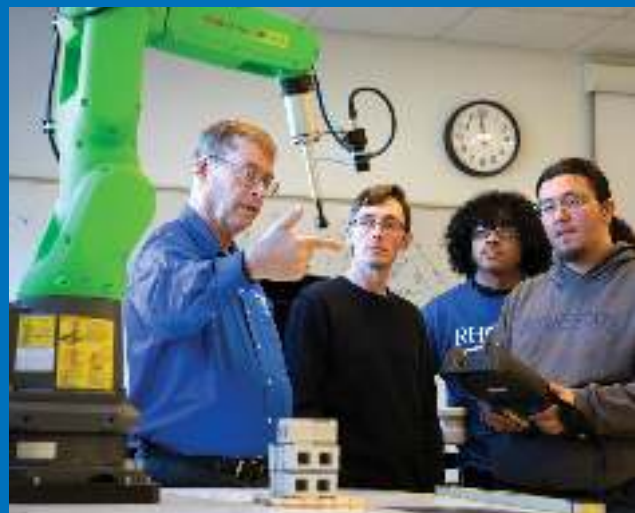


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RHODES STATE COLLEGE

MESSAGE FROM THE PRESIDENT

Dear Students,

We are delighted to share Rhodes State College as the destination of choice for over 4,000 students who come to us from all walks of life. Many attend Rhodes for our signature programs and plan to complete associate degrees. Other students take coursework for certificates, and yet others to achieve certification and licensure requirements. Some of our students are taking college courses in high school with plans for continuing at Rhodes or transferring to another institution to pursue a bachelor's degree.

The foundation of our efforts is demonstrated through our mission, as an institution that changes lives, builds futures and improves communities through lifelong learning. We offer endless opportunities, an exceptional value, and a solid educational pathway that opens doors. We know this to be true because of the 19,000 alumni we have served and those, like you, we continue to serve.

First Lady, Dr. Jill Biden stated... "community colleges are the most powerful engine of prosperity." We agree! Presently we are implementing our 2021-2023 Strategic Plan which is tailored to provide you with an educational experience that provides each of you an equitable opportunity to achieve your educational and career dreams. You will find that we will take student learning to new heights with fabulous experiences and prepare you for in-demand jobs.

Dramatic shifts in workforce needs are happening and Rhodes State is preparing to be an educational leader in current and future educational opportunities for the business and industry sector as well. Rhodes State is renovating space on the main campus for new Emerging Workforce Innovation Centers. The Justin A. Borra Center for Behavioral Services is being created to serve students who are passionate about helping individuals with substance abuse disorders. The Nutrien Agronomy Suite is underway where students will learn about soils and crop, nutrient, and pest management within the Agriculture Technology Program. Future plans include an additional Innovation Center for Advanced Manufacturing, Industry 4.0, and Radiographic Imaging. These newly renovated spaces will provide leading-edge technology and equipment, simulation experiences, and focus on the shifting skillsets to meet employer's workforce needs.

Rhodes State is building to deliver outstanding educational experiences for students and through our future focused efforts, we can ensure that quality programs, training, and value-added services are available for the demands of a globalized technology driven economy and meeting the needs of students and employers.

We are proud to go "beyond expectations" and serve as a distinguished two-year Ohio institution.

Kindest Regards,

Cynthia E. Spiers, PhD
President

ABOUT THE COLLEGE

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Facilities (p. 7)

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History

James A. Rhodes State College (formerly Lima Technical College) was officially chartered in 1971 as a state, public-assisted associate degree-granting institution of higher education. A study conducted by community leaders in 1967 revealed the need for a number of technical educational programs to satisfy the employment demands of area businesses, industries and agencies. As a result, Penta Technical Institute of Perrysburg (now known as Owens Community College) established instructional programs on the Lima Campus in 1969. In the fall quarter of that year, a total of 49 students enrolled in the nursing program, the only course of instruction offered.

In June 1971, at the recommendation of the Ohio Board of Regents, the Allen County Technical Institute District was formed. Functional operation of the new institution began in July 1971 under the interim auspices of The Ohio State University. Finally, in September 1971, the College received its own charter and began operation under its own Board of Trustees. The continued cooperative relationship between Lima Technical College and The Ohio State University has produced an efficient campus operation and a very unique and effective educational environment.

Since the fall quarter of 1971, in which 468 students registered, the College has experienced remarkable growth and development. Today the College offers over 70 associate degrees, majors and certificate programs, and the College's online coursework and off-campus learning centers serve 33 Ohio counties. More than 25,000 participants from manufacturing to allied health organizations have benefited from workforce development services.

As Lima Technical College grew, the need for a name change became increasingly more evident. On March 1, 2002, the Lima Technical College Board of Trustees voted to change the College's name to more accurately reflect the scope and diversity of its courses and services to West Central Ohio and beyond. Effective June 24, 2002, the College formally changed its name to James A. Rhodes State College, in honor of the former Ohio Governor who spearheaded the state's two-year college system.

Rhodes State College has gained accreditation from The Higher Learning Commission, a commission of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, (312) 263-0456 or <https://www.hlcommission.org/>. The majority of Rhodes State's programs have received accreditation from professional associations (see specific program information under "Programs of Instruction" section.)

Facilities

The concept of a single student body on the Lima Campus carries over to the use of facilities. The nine buildings, located on 565 acres, are shared by Rhodes State College and The Ohio State University at Lima. Classroom and laboratory space, comprising a total gross area of 420,000 square feet, is available to sustain current programs in technical and continuing education.

Galvin Hall, the first building constructed on the campus in 1966, houses numerous classrooms, lecture rooms, faculty offices and a recreation area.

The campus auditorium, cafeteria, music laboratory, and some faculty offices are located in Reed Hall, which was built in 1968.

The Technical Education Laboratory building, built in 1970 and renovated in 2008, was designed and constructed specifically to support the technical education programs at Rhodes State College. It presently contains faculty offices, Central Duplication, Security, Testing Center/Accommodative Services, and specialized laboratories for the Law Enforcement, Radiographic Imaging, Medical Assisting, Education, and Human Service programs. Additionally, this houses The Justin A. Borra Center for Addiction Studies and Services which opened in 2023.

Cook Hall, dedicated in 1977, is a multi-purpose facility, which houses the library, gymnasium, classrooms, faculty offices, and The Kenneth & Jean Clemens Dental Hygiene Clinic.

The Public Service Building, dedicated in 1993, houses the administrative offices. The Business Office, Admissions, Advising, Veteran Services, The SHOP, Registration and Records, the Bookstore, Financial Aid, and Transfer Residency Office are located in this building.

The James J. Countryman Engineering & Industrial Technologies Building, dedicated in 1996, provides additional laboratory and classroom space. In 2012, an expansion of the Countryman building was completed to include a 16,000 square foot addition with classrooms, administrative/faculty office space and student soft space. Additional Workforce Development and Innovation to include Career Services and the Small Business Development Center is located in this building. The Nutrien Agronomy Suite is underway where students will learn about soils and crop, nutrient, and pest management within the Agriculture Technology Program.

Dedicated in 1999, the Life and Physical Sciences Building, is a 90,000 square foot structure that houses several classrooms, faculty offices, the Tutoring Center, the biology, chemistry and physics laboratories along with a new ESports lounge and arena.

The Information Technology Building opened in Winter of 2004 and was renamed Keese Hall in honor of retired president Earl Keese. This 33,232 square foot structure houses the business and information technology programs and several administrative offices. In 2014, the Keese Hall Multipurpose Center was opened. This important expansion for campus and community use seats 300-400 people, with access to high quality breakout spaces in the existing Keese Hall.

In August 2021, the Borra Center for Health Science opened in the heart of downtown Lima. The Center is named in honor of Pier C. Borra and Renee A. Borra for their extreme generosity in advancing the College's vision for regional health care education. This facility strategically helps Rhodes State College meet the growing need for more healthcare professionals as well as the training needs of incumbent healthcare professionals. This 50,000 square foot, with cutting-edge technology and equipment, Center houses the nursing, respiratory care, EMS, physical therapist assistant and occupational therapy assistant programs. In addition, the Center has high-tech Simulation Laboratory spaces including four healthcare suites with high-fidelity simulators for student and community experiential learning activities. The Center, an interprofessional state-of-the-art teaching facility, represents a collaborative effort with major hospitals, healthcare partners, businesses, and government to expand educational opportunities, drive community revitalization, enhance business development and innovation, and provide access to healthcare to underserved residents.

Philosophy of Student Learning and Development

At Rhodes State College, our focus is on student learning and development both in and out of the classroom. Therefore, the philosophy of student learning and development at the College is to promote the whole person in the context of a diverse community in which students are encouraged to responsibly manage their lives and educational goals with balance and integrity.

Through a student-centered environment, students are developed toward intellectual, intrapersonal, interpersonal and life-management achievement. As students embark on their educational journey at Rhodes State College, they learn to experience, understand, and appreciate a college education and what it can do for them personally and professionally.

The College adheres to exemplary student affairs practices that are designed to create a student development-centered environment that recognizes diversity and promotes student access and progress. The philosophy of student learning and development is embedded within the Student Affairs' mission, goals, activities, programs and services.

Diversity

Rhodes State College values the pluralistic nature of our society reflected in diversities of race, ethnicity, national origin, religion, economic status, gender, gender identity and expression, age, sexual orientation, veteran status, or abilities. The College recognizes the strengths and challenges that come with social variety and thus promotes diversity in its vision and practices for equity and inclusion.

MISSION, VISION AND VALUES

Mission

Rhodes State College changes lives, builds futures and improves communities through life-long learning.

Vision

Rhodes State College aspires to be the College of choice where students have an equitable opportunity to achieve their career and educational goals. Our people will be the source of innovation and reason for the enriched value added to our students, communities, and partners.

Values

- **Equity:** Committing to programs, services, policies and practices, which support the successful entry and participation of diverse populations of students, faculty, and staff.
- **Quality:** Providing excellence in programs and services that exceeds expectations.
- **Integrity:** Acting in an honest, responsible, and ethical manner; the foundation for trust.
- **Innovation:** Responding with agility, urgency, and design, bringing value to our internal and external communities.
- **Passion:** Expressing an enthusiastic and caring “fire” that brings meaning to our work and makes a positive difference in the lives of others.
- **Compassion:** Helping students and each other manage hardship by invoking a positive action; contributing to resiliency and well-being.

ACADEMIC CALENDARS

Summer Session 2023

Monday, May 29	Memorial Day - no classes, offices closed
Tuesday, May 30	8-week, 10-week term begins
Monday, June 19	Juneteenth - no classes, offices closed
Tuesday, July 4	Independence Day observed – no classes, offices closed
Friday, July 21	Last day of 8-week term
Friday, August 4	Last day of 10-week term

Fall Semester 2023

Monday, August 21	Full-term and first half-term classes begin
Monday, September 4	Labor Day – no classes, offices closed
Thursday, October 12	Last day of first half-term classes
Friday, October 13	Fall Break - no classes, offices open
Monday, October 16	Second half-term courses begin
Friday, November 10	Veteran's Day observed - no classes, offices closed
Thurs.-Fri., November 23-24	Thanksgiving Break - no classes, offices closed
Friday, December 1	Last day of full-term classes
Friday, December 8	Last day of second half-term classes
Mon.-Tue., Dec. 25-Jan. 2	Holiday Break - no classes, offices closed

Spring Semester 2024

Monday, January 8	Full-term and first half-term classes begin
Monday, January 15	Martin Luther King Day - no classes, offices closed
Friday, March 1	Last day of first half-term classes
Monday-Friday, March 4-8	Spring Break - College offices open
Monday, March 11	Second half-term classes begin
Friday, April 26	Last day of full-term classes
Friday, May 3	Last day of second half-term classes
Saturday, May 4	Commencement

ADMISSIONS

Rhodes State College observes an “open door” admissions policy. Admission to the College does not guarantee admission to a particular course, program or out-of-state online delivery. Out-of-state students, planning to enroll in online coursework while living out-of-state, should confirm Rhodes State is authorized to deliver online courses within that state. Call (419) 995-8320 or go to www.RhodesState.edu for more information.

General Admissions Procedures

To apply to Rhodes State College, prospective students must complete an online application for admission through the Rhodes State website. There is a one-time \$25 non-refundable student onboarding fee. This fee will be charged at the time you register for your first semester and is due with your first-semester bill.

- Rhodes State College does not require a high school transcript or GED scores for admission to the College or for degree conferral.
- Students applying for Federal Financial Aid must submit an official high school transcript with graduation date or GED certificate with scores to confirm that they are qualified to study at the post-secondary level and therefore is eligible for financial aid.
- An applicant transferring to Rhodes State College from another college, university, or other post-secondary institution, should request an official transcript be sent directly to Rhodes State College for transfer credit evaluation.

A high school student considering enrolling before graduation should refer to the College Credit Plus section (p. 11) in this catalog for more information.

Certain professions prohibit individuals with criminal records from practicing. If a student has been convicted of a misdemeanor or felony, he/she should consult the Office of Admissions for the appropriate referral for information concerning eligibility for a professional license.

American College Test (ACT)

The ACT is a standardized test that measures college readiness. An enhanced version of the ACT has been developed and administered since the 1989 academic year. This enhanced version does represent an adjusted grading scale. If an applicant took the ACT prior to 1989, his/her score must be adjusted to meet the new enhanced version scores. Consult the Office of Admissions for the correct conversion. ACT is not required for admission to Rhodes; however, sub-scores may be used to meet established course prerequisites.

Processing

Once the application has been received, the student will be notified regarding their admission and next steps in the enrollment process.

Placement Testing

Prior to registration in courses with a prerequisite of mathematics, reading, and/or writing or science, course prerequisites must be met. Course placement will be guided by the prerequisites identified in the course descriptions in this catalog. College Readiness (Transitions) courses taught by ASPIRE instructors may serve as a prerequisite to

developmental math and reading courses (for more information on ASPIRE, contact the Tutoring Center).

ACCUPLACER is one measure used for placement into mathematics, science, and reading courses. ACCUPLACER does not function like a typical test because there is no “passing” score. This placement test measures current skill level and identifies the best place to start.

Students may be exempted from some or all placement testing if at least one of the following conditions applies:

- The student is a former Rhodes State College student with qualifying placement scores on file from less than two years ago.
- The student has submitted qualifying placement scores from another college or university to the Office of Admissions.
- The student has submitted official college transcripts showing successful completion of appropriate college-level mathematics and/or writing courses with a B grade or higher.
- The student has submitted a copy of ACT/SAT test scores to the Office of Admissions and, based on specific sub-scores, has met requirements.
- The Dean of the Division in which the course is housed approves enrollment in one or more courses for personal self-enrichment.

Orientation

New students will be assigned a Success Navigator to assist them through the enrollment process. Success Navigators will provide information on our orientation programs that are held before each semester and are designed to introduce students to success strategies, college personnel, registration procedures, facilities, and requirements for their academic program.

Orientation information will be provided to students after their acceptance to the College. Students will be guided to their preferred option for orientation by their Success Navigator.

Transfer and Transient students are not required to attend an orientation but are encouraged to do so. They must meet individually with a Success Navigator, however, prior to their first registration.

To learn more about our Orientation, visit our New Student Orientation page.

College Credit Plus

Kitt Horn, BS, **Dean, K-12 Partnerships**
 Phone: (419) 995-8430
 Email: horn.k@rhodesstate.edu
 Office: PS 146

Rhodes State College Credit Plus (CCP) Program provides students in grades 7 through 12 the opportunity to earn both high school credit to satisfy graduation requirements and college credit that will be on their Rhodes State College transcript prior to graduating from high school.

The program promotes rigorous academic pursuits and has a variety of options for eligible college-ready high school students to get an early start toward completing a college degree. Many Rhodes State courses transfer to any public college or university in Ohio, and also transfer to many private institutions, as well.

Benefits to students and families are that they earn high school and college credit for courses taken and reduce the time and cost of earning a

college degree. Public, private, and home school students can participate in the CCP Program that is governed by the State of Ohio. Students work with their school counselors to obtain specific CCP information about participating in their middle or high school.

CCP courses are taught in a number of ways, including:

- At the high school taught by a high school teacher who has been approved to teach the college course; or
- At the high school taught by Rhodes State faculty; or
- At the Rhodes State College campus taught by Rhodes State faculty; or
- Online taught by Rhodes State faculty.

Admission and Eligibility

Rhodes State adheres to the Admission and Eligibility requirements of the Ohio Department of Higher Education College Credit Plus Program.

Students in grades 7-12 may apply for Rhodes State's College Credit Plus admission. The College admits students based on college-readiness in one or more subject areas. Admission to the College does not guarantee direct admission to a particular course or program. The student must meet any course prerequisites prior to registration. The high school counselor or Rhodes State Student Success Navigator can help explain the options, deadlines, and how to proceed. For answers to frequently asked questions, go to <https://higher.ed.ohio.gov/initiatives/access-acceleration/college-credit-plus>

To participate in College Credit Plus, a student must:

- a. Secure the permission of his/her parents or legal guardian and a high school official.
- b. Meet the Rhodes State College Admissions Requirements.
- c. Complete and submit the following required materials:
 - Rhodes State College Credit Plus Admissions Application
 - Official High School Transcript
 - Standardized test results

Application deadlines:

- Summer Semester - April 1
- Fall Semester - August 1
- Spring Semester - November 15

See the listing of degrees and certificates for student admissions requirements for each program.

Alternative High School Pathways

Rhodes State provides additional opportunities for students seeking to complete their high school education using alternative pathways. More information is available by contacting K-12 Partnerships at (419) 995-8430.

Limited Enrollment Programs

Rhodes State College offers a number of programs within the Health Sciences and Business, Technology, and Public Service Divisions. These programs have specific admission requirements beyond the general admission requirements of the College. In addition, a student must be 18

years or older to participate in the clinical phase of a health program. At the present time, the limited enrollment programs are:

Limited Enrollment

Criminal Justice - Basic Police Academy
Dental Hygiene
Health Information Technology (Marion Technical College)
Medical Laboratory Technology (Marion Technical College)
Nursing
Occupational Therapy Assistant
Physical Therapist Assistant
Practical Nursing Certificate Program
Respiratory Care
Radiographic
Imaging
Surgical Technology

Transient (Guest) Students

Students may be admitted to Rhodes State College as a transient (guest) student for a limited period of time. Transient students are regularly enrolled at another institution of higher education and expect to return to that institution. To ensure Rhodes State coursework receives full credit at their home institution, students should contact the advisor, registrar, or dean from their home institution for course description review and completion of any applicable forms.

Transients students apply as non-degree seeking students. Official transcripts are not required from their home institution but students may be asked to provide evidence that they meet established course prerequisites.

International Students

Rhodes State College welcomes international students. Students from other countries may require additional documentation to attend. Specific requirements have been set forth for international students wishing to attend Rhodes State. The College defines international applicants as those students who are not a United States citizen and who are not permanent residents. Those seeking international student status on an F-1 Visa or F-1 Immigration Status **must** comply with the following steps:

- a. Provide country of birth and country of citizenship.
- b. Provide the most current foreign address.
- c. Provide proof of English language proficiency. International students must obtain a minimum score of 550 on the paper-based or 213 on the computer-based Test of English as a Foreign Language (TOEFL) or a minimum score of 80 on the Michigan Test of English Language Proficiency (MTELP).
- d. Must provide proof of adequate financial support.
- e. Provide copies, transcripts or other records of courses taken.
- f. Must be accepted for the purpose of enrolling in a full-time program of study, not as a part-time or casual student. When an international student is accepted to the College, the student will receive Form I-20 (Certificate of Eligibility) which must be presented to the US Consulate in the student's home country to arrange for an F-1 visa.

For more information, contact the Office of Adult and Traditional Enrollment located in the Public Service Building, Room 148 or phone at (419) 995-8320.

Program 60

Rhodes State College allows Ohio residents who are 60 years of age or older to participate in selected courses as guests of the College. Participants are admitted to credit courses without a fee on a space-available basis and are not required to take examinations since college credit is not awarded. For more information, contact the Office of Advising at 419-995-8400 or Advising@RhodesState.edu.

Residency Requirements

The following guidelines are used by Rhodes State College to determine Ohio residency for tuition purposes. These guidelines conform with the policy definitions and rules adopted by the Ohio Department of Higher Education.

A resident of Ohio "for all other legal purposes" shall mean any person who maintains a 12-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive welfare benefits, and who may be subject to tax liability under Section 5747.02 of the Revised Code; provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.

A. Ohio Residency Defined

The following persons shall be classified as residents of the state of Ohio for tuition surcharge purposes:

- a. A student whose spouse, or a dependent student, at least one of whose parents or legal guardian, has been a resident of the state of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
- b. Persons who have resided in Ohio for all other legal purposes for at least 12 consecutive months preceding their enrollment in an institution of higher education and who are not receiving, and have not directly or indirectly received in the preceding 12 consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.
- c. Persons who are dependent children of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment and established domicile in Ohio. Documentation of full-time employment and domicile will be required.
- d. A veteran, and the veteran's spouse and any dependent of the veteran, who meets both of the following conditions:
 - i. The veteran
 1. either served one or more years on active military duty and was honorably discharged or received a medical discharge that was related to the military service or
 2. was killed while serving on active military duty or has been declared to be missing in action or a prisoner of war.
 - ii. If the veteran seeks residency status for tuition surcharge purposes, the veteran has established domicile in Ohio as of the first day of term of enrollment in an institution of higher education. If the spouse or a dependent of the veteran seeks residency status for tuition surcharge purposes, the veteran and the spouse or dependent seeking residency status have established domicile in Ohio as of the first day of a term of enrollment in an institution of higher education, except that if

the veteran was killed while serving on active military duty or has been declared to be missing in action or a prisoner of war, only the spouse or dependent seeking residency status shall be required to have established domicile in Ohio.

- e. A veteran who is the recipient of federal veterans' benefits under the "All-Volunteer Force Educational Assistance Program," 38 U.S.C. 3001 et seq., or "Post-9/11 Veterans Educational Assistance Program," 38 U.S.C. 3301 et seq., or any successor program, if the veteran meets all of the following criteria:
 - i. The veteran served at least ninety days of active duty.
 - ii. The veteran enrolls in a state institution of higher education, as defined in section 3345.011 of the Revised Code.
 - iii. The veteran lives in the state as of the first day of a term of enrollment in the state institution of higher education
- f. A person who is the recipient of the federal Marine Gunnery Sergeant John David Fry scholarship or transferred federal veterans' benefits under any of the programs described in number 5 above, if the person meets both of the following criteria: (In order to qualify the veteran's period of active duty must have been at least ninety days.)
 - i. The person enrolls in a state institution of higher education.
 - ii. The person lives in the state as of the first day of a term of enrollment in the state institution higher education.
- g. A person who is using federal veterans' educational assistance under the "Vocational Rehabilitation and Employment," 38 U.S.C. 3101 et seq if the person meets the following criteria:
 - i. The person enrolls in a state institution of higher education.
 - ii. The person lives in the state as of the first day of a term of enrollment in the state institution of higher education.

B. Specific Exceptions and Circumstances

- a. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for these purposes.
- b. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
- c. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.
- d. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile as long as such person has fulfilled his or her tax liability to the state of Ohio for at least the tax year preceding enrollment.
- e. A person who has been employed as a migrant worker in the state of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.
- f. A person who was considered a resident under this rule at the time the person started a community service position as defined under this rule, and his or her spouse and dependents shall be considered residents of Ohio while in service and upon completion of service in the community service position.

- i. "Community Service Position" shall mean a position volunteering or working for: VISTA, AmeriCorps, City Year, the Peace Corps, "Teach for America," or any similar program as determined by the Ohio Department of Higher Education; or
 - ii. An elected or appointed public official for a period of time not exceeding 24 consecutive months.
- g. A person who returns to the state of Ohio due to marital hardship, takes or has taken legal steps to end a marriage, and reestablishes financial dependence upon a parent or legal guardian (receives greater than 50% of his or her support from the parent or legal guardian), and his or her dependents shall be considered residents of Ohio.
- h. A person who is a member of the Ohio National Guard and who is domiciled in Ohio, and his or her spouse and dependents, shall be considered residents of Ohio while the person is in Ohio National Guard service.
- i. A person who, while a resident of Ohio for state subsidy and tuition surcharge purposes, graduated from an Ohio high school or completed the final year of instruction at home as authorized under section 3321.04 of the Revised Code, if the person enrolls in an Ohio institution of higher education and establishes domicile in Ohio as of the first day of the term of enrollment, the student shall be classified as a resident of Ohio for tuition purposes, regardless of the student's residence prior to that enrollment, unless the person is in the United States on a student visa and has not petitioned for a change in status.
- j. A person who enrolls in an institution of higher education and establishes domicile in this state, regardless of the student's residence prior to that enrollment, unless the person is in the United States on a student visa and has not petitioned for a change in status and the person meets all of the following criteria:
- i. The person officially withdrew from a school in this state while the person was a resident of this state for state subsidy and tuition surcharge purposes;
 - ii. The person has not received a high school diploma or honors diploma awarded under section 3313.61, 3313.611, 3313.612, or 3325.08 of the Revised Code or a high school diploma awarded by a school located in another state or country; and
 - iii. The person while a resident of this state for state subsidy and tuition surcharge purposes, took a high school equivalency test and was awarded a certificate of high school equivalence.
- k. A dependent person classified as a resident of Ohio for these purposes under definition 1 of Ohio Residency Defined and who is enrolled in an institution of higher education when his or her parents or legal guardian removes their residency from the state of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.
- l. In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under definition 1 and 2 of Ohio Residency Defined.
- m. For students who qualify for residency under definition 3 of Ohio Residency Defined, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than twelve months after accepting employment and establishing domicile in Ohio.
- n. Any person once classified as a nonresident, upon the completion of 12 consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person, in fact, wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of documentation regarding the sources of a student's actual financial support.
- o. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.
- p. For the purpose of determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.
- q. Any institution of higher education charged with reporting student enrollment to the Ohio Department of Higher Education for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of his or her Ohio residency. The institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination of residency.

Northwest Ohio Regional Tech Prep Center

Stephen Peck

Phone: (419) 995-8811

Email: peck.s@rhodesstate.edu

Office: KH 215

Tech Prep is a career-focused initiative combining rigorous academic coursework with high technology interests. Students develop skills in math, science, and communications along with their technical classes to prepare for targeted career pathways. After completing a high school program, College Tech Prep students transfer smoothly into associates and bachelor's degree programs.

Advanced Standing

Depending upon the specific College Tech Prep program, students who attend Rhodes State College can save on tuition costs by earning Advanced Standing credits while in high school. High School students already enrolled in a College Tech Prep program should see their school counselor about Advanced Standing credits at Rhodes State College.

Scholarships

All Tech Prep students successfully completing their program are eligible to receive a \$1,000 scholarship. Students who maintain a 3.0 or higher cumulative GPA are eligible to renew the \$1,000 scholarship for a second year. The scholarship is split between the fall and spring academic semesters.

College Tech Prep Programs

The Northwest Ohio Regional Tech Prep Center serves high schools throughout northwest Ohio, including those in the following career-technical planning districts: Apollo Career Center, Lima City Schools, Miami Valley Career Technology Center, Millstream Career Compact, Ohio Hi-Point Career Center, Tri-Star Career Compact, and Vantage Career Center.

Academic Programs

Check with your high school or career center for specific studies in these areas:

- Agriculture & Environmental Systems
- Arts & Communications
- Business & Administrative Services
- Construction Technologies
- Education & Training
- Engineering & Science Technologies
- Family & Consumer Sciences
- Finance
- Health Science
- Human Services
- Information Technology
- Law and Public Safety
- Manufacturing Technologies
- Marketing

Additional Information

Visit www.techprepnwo.org

TUITION & FINANCIAL ASSISTANCE

The key to financing education is to start planning early and keep your options open. The goal of the Financial Aid Office is to provide financial assistance to students through monetary aid and scholarship distribution. Rhodes State College will make every effort to recognize any difference between the student's costs to attend the institution and the amount the family is able to pay. Once this difference is determined, the Financial Aid Office will assist in identifying strategies to overcome this financial difference.

Tuition and Fees

Student Onboarding Fee

A non-refundable student onboarding fee of \$25 is charged to each applicant for admission to full-or part-time status. The student onboarding fee is only charged once, at the time of registration for the student's first semester, and is due with the first-semester bill.

Registration Fee

There is a non-refundable registration fee of \$31 per term for part-time (1-11 credit hours) students. Full-time students, defined as taking 12 credit hours or more, will not be charged a registration fee. This is refunded only when classes are canceled by the College.

Tuition Charges

Tuition charges are per credit hour. Students pay for every credit hour registered.

Credit Hours	Ohio Resident	Non-Resident
1	\$ 190.00	\$ 380.00
2	\$ 380.00	\$ 760.00
3	\$ 570.00	\$ 1,140.00
4	\$ 760.00	\$ 1,520.00
5	\$ 950.00	\$ 1,900.00
6	\$ 1,140.00	\$ 2,280.00
7	\$ 1,330.00	\$ 2,660.00
8	\$ 1,520.00	\$ 3,040.00
9	\$ 1,710.00	\$ 3,420.00
10	\$ 1,900.00	\$ 3,800.00
11	\$ 2,090.00	\$ 4,180.00
12	\$ 2,280.00	\$ 4,560.00
13	\$ 2,470.00	\$ 4,940.00
14	\$ 2,660.00	\$ 5,320.00
15	\$ 2,850.00	\$ 5,700.00
16	\$ 3,040.00	\$ 6,080.00
17	\$ 3,230.00	\$ 6,460.00
18	\$ 3,420.00	\$ 6,840.00
19	\$ 3,610.00	\$ 7,220.00
20	\$ 3,800.00	\$ 7,600.00

NOTICE: Tuition and all fees are subject to change without prior notice.

Refund of Tuition

To receive a tuition refund, students must complete the drop/add form in the Office of Advising and Counseling, Room 148 of the Public Service Building. The date used to calculate the amount of fees to be refunded will be the date which the completed drop/add form is approved by the Office of Advising and Counseling. The refund schedule for a standard term is as follows:

Week	Days of Term	Refund %
(1) First	1-7	100
(2) Second	8-14	50

No refunds will be given for courses dropped after the second week of the term. All refunds will be issued within 30 days of the approved withdrawal.

Forms of Payment

Cash, checks and money order payments can be made in person at the Business Office PS222 during normal business hours. Payments can also be made on student accounts by accessing the student STARS account. Rhodes State College accepts online only payments of tuition and fees by MasterCard, Visa, Discover or American Express. Credit card payments are processed through a third-party vendor (Cashnet) who assesses an additional 2.75% convenience fee. In addition, payments made by credit card may be subject to additional fees and interest assessed by the card issuer. The convenience fee, as well as any applicable fees or interest assessed by the card issuer, are not assessed by Rhodes State College and are not refundable through Rhodes State College regardless of circumstances.

Student Installment Payment Plan

Rhodes State College offers convenient payment plans allowing students to pay in more manageable monthly installments with a minimal, non-refundable, \$20 enrollment fee. Students can use a plan to pay all or part of their tuition and avoid the high interest rates that normally come with a traditional loan.

- Simple enrollment process ensuring students accounts are set up properly with the College
- Payments conveniently made electronically — no postage or lines to worry about
- Easy access to manage accounts online

In order to allow family and friends to help students with their payments, students can send an email, with an imbedded link, that will allow others to make payments on the student account.

Payment plans are processed through a third-party vendor (Cashnet).

Students can access the payment plan option through their STARS account. The enrollment fee is not assessed by Rhodes State College and is not refundable through Rhodes State College regardless of circumstances.

Late Payment Fee

There is a late payment fee of \$50 for tuition and fees received after the published payment deadline that are not enrolled in a payment plan, or those still having an outstanding balance.

Late payments on payment plans are assessed by Cashnet and not by Rhodes State College.

Returned Payment Fee

A fee of \$35 will be assessed for all checks returned to the College. A fee of \$25 will be assessed for all rejected web payments.

Delinquent Payments

Students who have neglected to pay their fees in full may be denied services such as grades, transcripts, financial aid, further registration, and graduation. Some accounts may be referred to a collection agency. In addition to any outstanding tuition and fees, the student will be responsible for the costs of collection including, without limitation, interest, penalties, collection agency costs, court costs, and attorney fees.

Students that encounter difficulty in meeting their financial obligations should discuss the situation with the Business Office or Financial Aid Office before such measures become necessary.

Laboratory Fees and Instructional Support Charges

Laboratory fees and instructional support charges will be assessed for the cost of supplies and equipment used in selected courses.

Distance Education Fee

There is a \$10.50 per credit hour charge for each distance education course taken.

Technology Fee

There is a \$3 per credit hour charge for technology to full-time and part-time status students taking over three credit hours per semester.

Tuition Reimbursement/Deferment Option

For students eligible for tuition reimbursement benefits from their employer, the College offers deferment of tuition and fees until 30 days after the term of registration. There is a \$25 fee per term to defer tuition with this option. It is necessary for students to complete the Tuition Reimbursement/Deferment form each term they choose to use this option. The \$25 fee is payable when the deferment form is presented to the Business Office.

Credit by Examination, Credit for Experience, and Credit for Non-Academic Learning

Students may receive up to 30 credit hours. The fee is \$25 per credit hour, payable in the Business Office. These requests cannot be processed during the term of intended graduation. See the Dean/Chairperson of your academic division for more information.

Veterans Education Benefits

U.S. Military, Service Members, Veterans, and Military-Connected Students

Rhodes State College is committed to providing our student veterans, service members, and family members receiving VA Education Benefits

with the guidance needed to successfully complete their education. It is our mission to facilitate the transition of veterans and their families from military to college life. Rhodes State College offers a variety of associate degrees and certificate programs that prepare students for the next level of academic achievement and/or career attainment.

U.S. Military and Service Members – Priority Registration

Rhodes State College supports student veterans in achieving academic goals so they can move easily and effectively into the competitive workforce. In support of our student veterans and military service members and in compliance with the Rhodes State Valuing our Veterans Support and Assistance policy and, Ohio Revised Code §3345.422, Rhodes State College will open a priority registration period for student veterans and military service members beginning one week prior to the opening of registration to the general student population. During this priority registration timeframe, veterans and currently serving military service members may register for classes. It is recommended that veterans and currently serving military service members register as soon as possible to ensure any issues encountered can be brought to the attention of Rhodes State staff. Please contact Crystal Snyder to register for classes at snyder.c@rhodesstate.edu or 419-995-8041 for assistance.

NOTE: The term “veteran or military service member” refers to an individual who:

- Has served, or is currently serving, in the United States Armed Forces including a reserve component and the National Guard, and
- Was discharged or released from such series with a condition other than dishonorable.

Rhodes State College has a single point of contact for veterans, active duty service members, and military-connected students. Please contact Nicole Dittman at veterans@rhodesstate.edu or 419-995-8479.

Veterans Benefits and Transition Policy

Rhodes State College, in accordance with the Veterans Benefits and Transition Act of 2018, will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of payment by the U.S. Department of Veteran Affairs. This policy is limited to tuition funds paid by the U.S. Department of Veteran Affairs. Please contact our School Certifying Official, Jeff Engle at Engle.J@RhodesState.edu or 419-993-7408 for assistance.

To learn more about the variety of supportive services Rhodes State provides veterans and military-connected students, visit the College's veteran's webpage.

Financial Aid

The Financial Aid Office is located in the Public Service Building, Room 148. The office is open for walk-ins and appointments: Monday through Friday, 8:00 a.m. to 5:00 p.m. with extended hours prior to and immediately after the start of the semester terms.

Contact the Financial Aid Office:

(419) 995-8802
(419) 995-8112 – FAX

Finaid@RhodesState.edu

Basic Aid Opportunities

The following programs are available at Rhodes State College:

- a. **Pell Grant** - The Federal Pell Grant is awarded based on full-time (12 hrs. or more), part-time (9-11 hrs.), half-time (6-8 hrs.), or less than half-time (1-5 hrs.). The award maximum is \$6,895. A student is eligible for the Pell Grant for 12 full-time semesters or 600%. Check your Lifetime PELL percentage at www.studentaid.gov.
- b. **SEOG** - The Federal Supplemental Educational Opportunity Grant is awarded to those students who have the lowest EFCs, are enrolled full-time or part-time, and have a GPA greater than 1.99. The award maximum is \$4,000 and funds are limited. Not all students who meet the qualifications will be awarded SEOG due to budgetary restrictions. Priority is given to those students who file the FAFSA by May 15.
- c. **Federal Work-Study** - The Federal Work-Study Program (FWSP) award determination is based on the student's eligibility using federal guidelines. A current FAFSA must be on file to determine eligibility. FWSP funds are awarded on a first-come, first-served basis and the rate of hourly pay is Ohio minimum wage. Students can work up to a maximum of 19 hours per week and students must meet the enrollment requirements. To be considered for an FWSP position, you must complete a Student Employee Application at <https://www.collegecentral.com/rhodesstate/> and apply for the positions in which you are interested.
- d. **Federal Direct Loans** - Both Subsidized and Unsubsidized loans must be repaid. The maximum loan for dependent students is \$5,500 for up to 30 earned hours and \$6,500 for 31 hours to maximum hours per program. For independent students and dependent students whose parents are denied a Parent Plus Loan, an additional \$4,000 may be secured each year. Failure to maintain at least six credit hours each term will result in the cancellation of the loan.
- e. **Federal Direct PLUS Loans** - The PLUS loan is a loan borrowed by a parent for a dependent undergraduate student. The maximum award amount is the student's Cost of Attendance less other financial aid that the student receives. A student must be registered for at least six credit hours to remain eligible. Failure to maintain at least six credit hours each term will result in the cancellation of the PLUS loan.

Estimated Financial Assistance (EFA) is all financial aid from other sources that the student is expected to receive. Need-based aid includes Subsidized loans, Pell grant, Federal Work-Study and certain scholarships.

All federal, state and institutional aid cannot exceed the student's Cost of Attendance (COA).

Other Sources of Financial Aid

Students are encouraged to check the internet for additional private scholarships and funding opportunities. Reliable sources are the Rhodes State College website, www.fastweb.com, and www.salliemae.com/plan-for-college/scholarships. For more loan funding options, students may inquire about Private loan and PLUS loan details and eligibility requirements in the Financial Aid Office. Also, local, county and state agencies: such as BVR and WIOA, may have funding sources based on specific criteria.

Note: Student aid packaging will include funding from other third-party sources in combination with all federal, state, and institutional aid which cannot exceed the student's Cost of Attendance (COA).

Book Voucher

Students' financial aid is credited to their billing account. Depending on the amount of financial aid awarded, a student may receive a book voucher for the purchase of books and materials. Book voucher forms which can be found on our website under Financial Aid must be submitted to the Office of Financial Aid one day before use, and all aid requirements must be completed.

Procedures and Eligibility

Most financial aid awards are determined by analyzing a family's ability to pay in relation to the cost for a school year. In order to determine financial need on a uniform basis, each applicant must submit the Free Application for Federal Student Aid (FAFSA). Students are encouraged to complete the FAFSA via the internet at www.studentaid.gov. If a student prefers to complete a paper form, the student may request one from the Department of Education at (800) 433-3243.

After financial need has been established, a student's need may be met through one of several funds or through a financial aid package consisting of a combination of funds and programs.

Students should submit financial aid forms prior to each term's deadlines for aid to be processed and applied to the following academic term. (Summer - April 1, Fall - June 1, Spring - November 1) Students who apply after this date may find funds depleted. Applicants entering directly from high school are advised to apply early in their senior year, no later than May 1. Contact the Financial Aid Office or a high school counselor for further information. The Rhodes State school code for the FAFSA is **010027**. Federal financial aid requires an official High School Transcript or GED, with scores for disbursement of federal financial aid.

Federal Direct Loan Program

Federal Direct Student Loans are available and are commonly referred to as subsidized or unsubsidized loans. The **subsidized** Direct loan is awarded based on financial need. Students do not pay interest on these loans until they cease at least half-time enrollment, or they graduate from their respective institution. The federal government subsidizes the interest during the time the student is enrolled in school. The **unsubsidized** Direct loan is not awarded based on financial need but rather on the individual's desire for additional funds. Students will be charged interest from the time their loan is disbursed until the loan is paid in full. Students may receive both a subsidized and an unsubsidized loan during the same enrollment period, depending on financial need.

The total amount for which a student may be eligible for is determined by dependency status, enrollment status, Cost of Attendance (COA) and student Expected Family Contribution (EFC).

a. Maximum yearly loan amount

Students enrolled in a degree-seeking program may complete a loan application available from the Financial Aid Office or on the Rhodes State website. Students must be enrolled for and complete a minimum of six credit hours per term to be eligible for loans.

Students classified by the federal government as "**Dependent**" are eligible to borrow the following amounts:

- \$5,500 per year during the first 30 hours of earned coursework (up to \$3,500 is subsidized)
- \$6,500 per year during the remainder of the student's program (up to \$4,500 is subsidized)

Students classified by the federal government as "**Independent**" or a "**student whose parent is denied a parent plus loan**" are eligible to borrow the following amounts:

- \$9,500 per year during the first 30 hours earned of course work (up to \$3,500 is subsidized)
- \$10,500 per year during the remainder of the student's program (maximum number of attempted hours and up to \$4,500 is subsidized)

Rhodes State College may only process loans for the maximum number of attempted hours for each program. Students are reminded that the total debt they may accumulate during their **ENTIRE** undergraduate career (associate degree and bachelor's degree) from all Direct loans combined is \$31,000 as a dependent student and \$57,500 as an independent student (of which no more than \$23,000 can be subsidized loans).

Schell Loan Program

The Rhodes State College Foundation's Schell Loan Program is an interest-free loan that is made available through the generosity of a grant from the Charles E. Schell Foundation administered by Fifth Third Bank. This loan is non-interest bearing and carries a "moral obligation repayment clause" thus directing the recipient to ultimately make repayment of the loan amount. The funds are restricted for the educational benefits of citizens in Ohio, Kentucky, and West Virginia. To apply, students need to meet specific requirements. Contact the Financial Aid Office (FinAid@RhodesState.edu or 419-995-8802) for further details regarding eligibility. Applications will be mailed to eligible students during Fall semester each year.

Satisfactory Academic Progress (SAP)

Federal regulations require that Rhodes State College develop and enforce standards of satisfactory academic progress prior to awarding students any federal financial assistance. A SAP review process evaluates whether a student is "making measurable progress toward completion of their course of study and eligible to continue receiving federal assistance." All credit hours attempted, from a student's first term of enrollment at Rhodes State College, must be included in the SAP review process.

If a student is not in compliance with the Satisfactory Academic Progress Standards, they are ineligible to receive the following:

- Federal Pell Grant
- Federal Direct Loans
- Federal Supplemental Educational Opportunity Grant (SEOG)
- Federal Direct PLUS Loans

- Federal Work-Study
- Student Worker Wages

A student may still receive various scholarships if he/she meets the eligibility and requirements for such scholarship awards.

Notification of Satisfactory Academic Progress

A student who fails to maintain satisfactory academic progress during a term will receive a warning status letter. The letter informs the students that failure to maintain satisfactory academic progress in any subsequent term will result in the suspension of federal aid. If, after one term of warning status, the student still has not corrected the SAP deficiencies, a suspension letter will be mailed informing the student that his/her financial aid has been suspended.

Repeating Courses

The Department of Education will allow for repeating coursework previously taken in a program. Students CAN receive financial aid:

- To repeat a course that has already been passed (D- or higher) only one additional time. Any repeated attempts after that will not be eligible for financial aid. Note that this applies even if you earn a failing grade (E) or withdraw (W) during the second attempt.
- As many times as necessary to repeat a course in which the only previous grade earned has been a failing grade (E).

Auditing

Prior to the 15th day of the term, audited hours will not receive federal financial aid. After the 15th day of the term, students who change to an audit will be subject to a return of Title IV Funds. Auditing a course (s) is not considered successful completion of the course(s) and may affect a student's financial aid status.

Criteria for Determining Satisfactory Academic Progress (SAP)

All Rhodes State College student academic records are reviewed to verify that a student is meeting the Satisfactory Academic Progress (SAP) standards. This includes all transfer credit hours being accepted by Rhodes, developmental courses, and English as a Second Language course taken at Rhodes State College. Those students who are receiving federal student aid are required to maintain SAP standards to remain eligible for federal aid. Please be aware that being eligible to enroll in classes does not mean that the student has an eligible SAP status and can be awarded federal student aid.

The SAP status is reviewed after each semester's grades are posted. All Rhodes State College student records will be reviewed, even if the student did not receive financial aid during their periods of enrollment at Rhodes.

Once the SAP status is determined, students will receive notification via their Rhodes State College email indicating if they are not meeting the SAP requirements.

The criteria used in determining student academic progress at Rhodes State College include:

- Grade Point Average (GPA)
- Credit Hours Attempted/Completed (Percent of Completion Rate)
- Maximum Timeframe/Credit Hours for Program Completion

A. Grade Point Average (GPA) Requirement Explained

To receive federal student aid (Title IV) a student must maintain a minimum cumulative GPA 2.0. A student will be placed on warning status when he/she drops below the required Minimum Cumulative GPA. Failure to achieve Minimum Cumulative GPA requirements for two consecutive terms will result in the suspension of all federal financial aid.

B. Credit Hours Attempted/Completed Explained

To receive federal student aid (Title IV), students must successfully complete at least 67% of all credit hours attempted each term. Financial aid hours are set on the 15th day of the semester, and all attempted hours after that time will be calculated in the completion rate. An unsuccessful completion of a course is one that has been dropped, audited, or ultimately failed with a grade of "E." To calculate your completion rate, you will divide your successfully completed hours by the total number of credit hours attempted. Financial Aid does not round percentages (i.e., 66.67% does not round to 67%).

Students will be placed on warning status the first term in which their cumulative completion rate drops below the required 67%. Failure to meet the minimum completion rate in two consecutive terms will result in the suspension of all federal financial aid. Successful completion is defined as receiving a letter grade "D" or better or an "S."

For example, the student registers for 12 credit hours in the fall term and passes only 8 hours, he/she would be placed on warning status for the Spring term as the student did not successfully complete at least 67% of their course work ($8 \text{ passed hours} / 12 \text{ registered hours} = 66.67\%$). Therefore, he/she must achieve the minimum 67% completion rate for spring term. If the student does not successfully complete at least 67% of registered credit hours for the spring term, his/her federal financial aid will be suspended for the next term, he/she enrolls.

C. Maximum Time/Credit Hours for Program Completion Explained

Students must complete the degree requirements within 150% of the required hours for their degree program. Students lose eligibility for future awards after the term in which they exceed the maximum hours. All hours attempted at Rhodes State (not just for your current program), and any transfer credits from other institutions are considered when determining financial aid eligibility; whether or not financial aid was received.

To determine the maximum allowable hours for a specific program of study (major), refer to the Rhodes State College Catalog, note the total hours required for the program, and multiply that figure by 1.5.

For example, if a student is enrolled in a program that requires 60 credits to graduate, the student cannot attempt more than 90 credits, or his/her financial aid will be suspended.

An attempted credit includes all credits that you are enrolled in after the add/drop deadline for the course and all courses that appear on your transcript. These may include courses for which you earn a regular letter grade, a "W" to show withdrawal, and pass/no pass grades. Regardless of where the hours were attempted (transfers from other institutions, or at Rhodes State College), Rhodes State College Satisfactory Academic Progress policy will apply. These hours include developmental courses, repeated courses, transfer courses, and courses from which a student withdraws. Students transferring to Rhodes State will have their eligibility determined after all transfer credits have been applied to their academic record.

Options for Reinstatement of Financial Aid after Suspension

- a. If the failure to maintain Satisfactory Academic Progress (SAP) was due to extenuating circumstances, students will need to submit the following documentation to the Financial Aid Office:
 - A completed SAP Appeal Form. (found online or in the Financial Aid Office)
 - A typed signed letter detailing the extenuating circumstances that caused you to unsuccessfully complete your classes. In addition, describe what has changed for you to be successful going forward.
 - Documentation showing the circumstances for which the student failed to meet the requirements.
 - Meet with your academic advisor to determine if you can meet SAP within one semester. If it is determined that you cannot, you must submit an Educational Planning Form with your appeal documentation. The Educational Planning Form will list all the courses you need to bring yourself to good standing and/or are needed to graduate with your degree.
2. If the failure to maintain Satisfactory Academic Progress (SAP) was not due to extenuating circumstances:
 - Successfully complete a minimum of three (3) credit hours required within your academic major. All courses for which you are registered must be successfully completed.
 - Achieve a term GPA of 2.0 without the use of federal financial aid funds and bring cumulative GPA to minimum standards set forth by your program.

Both of the options mentioned above must meet the following conditions:

- Pass the class(es) with a minimum GPA of 2.0 for the term.
- Pay your bill in full by the end of the term without the use of federal funds. (Out of pocket, scholarships, payment plan, etc.)
- Maintain a cumulative GPA that meets your program GPA requirement.
- Submit a Satisfactory Academic Progress (SAP) Review Request Due to Student Achieving SAP without Title IV form (found in the Financial Aid Office) with a typed and signed letter stating the courses the student has taken and passed to determine if aid will or will not be restored.

Approval of Appeal: If the written appeal is granted, the student's eligibility for federal aid will be restored on probation status until specific requirements of the approved appeal are met.

Approval of Review Request: If the Review Request is approved, the student's eligibility for federal aid will be restored in the next semester, the student enrolls.

Denial of Appeal or Review: If the appeal is denied, the student may submit additional written documentation, or the student may follow option II as listed above as an alternative to having their federal financial aid restored.

Denial of Review Request: If the Review Request is denied, the student's federal aid will not be reinstated for the next semester enrolled. The student may attempt Option II again in the next semester.

With either an approval or denial of the student's SAP appeal or review request, the student will receive written/mailed notification and notification of any requirements that must be met to continue receiving federal student aid.

D. General Procedures for Satisfactory Academic Progress (SAP) Appeals

A student may successfully appeal satisfactory academic progress a maximum of two (2) times while enrolled at Rhodes State College.

Note: Students are only allowed two (2) approved satisfactory academic progress appeals during their enrollment at Rhodes State College. Once these two appeals are met, any subsequent appeal will be denied.

Additionally, if the student will not be able to return to satisfactory standing within one semester, an Educational Planning Form must be created with an academic or faculty advisor and must prove that, if followed, the student will be able to meet SAP standards by a specific point in time.

- a. The extenuating circumstances listed below will be reviewed as possible causes which may have prevented the student from maintaining satisfactory academic progress, with appropriate documentation:
 - Family difficulties (such as divorce, illness, hospitalizations)
 - Interpersonal problems with friends, roommates, significant others
 - Financial difficulties
- b. If an appeal without an Educational Plan is approved, the student will be expected to return to satisfactory standing after the semester appeal was granted. If the student is unsuccessful, they will immediately return to Financial Aid Suspension. If an appeal with an Educational Plan is approved, the student will be expected to follow the Educational Plan exactly in order to continue making progress towards returning to satisfactory standards.
- c. Successful completion of course work is defined as a letter grade. Acceptable grades for awarding federal financial aid are listed in the catalog under Registration in the student handbook. Unacceptable grades include: "W", "WP", "WF", "I", "E", "R", (Audit), or "U."
- d. The GPA requirement for SAP is determined at the end of each term. Grade changes within a term will not change your SAP status but will determine your status for the next term of attendance.

Financial Aid Non Attendance

"Non-attendance" is defined as a student receiving Federal Title IV funds (ie. Pell Grant, Iraq, and Afghanistan Service Grant, SEOG, and Direct Loans) but never begins attending classes. Per federal regulations 34 CFR 668.21 and 34 CFR 668.21(a)(2)(i), we must return the disbursed funds to their programs even if they were disbursed directly to the student.

Courses Not Required For Degree

Under the Department of Education's guidelines, students may receive federal financial aid only for courses required for their degree or certificate. If a student is found to be taking courses that are not required for his/her program, federal financial aid will be adjusted accordingly. It is

the student's responsibility to notify the Financial Aid Office if he/she will be taking courses that are not required.

When Students Fail to Earn a Passing Grade in Any of their Classes

If a student receives a failing grade in a course, the instructor must report the last day the student attended the class. This date will be used in the calculation to Return of Title IV Federal Financial Aid funds.

Withdrawals and Return of Federal Financial Aid

As part of the Higher Education Amendments of 1998, Congress passed provisions governing what occurs to federal financial aid if students completely withdraw from school in any term. The law assumes that students "earn" federal financial aid award(s) directly in proportion to the number of days of the term attended. For example, if a student completes 30% of the term, he/she earns 30% of the award(s) he/she was originally scheduled to receive. This means that 70% of the scheduled award(s) remain unearned and must be returned to the federal government.

If a student withdraws from the College (either officially or unofficially) or ceases attendance in all courses before completing more than 60% of the term, he/she may have to repay any unearned federal monies that were already disbursed. The student must either repay the disbursed monies that were unearned in full or make satisfactory arrangements with either the College or the Department of Education. Students must complete these repayment arrangements within 45 days of the date of the College's notification of overpayment status or risk losing eligibility for additional federal financial assistance. In addition, students may owe the College money for tuition that was originally covered by financial aid funds.

Estimated Budgets per Academic Year

ESTIMATE OF ANNUAL ACADEMIC EXPENSES:

The following estimated costs assist the Financial Aid Office in determining a student's financial need and assist students in determining the approximate expenses that will be incurred for one year of education at Rhodes State College.

Based on Full-Time Status -

- Tuition: \$4,440.00 (2 semesters taking 12 credit hours)
- Onboarding Fee: \$25.00 non-refundable charged on each new student's account when they register for their first semester.
- Distance Education Fee (all online courses): \$10.50 per credit hour
- Technology fee: \$3.00 per credit hour (charged to students carrying more than 3 credit hours)
- Books and supplies: \$1,800.00

Some programs may incur higher book and laboratory fees.

Based on Part-Time Status -

- Tuition: \$3,330.00 (2 semesters taking 9 credit hours)
- Onboarding Fee: \$25.00 non-refundable charged on each new student's account when they register for their first semester.

- Registration Fee: \$62.00 non-refundable (based on two semesters charged to all part-time students (1-11 credit hours). Refunded only when classes are cancelled.
- Distance Education Fee (all online course): \$10.50 per credit hour
- Technology fee: \$3.00 per credit hour (charged to students carrying more than 3 credit hours)
- Books and supplies: \$1,800.00

Some programs may incur higher book and laboratory fees.

Financial Aid is also available to assist students with personal living expenses and transportation costs. This personal expense support is allotted based upon a combination of need and eligibility.

Foundation and Scholarships

Kevin L. Reeks, **Vice President**

Institutional Advancement

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Founded in 1978, the Rhodes State College Foundation assists the College by developing partnerships and relationships with individuals, businesses, and community organizations. The Foundation generates financial support to increase the College's viability, enhance opportunities for students, and help provide more accessible and affordable education to current and future students. Foundation scholarship applications are available Fall semester for the next academic year. The scholarships listed here were established by individuals, families and organizations who value education and desire to assist Rhodes State students in the pursuit of transforming their lives.

Foundation Scholarships

Alberta M. Lee Scholarship
Alumni Legacy Scholarship
Altrusa International of Lima Ohio Inc. Scholarship for Women
Anigbogu Godwin Rovner Respiratory Care Scholarship
Auglaize Peace Officer Scholarship
Sam & Barb Bassitt Scholarship
Borra Health Sciences Pathway Scholarship
Dr. Norman & Margaret Browning Scholarship
Dr. Robert D. & Ann M. Brunk Scholarship
Business Leaders Scholarship
James J. Countryman Scholarship
Distance Education Scholarship
Dr. Wilfred Ellis Multicultural Scholarship
Richard & Mary Elmquist-Lane Scholarship for Unique Challenges
Emergency Medical Services Scholarship
Elizabeth Enneking Memorial Scholarship
Mark & Ruth Ettinger Scholarship
Gilbert Scholarship
Grand Lake Health System Nursing Scholarship
Hardin County Engineering Technology Scholarship
Frank & Shirley Hill Scholarship
Terri Hill-Kaufman Memorial Scholarship
Jack & Margaret Howell Putnam County Scholarship
John J. & Martha M. Hudson Scholarship
Roger P. Jones Concrete Technology Scholarship
Jaime Johnson & Lindsay Kahn-Vargo Scholarship
Jim & Celia Kahn Scholarship
Kent & Diane Kahn Scholarship

Margot & Robert B. Keller Public Service Scholarship
John & Irene Kinkley Scholarship
Jane P. Krites Scholarship
Alberta M. Lee Scholarship
Thomas R. & Gloria P. Leech Scholarship
Thomas & Linda Leshner Dental Hygiene Scholarship
Lima Elks Fifty Four Scholarship
Dr. Rosalyn Liston Scholarship
McClain/Marshall Scholarship
Kito Christian Shane McCurdy Scholarship
Mercy Health Ally Scholarship
Memorial Scholarship
Le Nien Boone Mueller Scholarship
National Board of Respiratory Care Scholarship
Nicholas J. Pratt Scholarship
Norman J. Rex Memorial Scholarship
Nursing Scholarship
One-Night-a-Week Champion Scholarship
Outstanding Alumni Scholarship, Ann Pohl, Nursing
Outstanding Alumni Scholarship, Ann Pohl, Respiratory Care
Physical Therapist Assistant Scholarship
George B. Quatman Scholarship
Quest Federal Credit Union Scholarship
Radiographic Imaging Scholarship
Rudy & Norma Rakowsky Scholarship
Respiratory Care Alumni Scholarship
Rhodes State College Faculty & Staff Student Scholarship
Rhodes State Scholarship
John & Margie Robenalt Memorial Scholarship
Bettye Roeder Nursing Scholarship
Jim A. Rohrer Scholarship
Dr. Charles R. Ryan Scholarship
Marilyn Shaffer Office Administration Scholarship
Avis Hardin Smith Memorial Scholarship
Willie and Sarah Smith Family Scholarship
David & Marie Steiner Scholarship
Matthew C. Terrill Memorial Scholarship
Dr. Jonah & Cynthia Ukiwe Scholarship
Gary Weaver Public Service Scholarship
West Central Ohio Manufacturing Consortium (WCOMC) Scholarship

Other scholarships are available during the year through the Financial Aid Office and at www.RhodesState.edu/scholarships.

Alumni Relations

Alumni Relations facilitates relationships with alumni and the businesses and communities in which they live and work. The focus is to connect with over 19,000 alumni and nurture the personal growth and success that began when they were students. Alumni Relations collaborates with all Development Office activities to maximize efforts to keep alumni informed, involved and invested in Rhodes State College. For information please email alumni@RhodesState.edu.

ACADEMIC DIVISIONS

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Academic Vision

To kindle a passion for learning.

Academic Statement of Values

We uphold the following core values in all that we do.

Quality: Expectation of excellence in teaching and learning

Ethical Behavior: Internalized responsibility to act and model in a trustworthy and honorable manner

Competence: Performing to professional and instructional standards

Collegiality: Maintaining an open and supportive culture

Commitment: Meeting the needs of students, peers, and community in a consistent and dedicated manner

Academic Commitment to Assessment

Nanette Smith, EdD

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Rhodes State College is committed to graduating students who are skilled professionals and meaningful contributors to their communities. To fulfill this commitment, the College uses an assessment process which fosters professional and intellectual growth of its students by offering contemporary curricula and a supportive environment. With this in mind, Rhodes systematically assesses student learning outcomes in order to improve learning and instruction. Program assessment of learning assures students, employers, and the community that Rhodes State College graduates possess the skills needed to perform competently in the workplace. Assessment of Institutional Learning Outcomes (ILOs) affirm that graduates possess the needed skills and abilities to act as life-long learners and quality contributors to their communities.

Assessment at Rhodes occurs at the course (SLOs), program (PLOs) and institutional levels (ILOs) of the College where the ability to affect growth is realized through a systematic cycle of assessment where collection, analysis and reflection of outcomes data is used impact decision making and ensure continuous improvement of the teaching and learning process at the College. Rhodes has identified six (6) Institutional Learning Outcomes (ILOs), which also serve as General Education

Outcomes for academic programs. Outlined below are the ILOs and graduate expectations for each.

Institutional Learning Outcomes (ILOs)

1. Civic, Professional, and Ethical Responsibility (CPER)

- Demonstrate professional skills and participate in activities that are necessary for success in one's career or academic discipline.
- Recognize civic and ethical responsibilities associated with the rights and expectations as citizens in a democratic society.

2. Cultural and Diversity Awareness (CDA)

- Understand and integrate knowledge of cultural worldviews, reflect attitudes of openness and curiosity, and illustrate empathy and understanding of own and other cultures.
- Exercise awareness of the interdependence of diversity factors (i.e. culture, history, sexual orientation, psychological functioning, education, economics, environment, language, politics, age, gender, physical challenges, class, religion, etc.).

3. Critical Thinking (CT)

- Demonstrate ability to interpret meaning in decision-making and apply information to engage in innovative problem-solving strategies.

4. Effective Communication (EC)

- Apply knowledge of communication patterns and effectively interpret, use, and adapt various contexts or presentation methods to appropriate audiences.

5. Quantitative and Scientific Reasoning (QSR)

- Understand and appropriately apply mathematics and scientific principles and methods.

6. Technological Proficiency (TP)

- Demonstrate the ability to utilize knowledge and skills to effectively incorporate technology into one's career or academic discipline.

Division of Technology and Liberal Studies

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The Division of Technology & Liberal Studies provides the Associate of Arts degree as well as programs that lead to opportunities available in business and industry regionally and worldwide. Rhodes State College recognizes the value of a liberal arts education, and offerings within the Division prepare students for transfer as well as applied programs of study. Information and Engineering Technology programs provide solid technical skills to propel students into careers within a sector that is ever-evolving. Business programs prepare students for careers in areas such as accounting, management, human resource, and marketing.

Majors

Accounting, Banking and Real Estate

- Accounting Major (p. 35)

Information and Emerging Technology

- Artificial Intelligence (p. 44)
- Network Security (p. 83)
- Web Programming/Computer Programming (p. 115)

Integrated Systems Technology

- Electro-Mechanical Engineering Technology (p. 59)
- Manufacturing Engineering Technology (p. 75)
- Mechanical Engineering Technology (p. 77)
- Electronic Engineering Technology (p. 60)

Management and Marketing

- Business Administration Major (p. 46)
- Digital Marketing and Media (p. 57)
- Human Resource Major (p. 70)

Technical Standards Statement

While many of the skills and abilities required by these standards are expected to develop and/or improve during the course of training, candidates seeking technical degrees within the Division of Technology & Liberal Studies must be able to perform the following essential skills/functions with or without reasonable accommodations. Prospective students with disabilities may want to pay careful attention to this information; if there are concerns, Accommodative Services can be contacted for assistance.

- Observation:** Students must be able to acquire a defined level of required information as presented through educational experiences in both basic arts and technical sciences. To achieve the required competencies in the classroom setting, students must perceive, assimilate, and integrate information from a variety of sources. These sources include oral presentation, printed material, visual media, and live demonstrations. Consequently, students must demonstrate adequate functional use of visual, tactile, auditory and other sensory and perceptual modalities to enable such observations and information acquisition necessary for academic and laboratory performance.
- Communication:** Effective communication is critical for students to build relationships with faculty, advisors, fellow students, and clients in the student's various roles of learner, consultant, and leader. Students must be able to gather, comprehend, utilize and disseminate information effectively, efficiently and according to professional standards. Students are required to communicate in the English language both verbally and in writing, at a level consistent with competent professional practice. Students are expected to use grammar and vocabulary proficiently. They must be able to elicit information, gather information, and describe findings verbally and in writing. This communication should be comprehensible by professionals and laypersons.
- Intellectual and Conceptual Abilities:** Students must demonstrate critical thinking skills so they can problem-solve creatively, master abstract ideas, and synthesize information presented in academic, laboratory, and fieldwork settings. Students must be able to measure, calculate, reason, analyze, process, integrate, synthesize, apply and

retain facts, concepts, and data related to the arts and sciences. In some areas, this requires comprehension of three-dimensional relationships and understanding of the spatial relationships of structures. Students must develop and exhibit a sense of ethics, and recognize and apply pertinent legal and ethical standards.

- Motor Skills:** Students must possess the motor skills required to properly manipulate tools and/or necessary equipment within their chosen discipline. These skills will vary depending on the particular program and laboratory settings. Students must possess the coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.
- Behavioral and Social Skills:** Students must demonstrate emotional stability and acceptable communication skills, and be capable of developing mature and effective academic relationships with their faculty and other students. Students must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that should be adopted and nurtured during the education process.
- Professional Responsibility:** Students must demonstrate professional attitudes and behaviors that reflect a sense of right and wrong in their chosen area of discipline and their working environment.

Students must be in attendance for classroom instruction/discussion (or meet defined "attendance" requirements for online coursework) and possess organizational skills and stamina for performing and completing required tasks and assignments within allotted time frames. Students will learn and demonstrate their ability to work cooperatively and collaboratively with fellow students on assigned projects and participate willingly in a supervisory process involving evaluation of abilities and reasoning skills.

Students must comply with all policies set forth by the college that regulate student activity and behavior. This includes matters ranging from professional dress and behavior to knowledge of and commitment to the code of ethics of their profession.

Division of Health Sciences and Public Service

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Programs within the Division of Health Sciences and Public Service prepare students for careers that meet specific health industry, public service sector, and agriculture employment needs in northwest Ohio. Rhodes State College also offers several allied health programs through the Northwest Ohio Allied Health Education Consortium. The Consortium combines the resources of five member institutions to provide more degree options and a seamless educational experience. Information regarding the requirements to qualify for the programs can be found on their respective program pages under the Majors tab in this section or in the Degrees, Programs, and Certificates (p. 28) section of the catalog.

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply.

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation. Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and

other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Majors

- Bachelors of Science, RN to BSN Completion
- Addictions, Mental Health, and Social Work Assistant (p. 37)
- Agriculture Technology (p. 41)
- Dental Hygiene (p. 53)
- Emergency Medical Services (p. 62)
- Health Care Administration (Northwest Ohio Allied Health Education Consortium) (p. 67)
- Health Care Technology (p. 67)
- Laboratory Science Technology (p. 72)
- LPN to ADN Transition Program (p. 74)
- Medical Laboratory Technology (Northwest Ohio Allied Health Education Consortium) (p. 81)

- Medical Scribe (Northwest Ohio Allied Health Education Consortium) (p. 82)
- Nursing (p. 85)
- Occupational Therapy Assistant (p. 87)
- Physical Therapist Assistant (p. 95)
- Pre-Veterinary Technology/Nursing (p. 100)(Partnership with Colby Community College)
- Radiographic Imaging (p. 103)
- Respiratory Care (p. 106)
- Surgical Technology (p. 112)

Health Sciences and Public Service Technical Standards Statement

All applicants accepted to programs in the Division of Health Sciences and Public Service must be able to meet the technical standards of the program of study for which they enroll. Students are asked to review the standards and, for many programs, to sign a form certifying that they have read, understand, and are able to meet the standards. Students are to be provided the technical standards information upon selection of their program of study. These Technical Standards are discipline-specific essentials critical for the safe and reasonable practice within each profession. These standards include concrete statements of the sensory/observational skills; communication skills; motor skills; intellectual conceptual, integrative, and quantitative abilities; and behavioral/social and professionalism for normal and safe functions. The intent of these standards is to inform prospective students of the attributes, characteristics, and abilities essential to practice within their chosen profession. Professional competency is the summation of many cognitive, affective, and psychomotor skills. The College has a moral and ethical responsibility to select, educate, and graduate competent and safe students/practitioners. Students are judged on their academic accomplishments, as well as on their physical and emotional capacities to meet the full requirements of the curricula and to graduate as skilled effective practitioners. For health programs, patient health and safety is the sole benchmark against which performance requirements, including Technical Standards, are measured.

For programs in health science and law enforcement, all students must be able to perform the essential functions of the curriculum and meet the standards described for the program in which the student is enrolled, with or without reasonable accommodations.

All programs within the Division are prepared to provide reasonable accommodations to accepted students who have documented disabilities. The College reserves the right to review information to determine whether an accommodation request is reasonable, taking into account whether an accommodation would:

- involve the use of an intermediary that would in effect require a student to rely on someone else's power of selection and observation
- fundamentally alter the nature of the program
- lower academic standards
- cause undue hardship on the College
- endanger clinicians, patients or others.

Applicants with disabilities who wish to request accommodations under the Americans with Disabilities Act, must follow the College's procedures for verification of a disability as stated in the Rhodes State College Student Guide to Accommodative Services. * Note: Students disabled after they matriculate into the designated health program are required to follow the same procedures when seeking accommodations.

Technical Standards

All applicants for the health sciences programs and certificates must possess the essential skills and abilities necessary to successfully complete the requirements of the curriculum either with or without reasonable accommodations for any disabilities the individual may have.

* Note: The use of an intermediary that in effect requires a student to rely on someone else's power of selection and observation will not be permitted.

The essential skills and abilities for the programs and certificates within the Division are categorized in the following Technical Standards:

- Sensory/Observational Skills:** Students must demonstrate adequate functional use of visual, tactile, auditory and other sensory and perceptual input to enable observation and information acquisition necessary for academic and laboratory performance. For health programs, the applicant must be able to observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of all the senses.
- Communication:** Students must be able to gather, comprehend, utilize and disseminate information effectively, efficiently and according to professional standards. Students are required to communicate in the English language both verbally and in writing, at a level consistent with competent professional practice. For health programs, the applicant must be able to speak, to hear, and to observe patients in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications. An applicant must be able to communicate effectively with patients and all members of the health care team. Communication includes, listening, speaking, reading and writing.
- Motor Skills:** Students must possess the motor skills required to properly manipulate necessary equipment within their chosen discipline. These skills will vary depending on the particular program and laboratory settings. Students must possess the coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision. For health programs, applicants must have sufficient motor skills to gain access to clients in a variety of care settings and to manipulate and utilize the equipment central to the assessment, general and emergency treatment of patients receiving health practitioners' care. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.
- Intellectual-Conceptual, Integrative, and Quantitative Abilities:** These abilities include measurement, calculation, reasoning, analysis, and evaluation. Problem solving, the critical skill demanded of practitioners, requires all of these abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relations of structures.
- Behavioral/Social Skills and Professionalism:** Students must demonstrate emotional stability and acceptable communication skills, and be capable of developing mature and effective academic relationships with their faculty, other students and others with which they will work. For health science, an applicant must possess

the emotional health required for utilization of his/her intellectual abilities. The exercise of good judgment, the prompt completion of all responsibilities attendant to the care of patients, and the development of effective relationships with patients are essential skills for health practitioners. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of the uncertainties inherent in the clinical problems of many patients. Concern for others, integrity, interpersonal skills, interest, and motivation are all personal qualities necessary for the health practitioners.

- f. **Environmental:** For some programs, applicants must interact with diverse populations of all ages with a range of acute and chronic medical conditions. Applicants must be able to tolerate frequent exposure to communicable diseases, toxic substances, ionizing radiation, medicinal preparations, hostile individuals, and other conditions common to health care and other professional environments.

DEGREES, PROGRAMS, AND CERTIFICATES

RN to BSN Completion Program

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The RN to BSN Completion Program is intended for registered nurses who are seeking to further their education to achieve a baccalaureate degree in nursing. Curriculum focuses on leadership, evidence-based practice, informatics, and community-based health promotion. This program is designed to be delivered in an online format, with the exception of two specialized lab experiences at the Borra Center for Health Sciences. Additionally, the Capstone course culminates in a practicum experience which allows students to specialize in either critical care, leadership, or case management. During their practicum, students will be assigned to work with a nurse mentor in their specialty area and gain real world experience as they collaborate with members of the healthcare team.

The RN to BSN Completion Program prepares the registered nurse to be a professional health care practitioner who provides compassionate care, which is based on scientific evidence and who serves as the link between the patient (individual, family, community, or population) and the health care environment across the lifespan. The program addresses the needs of the community as identified through ongoing assessment. This program is designed to promote life-long learning and produce qualified individuals for advanced employment in health care facilities as baccalaureate prepared nurses. Graduates are prepared to adapt to the emerging and expanding roles of the registered nurse in society.

Mission Statement

The RN to BSN Completion Program provides registered nurses the opportunity to obtain an affordable, quality professional nursing education through community involvement, experiential learning, and interdisciplinary collaboration to meet the community's need for highly trained nursing professionals.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Exemplifies professional leadership characteristics.
- b. Integrates evidence-based practice into the care of patients.
- c. Designs strategies to promote quality and safety in the care of patients.
- d. Promotes communication, teamwork and collaboration with the healthcare team.
- e. Coordinates individualized patient-centered care.
- f. Utilizes informatics and technology in the care of patients.

RN to BSN Degree Completion

The RN to BSN Completion program is designed to be completed in one year of full-time study. If a student chooses to take classes part-time,

all coursework must be completed and the degree conferred within five years of the program start date.

Dual Degree Enrollment

Current Associate Degree Nursing (ADN) students may choose to take additional coursework toward their BSN degree before graduation. Students choosing this pathway will declare a dual degree of Associate of Applied Science in Nursing and Associate of Science through Rhodes State College. The dual degree declaration will allow the additional courses to transfer to the RN to BSN Completion Program degree.

“C” grade policy

A minimum “C” grade is required for all courses with a NSG prefix.

Technical Standards
See here (p. 26) for details.

RN to BSN Completion Program

Bachelors of Applied Science in Nursing Degree

Structured Course Sequence (3 semester plan)

Fall		Hours
NSG 3010	Evolving Roles in Professional Nursing ^{*1st 8 weeks}	3
NSG 3020	Healthcare Research in Evidence-Based Practice ^{*1st 8 weeks}	3
NSG 3030	Nursing Informatics in Technological Healthcare Community ^{*2nd 8 weeks}	3
NSG 3040	Nursing Leadership and Management ^{*2nd 8 weeks}	4
CHM 1110	Introductory General Chemistry ^{*Half- or Full-term selection}	4
PSY 1010 or SOC 1010	General Psychology ^{*Half- or Full-Term selection} (SOC 1010 & PSY 1010 are both required for BS Degree; register for the course that you did not complete in your Associates Degree) or Sociology	3
Term Hours		20
Spring		
NSG 4010	Advanced Health Assessment for Individuals and Families ^{*1st 8 weeks}	3
NSG 4020	Birth to Middle Age Nursing Care in a Global Community ^{*1st 8 weeks}	3
NSG 4011	Advanced Health Assessment for Complex Health Disorders ^{*2nd 8 weeks}	3
NSG 4021	Gerontological Nursing Care in a Global Community ^{*2nd 8 weeks}	3
CHM 1120	Introductory Organic and Biochemistry ^{*Half- or full-term selection}	4
PROGRAM ELECTIVE ^{*Half- or full-term selection (Arts & Humanities)}		3
Term Hours		19
Summer		
NSG 4030	 Capstone in Professional Nursing ^{*8 week term}	6

COM 2110 Public Speaking ^{*8 week term}
 or COM 2213 or Verbal Judo
 PSY 1730 Abnormal Psychology ^{*8 week term}

PROGRAM ELECTIVE
^{*8 week term} (Arts &
 Humanities)

PROGRAM ELECTIVE
^{*8 week term} (Social
 & Behavioral Science)

Term Hours	18
Total Hours	57

Code	Title	Hours
Arts and Humanities Elective (Minimum of 6 credit hours)		
HST 2300	Technology and Civilization	3
HST 2521	Women in World History	3
LIT 2210	Introduction to Literature	3
LIT 2227	Literature of Graphic Novels	3
LIT 2228	African-American Literature	3
LIT 2250	The American Short Story	3
LIT 2260	Fantasy Literature	3
LIT 2301	British Literature I	3
PHL 1011	Introduction to Philosophy	3

Code	Title	Hours
Social and Behavioral Science Elective (Minimum of 3 credit hours)		
HST 2510	History of Latin America	3
POL 1010	Introduction to Political Science	3
PSY 2200	Social Psychology	3
SOC 1200	Death and Dying	3
SOC 1320	American Cultural Diversity	3
SOC 2211	World Religions: History, Belief, and Practice	3
SOC 2300	Social Problems	3

Acceptance Requirements

All Acceptance Requirement Criteria including Nursing Technical Standards must be met for entrance into the RN to BSN Completion Program.

Criteria

- General College requirements (see General Admissions Procedures.)
- Declaration of RN to BSN Completion as the major course of study.
- All applicants must be a graduate of an associate degree or diploma in nursing program that is recognized by an accrediting agency, or the equivalent if a graduate from a program outside of the U.S. Credits will be awarded for equivalent of 65 credit hours.
- All applicants must hold a current unencumbered RN license in the U.S. or in a jurisdiction that is an associate member of the National Council of State Boards of Nursing (NCSBN). Applicants holding the equivalent of RN licensure or certification outside of the U.S. must submit a Credential Evaluation Services (CES) Academic Report from the Council on Graduates of Foreign Nursing Schools (CGFNS). All students must maintain licensure throughout the program of study.
- Complete RN to BSN Completion Program Application (Application opens April 3rd for Fall entry).

- The RN to BSN Completion Program is in the process of pursuing candidacy for accreditation of its Program through the Accreditation Commission for Education in Nursing (ACEN), Inc., 3390 Peachtree Road, NE, Ste. 1400, Atlanta, GA 30326, (404) 975-5000; email info@acenursing.org; website; http://www.acenursing.org.

General Education

Ohio Transfer 36 (OT 36) and Transfer Assurance Guide (TAG) Courses

OT 36 and TAG courses completed at Rhodes State College are guaranteed by the Ohio Department of Higher Education (ODHE) to transfer among the 14 four-year public universities and the 23 two-year public community and technical colleges in Ohio. OT36 courses apply to an institution's general education curriculum in specific academic areas (e.g., English composition/oral communication; mathematics, statistics, and logic; arts and humanities; social and behavioral sciences; and natural sciences). TAG courses apply to a specific academic degree or program area.

The following list enumerates College-designated **Ohio Transfer 36 General (OT 36) Education and Transfer Assurance Guide (TAG) courses** and their discipline groupings. Please consult your advisor for possible additions to this list.

Code	Title	Hours
English Composition and Oral Communication		
COM 1110	English Composition	3
COM 1140	Technical Writing	3
COM 1160	Business Communications ¹	3
COM 1200	Writing in the Sciences	3
COM 2110	Public Speaking ¹	3
COM 2213	Verbal Judo	3
COM 2400	Composition and Literature	3
Arts and Humanities		
HST 1011	Western Civilization I ¹	3
HST 1012	Western Civilization II ¹	3
HST 1610	American History to 1877 ¹	3
HST 1620	American History Since 1877 ¹	3
HST 2300	Technology and Civilization	3
LIT 2210	Introduction to Literature	3
LIT 2215	Native American Literature	3
LIT 2260	Fantasy Literature	3
LIT 2227	Literature of Graphic Novels	3
LIT 2228	African-American Literature	3
LIT 2241	World Literature I	3
LIT 2242	World Literature II	3
LIT 2250	The American Short Story	3
LIT 2301	British Literature I	3
LIT 2310	Literature and the Holocaust	3
LIT 2450	Themes in Literature and Film	3
MUS 1010	Music Appreciation I	3
THR 1010	Introduction to Theatre	3
Mathematics, Statistics, and Logic		
MTH 1151	Quantitative Reasoning	3

MTH 1190	Finite Mathematics/Business	3
MTH 1260	Statistics	3
MTH 1370	College Algebra	4
MTH 1430	Trigonometry	3
MTH 1611	Business Calculus	5
MTH 1711	Calculus I	5
MTH 1721	Calculus II	5
MTH 2660	Calculus III ¹	4
MTH 2670	Differential Equations ¹	4
MTH 2680	Elementary Linear Algebra ¹	4
Social and Behavioral Sciences		
HST 2510	History of Latin America	3
PSY 1010	General Psychology ¹	3
PSY 1730	Abnormal Psychology ¹	3
PSY 2150	Lifespan Psychology ¹	3
PSY 2200	Social Psychology ¹	3
PSY 2301	Educational Psychology ¹	3
SOC 1010	Sociology ¹	3
SOC 1200	Death and Dying	3
SOC 1210	Family Sociology ¹	3
SOC 1320	American Cultural Diversity ¹	3
SOC 2211	World Religions: History, Belief, and Practice	3
SOC 2300	Social Problems ¹	3
POL 1010	Introduction to Political Science ¹	3
Natural Sciences		
BIO 1000	Basic Human Structure and Function	3
BIO 1090	Concepts in Biology	4
BIO 1110	Anatomy and Physiology I	4
BIO 1120	Anatomy and Physiology II	4
BIO 1210	Biology I ¹	4
BIO 1220	Biology II ¹	4
BIO 1400	Microbiology	4
BIO 2121	Introduction to Human Genetics	4
CHM 1110	Introductory General Chemistry	4
CHM 1120	Introductory Organic and Biochemistry	4
PHY 1120	Physics I ¹	4
PHY 1130	Physics II ¹	4

¹ Meets both OT 36 and TAG requirements.

The following list enumerates College-designated **Transfer Assurance Guide (TAG)** courses and their discipline groupings. Please consult your advisor for possible additions to this list.

Code	Title	Hours
American Sign Language		
ASL 1010	American Sign Language I	4
ASL 1020	American Sign Language II	3
Anthropology		
ANT 2411	Cultural Anthropology	3
Business		
ACC 1010	Corporate Accounting Principles	4
ACC 1020	Managerial Accounting Principles	4
BUS 2100	Business Law	3

ECN 1410	Macro Economics	3
ECN 1430	Micro Economics	3
MGT 1010	Principles of Management	3
MKT 1010	Principles of Marketing	3
Criminal Justice		
COR 2600	Correctional Supervision	4
LAW 1130	Introduction to Criminal Justice	3
LAW 1210	Criminology	3
Nutrition		
DTN 1000	Basic Nutrition	2
Education		
EDU 1000	Introduction to Education	3
EDU 1050	Introductory Child Development	3
EDU 2030	Individuals with Exceptionalities	3
EDU 2130	Families, Communities and Schools	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I	3
EET 1120	Circuit Analysis II	3
EET 1130	Electronics	4
EET 1330	Digital Circuits	4
EET 2310	Microcontroller Fundamentals	4
EET 2911	Programmable Logic Controllers	3
Geology		
GLG 1004	Historical Geology	4
Medical Terminology		
BHS 1390	Medical Terminology	2
Mechanical Engineering Technology		
MET 1000	Engineering Graphics with AutoCAD	3
MET 1020	Material Science	3
MET 1110	Manufacturing Processes	3
MET 1130	Statics	3
MET 2210	Strength of Materials	3
MET 2310	Fluid Power	3
MET 2440	Computer Aided Design	3
Social Work		
HUM 1111	Introduction to Social Work	3
HUM 1212	Social Welfare in the United States	3
Spanish		
SPN 1010	Beginning Spanish Language I	3
SPN 1020	Beginning Spanish Language II	3
SPN 2010	Intermediate Spanish I	3
SPN 2020	Intermediate Spanish II	3

Technical Courses

Technical courses are identified as those that teach technical skills, technical proficiency, and the knowledge required for career competency. Generally, technical courses at Rhodes State are taught by technical faculty members and carry a technical prefix. For example, an IT faculty member teaching CPT 1120 Introduction to VB Programming.

Institutional Academic Assessment

(Institutional/General Learning Outcomes)

Rhodes State College fosters the professional and intellectual growth of students and faculty by offering contemporary curricula that are taught by a qualified faculty comprised of lifelong learners who provide a supportive environment intended to develop critical thinking, an appreciation of global diversity, and the capacity for life-long learning. Rhodes State College has implemented an assessment process for measuring student academic achievement; this assessment process is used to identify opportunities for:

- a. improving teaching and learning
- b. aiding student retention
- c. verifying the job preparedness of graduates

It is our belief that we add value and enhance the personal growth of our students, which is essential to change lives, build futures, and improve communities through education. Therefore, Rhodes State College has chosen six Institutional Learning Outcomes (ILO) to be assessed at the course, program, and academic institutional level. The six ILOs are:

- a. Civic, Professional, and Ethical Responsibility
- b. Global and Diversity Awareness
- c. Critical Thinking
- d. Effective Communication
- e. Quantitative and Scientific Reasoning
- f. Technological Proficiency

The ILOs reflect the unique general education student learning outcomes the college community believes all Rhodes State College graduates will and should possess at the time of graduation. Every course in a program's curriculum contributes the students' acquisition of one or more ILOs. The College expects students to demonstrate growth in these six areas and will document the extent of that growth. Our ability to affect growth is realized only through a systematic and on-going process of collecting, sharing, and interpreting data in a cooperative effort.

Assessment of Institutional Learning Outcomes

Assessment of the Institutional Learning Outcomes (ILO) at Rhodes State College is a collaborative effort across each program/department of the College. Individual ILOs are assessed at multiple points in time across specific courses within each program, degree, or certificate's curriculum pathway. All six ILOs are assessed in program Capstone courses.

Rhodes State College has instituted two courses to assist with communication and measurement of assessment activities targeting the six Institutional Learning Outcomes.

• First-Year Experience Course

New students are required to take the one-credit hour course, SDE 1010 First Year Experience. This is a general college requirement taken as a part of all programs or as a prerequisite to program admission. This course is required for graduation. Delivered in both online and traditional in-class formats, the course contains helpful instruction about study skills, time management, Rhodes State policies and procedures, and assessment protocols. Detailed information about the e-portfolio and capstone course requirements is provided in the assessment discussions. Students will have a clear understanding of assessment activities as they complete the requirements for this course.

• Capstone Course

Students petitioning to graduate must successfully pass a capstone course before graduating from Rhodes State College. Completed near the end of the student's educational program, the course is a culminating experience that works to display an integration of program technical skills with the ILOs. Capstone courses include written, oral, and hands-on components that allow students to demonstrate mastery level competence among all six ILOs. Courses are designated with a graduation cap symbol.

Developmental Education

The "open door" policy at Rhodes State College provides access to students with a wide range of academic preparation, but to prevent its becoming a "revolving door," a comprehensive and effective developmental program is necessary. Developmental Education is intended to bridge the gap between the performance abilities of some entering students and the minimal performance standards generally expected of students pursuing college-level work, and ultimately of college graduates entering the workplace.

Developmental Education encompasses remedial work in areas where the student's mastery is insufficient, but it is not limited to that role. In addition, Developmental Education also describes course work designed to provide a broadening foundation of knowledge, learning skills and behaviors essential to the successful progression through higher education and into the workforce. This multi-focal basis of Developmental Education requires a college-wide philosophy of Developmental Education and the articulation of its various goals.

Goals:

- Developmental Education must efficiently, but thoroughly, prepare students for additional college experiences.
- Developmental Education must strive to avoid creating educational dependency, recognizing that the role of education is to enable increased empowerment and independent functioning, a vital characteristic of any professional career path.
- Developmental Education must challenge students, but should simultaneously seek to produce increased self-confidence and improved attitudes towards learning in them.
- Developmental Education must focus selectively on providing those discreet pieces of competence explicitly required for success in future courses, which were not attained in previous educational experiences.
- Developmental Education must facilitate frequent one-to-one interaction between students with varied problems and the course instructor; therefore dictating reasonable class sizes (typically smaller allocations than for corresponding freshman-level courses).
- Developmental Education is not limited to discipline-specific instruction, but should also concern itself with building and enhancing broader core skills and abilities, such as critical thinking and problem solving, which apply in many disciplines and contexts.

Associate of Arts Degree

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Overview

The Associate of Arts (AA) is for students who plan to transfer to a bachelor’s degree at a four-year college or university and desire a broad-based liberal arts education. It is designed to serve as the first two years of a bachelor’s degree. The AA offers a Humanities and Social and Behavioral Sciences focus while also meeting the general education distribution requirements. The successful completion of the degree requires a minimum of 60 credits.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Demonstrate professional skills and participate in activities that are necessary for success in one’s career or academic discipline.
- b. Recognize civic and ethical responsibilities associated with the rights and expectations as citizens in a democratic society.
- c. Understand and integrate knowledge of cultural worldviews, reflect attitudes of openness and curiosity, and illustrate empathy and understanding of own and other cultures.
- d. Exercise awareness of the interdependence of diversity factors including, but not limited to, culture, history, sexual orientation, psychological functioning, education, economics, environment, language, politics, age, sex, gender identity, physical challenges, class, and religion.
- e. Demonstrate ability to interpret meaning in decision-making and apply information to engage in innovative problem-solving strategies.
- f. Apply knowledge of communication patterns and effectively interpret, use, and adapt various contexts or presentation methods to appropriate audiences.
- g. Understand and appropriately apply mathematics and scientific principles and methods.
- h. Demonstrate the ability to utilize knowledge and skills to effectively incorporate technology into one’s career or academic discipline.

General Education

Students in this program complete 37-40 semester credit hours of general education transferrable courses in the following: English Composition and Oral Communication (9 credits), Arts and Humanities (6 credits), Global/International Perspectives (3 credits), Social and Behavioral Sciences (9 credits), Mathematics, Statistics and Logic (3-5 credits), and Natural Sciences (7-8 credits). Students round out their program by completing an additional 12 credit hours of electives in the Humanities and Social and Behavioral Sciences.

A Note to College Credit Plus Students

College Credit Plus (CCP) gives high school students the opportunity to enroll in college and earn college credit at no cost, while still in high school. The AA degree was designed to provide CCP students a seamless course selection pathway from high school to an associate’s degree to a bachelor’s degree.

Associate of Arts CCP Pathway

14 Credit Pathway

SDE 1010 First-Year Experience (1 credit)

COM 1100 English Composition (3 credits)
TM Arts and Humanities Course (3 credits)
TM Social and Behavioral Sciences Course (3 credits)
TM Physical and Biological Sciences Course with Lab (4 credits)

30-32 Credit Pathway (includes the above courses)

COM 2400 Composition and Literature (3 credits)
TM Arts and Humanities Course (3 credits)
TM Social and Behavioral Sciences Course (3 credits)
TM Physical and Biological Sciences Course with Lab (4 credits)
MTH Mathematics Courses (3-5 credits)

In selecting courses for this degree, all students are strongly encouraged to consult the following resources:

- the specific degree plan in the College catalog;
- their faculty advisor; and
- the four-year institution to which they intend to transfer in order to determine appropriate curriculum choices.

Students who have not yet decided on which major/degree to declare, might consider the Associate of Arts as they can enroll in general education courses until a decision is made. General education courses are required for all degree programs at the College.

Associate of Arts Degree
Structured Course Sequence (4 Semester Plan)

First Year		Hours
First Semester		
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
AA OT36 OR TAG ELECTIVE		3
1		
ANY COLLEGE LEVEL COURSE		3
Term Hours		16
Second Semester		
MTH 1151	Quantitative Reasoning	3-4
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
HST 1620	American History Since 1877	3
OT36 ENGLISH COMMUNICATION AND ORAL COMMUNICATION		3
2		
OT36 SOCIAL AND BEHAVIORAL SCIENCES		3
3, 4		
AA OT36 OR TAG ELECTIVE		3
1		
Term Hours		15-16
Second Year		
First Semester		
OT36 ARTS AND HUMANITIES		3
5, 6		
OT36 ENGLISH COMMUNICATION AND ORAL COMMUNICATION		3
2		
OT36 NATURAL SCIENCES		4
7, 8		

OT36 SOCIAL AND BEHAVIORAL SCIENCES 3, 4	3
AA OT36 OR TAG ELECTIVE 1	3
Term Hours	16
Second Semester	
COM 2820  AA Capstone Course	1
OT36 ARTS AND HUMANITIES 5, 6	3
OT36 NATURAL SCIENCES 7, 8	3-4
AA OT36 OR TAG ELECTIVE 1	3
ANY COLLEGE LEVEL COURSE	3
Term Hours	13-14
Total Hours	60-62

Capstone Course

- 1 Student may select any Ohio Transfer 36 (OT 36) or Transfer Assurance Guide (TAG) (p. 29) course from English Composition and Oral Communication, Arts and Humanities, Social and Behavioral Sciences, American Sign Language, Anthropology, Criminal Justice, Education, Social Work, and Spanish. (p. 29)
- 2 Student may select any Ohio Transfer 36 (OT 36) course from English Composition and Oral Communication. (p. 29)
- 3 Student may select any (p. 29) Ohio Transfer 36 (OT 36) course from Social and Behavioral Sciences.
- 4 Student must complete social and behavioral science courses from at least two different disciplines.
- 5 Student may select any Ohio Transfer 36 (OT 36) course from Arts and Humanities. (p. 29)
- 6 Student must complete arts and humanities courses from at least two different disciplines.
- 7 Student may select any Ohio Transfer 36 (OT 36) course from Natural Sciences. (p. 29)
- 8 One Laboratory Natural Science Course is Required.

Concentrations

- Education (p. 190)
- English Writing/Literature (p. 192)
- History (p. 195)
- Sociology (p. 201)

General Requirements

The Associate of Arts degree requires successful completion of a minimum of 60 semester credit hours. This includes the following:

- 37-40 general education credits distributed among English Composition and Oral Communication, Arts and Humanities, Social and Behavioral Sciences, Mathematics, and Physical and Biological Sciences,
- 12 additional credits of English Composition and Oral Communication, Arts and Humanities, Social and Behavioral Sciences, American Sign Language, Anthropology, Criminal Justice, Education, Social Work, and/or Spanish

- 5 credits of other requirements,
- 6 credits of general course electives.

In selecting courses for this degree, students are strongly encouraged to consult the specific academic plan in the College catalog, their faculty advisor, and the four-year institution to which they intend to transfer in order to determine appropriate curriculum choices.

Code	Title	Hours
Required General Education Distribution		
English Composition and Oral Communication		9
Arts and Humanities		9
Social and Behavioral Sciences		9
Mathematics		3-5
Physical and Biological Sciences		7-8
Arts and Humanities/Social Science and Biological Sciences Course Electives		
AA Transfer 36 and TAG Concentration Courses		12
Other Requirements		
SDE 1010	First Year Experience	1
COM 2820  AA Capstone Course		1
CPT 1250 Information Literacy Course		3
General Course Electives		6
Total Minimum Degree Requirements		60-63

Associate of Science Degree

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Overview

The Associate of Science (AS) is for students who plan to transfer to a bachelor's degree at a four-year college or university and desire a broad-based liberal arts education. It is designed to serve as the first two years of a bachelor's degree. The AS offers a Mathematics and Physical and Biological Sciences focus while also meeting the general education distribution requirements. The successful completion of the degree requires a minimum of 60 credits.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate professional skills and participate in activities that are necessary for success in one's career or academic discipline.
- Recognize civic and ethical responsibilities associated with the rights and expectations as citizens in a democratic society.
- Understand and integrate knowledge of cultural worldviews, reflect attitudes of openness and curiosity, and illustrate empathy and understanding of own and other cultures.
- Exercise awareness of the interdependence of diversity factors including, but not limited to, culture, history, sexual orientation, psychological functioning, education, economics, environment, language, politics, age, sex, gender identity, physical challenges, class, and religion.

- e. Demonstrate ability to interpret meaning in decision making and apply information to engage in innovative problem-solving strategies.
- f. Apply knowledge of communication patterns and effectively interpret, use, and adapt various contexts or presentation methods to appropriate audiences.
- g. Understand and appropriately apply mathematics and scientific principles and methods.
- h. Demonstrate the ability to utilize knowledge and skills to effectively incorporate technology into one's career or academic discipline.

General Education

Students in this program complete 37-40 semester credit hours of general education transferrable courses in the following: English Composition and Oral Communication (9 credits), Arts and Humanities (6 credits), Global/International Perspectives (3 credits), Social and Behavioral Sciences (9 credits), Mathematics, Statistics and Logic (3-5 credits), and Natural Sciences (7-8 credits). Students round out their program by completing an additional 12 credit hours of electives in the AS areas of Natural Sciences, Engineering, Computers, Business and Nutrition and 6 credit hours in any college level course.

A Note to College Credit Plus Students

College Credit Plus (CCP) gives high school students the opportunity to enroll in college and earn college credit at no cost, while still in high school. The AS degree was designed to provide CCP students a seamless course selection pathway from high school to an associate's degree to a bachelor's degree.

Associate of Science CCP Pathway

14 Credit Pathway

SDE 1010 First-Year Experience (1 credit)
 COM 1100 English Composition (3 credits)
 TM Arts and Humanities Course (3 credits)
 TM Social and Behavioral Sciences Course (3 credits)
 TM Physical and Biological Sciences Course with Lab (4 credits)

30-32 Credit Pathway (includes the above courses)

COM 2400 Composition and Literature (3 credits)
 TM Arts and Humanities Course (3 credits)
 TM Social and Behavioral Sciences Course (3 credits)
 TM Natural Sciences Course with Lab (4 credits)
 Mathematics, Statistics and Logic Courses (3-5 credits)

In selecting courses for this degree, all students are strongly encouraged to consult the following resources:

- the specific degree plan in the College catalog;
- their faculty advisor; and
- the four-year institution to which they intend to transfer in order to determine appropriate curriculum choices.

Students who have not yet decided on which major/degree to declare, might consider the Associate of Science as they can enroll in general education courses until a decision is made. General education courses are required for all degree programs at the College.

Associate of Science Degree Structured Course Sequence (4 Semester Plan)

First Year

First Semester		Hours
COM 1110	English Composition	3
MTH 1151	Quantitative Reasoning	3
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
ANY COLLEGE LEVEL COURSE		3-5

Term Hours 13-15

Second Semester

CPT 1250	Computer Applications in the Workplace	3
HST 1620	American History Since 1877	3
OT36 ENGLISH COMPOSITION AND ORAL COMMUNICATION ELECTIVE		3
2		
OT36 NATURAL SCIENCE ELECTIVE		4
2, 3		
OT36 SOCIAL AND BEHAVIORAL SCIENCES ELECTIVE		3
2, 4		

Term Hours 16

Second Year

First Semester

OT36 ARTS AND HUMANITIES ELECTIVE	3
2, 4	
OT36 ENGLISH COMPOSITION AND ORAL COMMUNICATION ELECTIVE	3
2	
OT36 NATURAL SCIENCE ELECTIVE	3-4
2, 3	
AS OT36 OR TAG ELECTIVE	3
1	
AS OT36 OR TAG ELECTIVE	3
1	

Term Hours 15-16

Second Semester

BIO 2820	 Associate of Science Capstone	1
OT36 ARTS AND HUMANITIES ELECTIVE		3
2, 4		
OT36 SOCIAL AND BEHAVIORAL SCIENCES ELECTIVE		3
2, 4		
AS OT36 OR TAG ELECTIVE		3
1		
AS OT36 OR TAG ELECTIVE		3
1		
ANY COLLEGE LEVEL COURSE ELECTIVE		3

Term Hours 16

Total Hours 60-63

🎓 Capstone course

- 1 Any AS Elective: students may select any Ohio Transfer 36 (OT36) or Transfer Assurance Guide (TAG) course from Mathematics, Statistics and Logic; Natural Sciences; Nutrition; Electronic Engineering Technology; Geology; Medical Terminology; and Mechanical Engineering Technology. (p. 29)
- 2 Student may select any Transfer 36 (OT36) course from the designated discipline specific elective area. (p. 29)
- 3 One Laboratory Natural Science Course is Required. (p. 29)
- 4 Students must select from 2 different disciplines(subject) in elective area. (p. 29)

Concentrations

- Artificial Intelligence and Machine Learning (p. 44)
- Business (p. 189)
- Construction Management Concentration (p. 193)
- Laboratory Science Technology (p. 72)
- Pre-Health (p. 197)
- Psychology (p. 199)

General Requirements

The Associate of Science degree requires successful completion of 60 semester credit hours. This includes the following:

- 37 general education credits distributed among English Composition and Oral Communication; Social and Behavioral Sciences; Arts and Humanities; Social and Behavioral Sciences; Mathematics, Statistics and Logic; and Natural Science,
- 12 additional credits of Mathematics, Statistics and Logic; Natural Sciences; Nutrition; Electronic Engineering Technology; Geology; Medical Terminology; and Mechanical Engineering Technology,
- 6 credits of any college level course work,
- 5 credits of other coursework.

In selecting courses for this degree, students are strongly encouraged to consult the specific academic plan in the College catalog, their faculty advisor, and the four-year institution to which they intend to transfer in order to determine appropriate curriculum choices.

Code	Title	Hours
Required General Education Distribution		
English Composition and Oral Communication		9
Arts and Humanities		9
Social and Behavioral Sciences		9
Mathematics, Statistics and Logic		3
Natural Science		7
Mathematics/Natural Sciences Focus		
Additional Mathematics/Natural Sciences Course Electives		12
Other Requirements		
SDE 1010	First Year Experience	1
BIO 2820	Associate of Science Capstone	1
CPT 1250	Computer Applications in the Workplace	3
College Level Course Electives		6
Total Minimum Degree Requirements		60

Associate of Technical Studies

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The Associate of Technical Studies (ATS) is designed for students whose career goals do not match exactly with those of existing programs. It enables the design of a personalized course of study using content from existing technical programs. By blending technical courses with general and basic studies selections, students can create a coherent arrangement of courses across program majors to produce a customized learning experience.

Student Admission

When it becomes clear that the student's educational goals cannot be accomplished through one of the existing technical programs, the Office of Advising may assist with the initiation of the Associate of Technical Studies (ATS). The student must complete an application for entrance into the ATS, outlining the proposed plan to meet program requirements. This should be created with assistance from the Division Dean, Program Chair, and/or academic advisor. The completed application is submitted to the Academic Dean overseeing the major program of study for review with the student and academic advisor to determine that the proposed plan meets the overall objectives of the ATS degree and the needs of the student.

Note: Students may not bring more than 40 completed credit hours to the ATS program.

Degree Requirements

Candidates for the degree of Associate of Technical Studies must meet the following general and specific requirements:

- a. Achieve a 2.0 overall grade point average.
- b. Complete 20 semester hours of residency.
- c. Declare intent to pursue and complete the degree.
- d. Complete 60 to 65 semester credit hours based on the agreed upon plan of study.

Specific Requirements

- a. The agreed upon curriculum must include General Education including English Composition, selected coursework in Behavioral Sciences, Mathematics, and either Humanities or Life and Physical and Biological Sciences. (see here (p. 29)).
- b. The agreed upon curriculum must include Basic/ Related Studies credit hours or the equivalent. One hour must be SDE 1010 First Year Experience . See academic advising for exceptions.
- c. Fifty percent of the agreed upon curriculum must be in Technical Studies credit hours or the equivalent.
- d. Completion of an appropriate Capstone course.

Accounting

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The objective of the Business Program is to provide quality, up-to-date education for individuals who desire to enter into or advance careers in fields related to accounting, business administration, human resource, supply chain, digital marketing, and digital media. All business majors are built on a blend of courses that stimulate critical thinking. Degrees and certificates within the Business Program are designed to prepare students for challenging and rewarding positions in business, industry, education, government, health care, and public service. Certificates provide an opportunity to secure expertise in special areas of concentration, and students may use most coursework to pursue associate-level degrees.

The Accounting, Business Administration, and Human Resource degrees are all accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The **Accounting Major** is designed to prepare students for gainful employment in business and industrial accounting positions in three main areas: private organizations, governmental agencies, and public accounting firms. The aim of the program is to educate the students in the design, maintenance, and utilization of a financial system. The curriculum emphasizes accounting systems and the analysis of financial data from the managerial point of view. Additionally, students learn to use using popular accounting and tax software. This degree complies with the educational requirements leading to the Certified Public Accountant Certification. Additional information regarding the CPA exam may be obtained from the program chair.

This degree can be earned in the classroom or fully online.

Program Learning Outcomes

Upon completion, the student will be able to:

- Interpret, analyze, and present reliable and relevant information to financial statement users based upon Generally accepted accounting principles both manually and electronically. [Critical Thinking & Computational Skills]
- Demonstrate an understanding of federal tax laws and their application to both individuals and business entities. [Critical Thinking & Computational Skills]
- Demonstrate an understanding of the basic concepts of managerial and cost accounting and their roles in business and decision making. [Critical Thinking & Computational Skills]
- Develop the ability to be a problem solver utilizing critical thinking skills as they apply to their chosen profession. [Critical Thinking]
- Prepare written and oral communication in professional formats. [Writing Skills]
- Utilize software programs commonly used in the accounting profession to provide practice for real-world accounting application. [Information Literacy]
- Apply ethical and professional behavior while working as an individual and as part of a team. [Global/Diversity Awareness]

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Accounting Major (Available in a Blended (Traditional and On-line) and Fully On-line Format)

Associate of Applied Business Degree Structured Course Sequence (4 Semester Plan)

First Year

First Semester		Hours
ACC 1010	Corporate Accounting Principles	4
AOT 2640	Spreadsheet Software and Applications	3
COM 1110	English Composition	3
MTH 1151	Quantitative Reasoning ¹	3
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		17

Second Semester

ACC 1020	Managerial Accounting Principles	4
ACC 1050	Accounting Software (QuickBooks)	2
ACC 1121	Payroll Accounting	2
COM 2110	Public Speaking	3
or COM 2213	or Verbal Judo	
ECN 1430	Micro Economics	3
HST 1620	American History Since 1877	3
Term Hours		17

Second Year

First Semester

ACC 2010	Intermediate Accounting I	4
ACC 2111	Cost Accounting	4
BUS 2100	Business Law	3
ACC 2250	Principles of Federal Income Tax	2
ACC 2290	Intermediate Income Tax	2
Term Hours		15

Second Semester

ACC 2020	Intermediate Accounting II	4
ACC 2300	Auditing	4
ACC 2401 	Applications in Accounting	2
BUS 2991	Internship (Practicum)	1
BUS 2992	Internship (Seminar)	1
MGT 1010	Principles of Management	3
or MKT 1010	or Principles of Marketing	
or ECN 1410	or Macro Economics	
or COM 1160	or Business Communications	
Term Hours		15
Total Hours		64

¹ If planning to transfer take MTH 1260.

Prerequisites:

Students should check course prerequisites before registering. Prerequisites are listed in the Course Tab (p. 117).

The Accounting, Business Administration, and Human Resource degrees are all accredited by the Accreditation Council for Business Schools and Programs (ACBSP)
11520 West 119th Street
Overland Park, KS 66213

Accounting Clerk Certificate

Cara Hurd, MACC, **Chair**
Phone: (419) 995-8323
Email: hurd.c@rhodesstate.edu
Office: SCI 260N

The Accounting Clerk Certificate provides students with the knowledge and skills needed for an entry-level accounting position. This certificate is geared for individuals who want to work as an accounting clerk, payroll processor, or accounts payable processor. The accounting clerk certificate curriculum focuses on accounting, payroll, and extensive technology skills.

Program Learning Outcomes

Upon completion, the student will be able to:

- Interpret, analyze, and present reliable and relevant information to financial statement users based upon generally accepted accounting principles both manually and electronically.
- Demonstrate an understanding of the basic concepts of managerial accounting and its roles in business and decision making.
- Utilize software programs commonly used in the accounting profession.

Accounting Major (p. 35)

Technical Standards

See here (p. 26) for details.

First Year

First Semester		Hours
ACC 1010	Corporate Accounting Principles	4
AOT 2640	Spreadsheet Software and Applications	3
SDE 1010 or MKT 1610	First Year Experience or Customer Service	1
Term Hours		8

Second Semester

ACC 1020	Managerial Accounting Principles	4
ACC 1050	Accounting Software (QuickBooks)	2
ACC 1121	Payroll Accounting	2
Term Hours		8
Total Hours		16

Activity Directing Certificate

Patricia Hampshire, DHS, LISW-S, HS-BCP, **Chair**
Phone: (419) 995-8852
Email: hampshire.p@rhodesstate.edu
Office: TL 102L

The Activity Directing certificate provides the educational content required to lead an activity department in long-term care facilities in the State of Ohio. For students wanting to pursue national certification,

the certificate provides the 90-hour basic modular education program required by the National Certification Council for Activity Professionals (please view the NCCAP website for all the needed national certification requirements).

For individuals who do not seek to head an activity department or are seeking national certification, this coursework will provide an understanding of professional activity work. All required courses are offered online and include the requirement of a 45-hour (per course) practicum placement at an agency that engages in professional activity work.

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain the scope and main features of the field, such as its development, theories, practices, and interactions of human systems.
- Demonstrate competency in core helping skills such as listening, writing, speaking, observation, interviewing, intake assessment, social assessment, intervention methods, record-keeping, goal planning, case management, group facilitation, crisis intervention, referrals, advocacy, cultural competence, orientation, education and prevention services.
- Behave professionally, ethically and legally in their responsibilities to consumers, colleagues, practice settings, employers, society, to self, and to the profession.
- Assess awareness of their own strengths, limitations, attitudes, values, personalities, interpersonal/reaction styles and how these may affect their professional practice.
- Perform entry-level skills competently in a professional setting by having participated in experiential training and reflection (learning by doing/experience).

Technical Standards

See here (p. 26) for details.

Code	Title	Hours
HUM 1310	Activity Directing I	3
HUM 1320	Activity Directing II	3
Total Hours		6

This certificate provides the basic coursework required to head an activity department at a long-term care facility in Ohio. Additional college credit and work experience may be necessary to become a National Certified Activity Director or Assistant Director (please see the department chairperson for more information).

Addictions, Mental Health, and Social Work Assistant

Patricia Hampshire, DHS, LISW-S, HS-BCP, **Chair**
Phone: (419) 995-8852
Email: hampshire.p@rhodesstate.edu
Office: TL 102L

The Addictions, Mental Health, and Social Work Assistant degree program prepares students with the knowledge and skills to support people with diverse challenges and needs. They are employed in settings such as community service centers, job and family services, mental health

agencies, addictions centers, correctional facilities, domestic violence shelters, recovery houses, homeless shelters, and so many more.

Graduates may be eligible for registration as a Social Work Assistant (SWA) through the Ohio Counselor, Social Worker and Marriage and Family Therapist Board, and the Chemical Dependency Counselor Assistant (CDCA) through the Ohio Chemical Dependency Professionals Board. For students interested in a bachelor's degree, this degree program is a great start by obtaining employable skills, while also having transfer opportunities into the Bachelor's of Social Work or Addiction Studies programs.

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain the scope and main features of the field, such as its development, theories, practices, and interactions of human systems.
- Demonstrate competency in core helping skills such as listening, writing, speaking, observation, interviewing, intake assessment, social assessment, intervention methods, record-keeping, goal planning, case management, group facilitation, crisis intervention, referrals, advocacy, cultural competence, orientation, education and prevention services.
- Behave professionally, ethically and legally in their responsibilities to consumers, colleagues, practice settings, employers, society, to self, and to the profession.
- Assess awareness of their own strengths, limitations, attitudes, values, personalities, interpersonal/ reaction styles and how these may affect their professional practice.
- Perform entry-level skills competently in a professional setting by having participated in experiential training and reflection (learning by doing/experience).

Grading Policy

Academic standards are found under Grading and Credit System (p. 220) of the Student Handbook section of this catalog. Addictions, Mental Health, and Social Work Assistant students must attain a "C" grade in each Human Service (HUM) course. Any Human Service (HUM) course in which a grade below a "C" is received must be repeated.

Curriculum Options

Students are encouraged to review their individual needs with the department chairperson when considering full-time and part-time alternatives. Additionally, students should review educational needs in conjunction with current work experiences.

Articulations (2+2 Option)

Students interested in pursuing a Bachelor's degree should speak to an Addictions, Mental Health, and Social Work Assistant Faculty Advisor early in their Rhodes State College career.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

Addictions, Mental Health, and Social Work Assistant

Associate of Applied Science Degree

First Year

First Semester		Hours
COM 1110	English Composition	3
HUM 1111	Introduction to Social Work	3
HUM 1150	Interviewing Techniques in Addictions, Mental Health and Social Work	3
PSY 1010	General Psychology	3
SOC 1010	Sociology	3
SDE 1010	First Year Experience	1
Term Hours		16

Second Semester

HST 1620	American History Since 1877	3
MTH 1151 or MTH 1260	Quantitative Reasoning or Statistics	3
HUM 1900	Professional Preparation and Engagement	2
HUM 2100	Case Management in Addictions, Mental Health and Social Work	3
HUM 2230	Issues and Ethics in Helping	3
Technical Elective		2-3
Term Hours		16-17

Second Year

First Semester

COM 2110 or COM 2213	Public Speaking or Verbal Judo	3
PSY 1730	Abnormal Psychology	3
HUM 1710	Substance-Related and Addictive Disorders	3
HUM 2400	Crisis Management	3
HUM 2991	Practicum I	2
Technical Elective		2-3
Term Hours		16-17

Second Semester

HUM 2170	Dynamics of Mental Health and Substance Use	3
HUM 2310	Group Dynamics/Intervention	3
HUM 2710	Addictions Counseling	3
PSY 2150	Lifespan Psychology	3
HUM 2992	Practicum II	2
Term Hours		14
Total Hours		62-64

 Capstone Course

¹ If planning to pursue a bachelor degree, choose from one of the OTM/TAG approved Math courses. See MTH (p. 159) courses in Course Description section of this catalog.

See here (p. 29) for Capstone information.

Please see the course descriptions (p. 117) section for prerequisites before registering for courses.

Prerequisites:

Students should check course prerequisites before registering.

Prerequisites are listed in the Course Tab (p. 117).

Human Service Program Electives

Technical Electives

Code	Title	Hours
HUM 1310	Activity Directing I	3
HUM 1320	Activity Directing II	3
HUM 1990	Independent Study in HUM	1-3
HUM 2000	Special Topics in Human Services	1-3
HUM 1212	Social Welfare in the United States	3
HUM 1720	Aging and Gerontology	3
HUM 1980	The Color of Justice	2
HUM 2040	Psychology and the Legal System	2
HUM 2030	Criminal Minds	3

Please see an advisor when considering a 2+2 option.

Admission Requirements

See the General Admissions Procedures (p. 11) in the College catalog.

Students who begin the curriculum in spring semester or who need developmental course support should recognize that it may take longer than four semesters to complete the program.

Individuals must recognize that to be successful in the Human Service field, there are important disposition and professional conduct factors, such being emotionally mature, respectful, dependable, and responsible.

Addiction Services Certificate

Diane Haller, LISW-S, ACSW, LICDC-CS, **Coordinator**

Phone: (419) 995-8202

Email: haller.d@rhodesstate.edu

Office: TL 102K

Prepares entry-level addiction professionals by providing two addiction-specific courses that have the education content areas and hours that meet standards for the Chemical Dependency Counselor Assistant Certification (CDCA-Pre and CDCA-Renewable) through the Ohio Chemical Dependency Professionals Board (OCDP). Students must be at least 18 years of age and hold a high school diploma or GED for the CDCA. Additional information about the addictions credentialing process can be found on the OCDP website. A grade of "C" or higher is required for the courses.

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain the scope and main features of the field, such as its development, theories, practices, and interactions of human systems.
- Demonstrate competency in core helping skills such as listening, writing, speaking, observation, interviewing, intake assessment, social assessment, intervention methods, record-keeping, goal planning, case management, group facilitation, crisis intervention, referrals,

advocacy, cultural competence, orientation, education and prevention services.

- Behave professionally, ethically and legally in their responsibilities to consumers, colleagues, practice settings, employers, society, to self, and to the profession.
- Assess awareness of their own strengths, limitations, attitudes, values, personalities, interpersonal/ reaction styles and how these may affect their professional practice.
- Perform entry-level skills competently in a professional setting by having participated in experiential training and reflection (learning by doing/experience).

Technical Standards

See here (p. 26) for details.

Addiction Services Certificate

First Year

First Semester		Hours
HUM 1710	Substance-Related and Addictive Disorders	3
Term Hours		3
Second Semester		
HUM 2710	Addictions Counseling	3
Term Hours		3
Total Hours		6

Advanced EMT Certificate

Chadwick Massie, M.Ed., Paramedic, **Coordinator**

Phone: (419) 995-8228

Email: massie.c@rhodesstate.edu

Office: TL 162B

The Emergency Medical Services (EMS) program at Rhodes State is committed to educating highly trained and professional EMS providers. As a part of this program, the Advanced Emergency Medical Technician certificate prepares students to sit for the NREMT exam and meet the certification standards set forth by the Ohio Board of EMS. Participants in the certificate program must first be certified as an Ohio EMT-Basic.

Once complete, students in the certificate program will be able to perform all duties of an Advanced EMT as well as initiate advanced patient assessment and appropriate intravenous procedures and use specific pharmacological agents for pain, respiratory emergencies, and diabetic emergencies.

Emergency Medical Services Major (p. 62)

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to prioritize decisions and act quickly in the best interest of the patient.
- Apply knowledge and skills necessary to treat a variety of patients in many different environments.
- Adhere to the ethical and professional standards that govern the EMS profession.
- Demonstrate effective communication skills with empathy and compassion.

- e. Systematically collect and analyze patient data to effectively treat mechanism of injury or nature of illness.

Technical Standards

See here (p. 26) for details.

Code	Title	Hours
EMS 1120	Advanced EMT	8

Changes in the federal and state EMT-Advanced and Paramedic curriculums may necessitate changes to Rhodes State certificate programs.

Advanced Nursing Assistant Certificate

Melissa Harvey, EdD, MSN, RN, **Chair**

Phone: (419) 995-8347

Email: harvey.m@rhodesstate.edu

Office: TL 120J

The Advanced Nursing Assistant (ANA) certificate gives students the ability to build advanced skills and training upon their Nurse Assistant Certificate (STNA) knowledge. Nursing Assistants are in high demand and those who have enhanced training and skills will become an asset to any healthcare facility. Upon completing the coursework associated with this certificate, the certified ANA would have an increased earning potential. The ANA certificate is embedded within the prerequisite semester for the Nursing curriculum to enable students to work part-time in a health care field while completing either the Practical Nursing (LPN) or Associate Degree (RN) Nursing program. It can also be a stand-alone certificate for job-ready employment. Additionally, this certificate can be used to meet technical requirements of the Associate degree in Health Care Technology.

Program Learning Outcomes

Upon completion, the student will be able to:

- Identify principles of patient-centered care across the lifespan.
- Understand effective and collaborative communication skills using research and writing.
- Understand the normal anatomy and physiology of the human body as it relates to health and wellness across the lifespan.
- Recognize the transition to college level learning and the rigors of nursing concepts and practice.
- Demonstrate advanced psychomotor skills required for entry into the nursing programs.

Technical Standards

See here (p. 26) for details.

Advanced Nursing Assistant

First Year

First Semester		Hours
BIO 1110 or BIO 1000	Anatomy and Physiology I (ADN or BSN Concentration) or Basic Human Structure and Function	3-4
BHS 2110	Growth and Development: Lifespan	2
BHS 2120	Introduction to Nursing	2

COM 1110	English Composition	3
Term Hours		10-11
Total Hours		10-11

Agricultural Business Certificate

James Uphaus, PhD, **Chair**

Phone: (419) 995-8207

Email: uphaus.j@rhodesstate.edu

Office: JJC 179M

The Agriculture Business certificate will provide students with a basic understanding of Northwest Ohio Agriculture from production to marketing, skills for managing themselves and others in agriculture businesses, marketing techniques in niche and commodity marketing unique to agriculture, and critical thinking skills in solving sustainability issues in local and international agriculture. This certificate provides students with the basic skills required by employers. Agriculture employers have assisted in designing this certificate to prepare students who are authentic speakers about agriculture, who can be self-managed, understand local marketing options and are critical thinkers and problem solvers.

Agricultural Business Highlights

- The certificate prepares students for agriculture service-industry occupations
- Courses introduce students to agriculture, management of agricultural business, sales and marketing in the agricultural business, and sustainable agriculture
- Curriculum prepares students for the industry credential Certificate in Agricultural Business
- Financial Aid eligible for those who qualify
- Completed in one term
- 100% online

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain the United State Agriculture system including production inputs, processing and management towards effective communication, marketing, management, and career opportunities
- Identify components of a successful agribusiness demonstrating competency in industry standard financial reporting and cash management systems, and techniques of people management
- Explain the U.S. Farm resource and food policy and the impact of international trade in marketing strategies for modern agribusinesses
- Identify issues and solutions related to food, fiber and energy production related to sustainability in agriculture systems

Technical Standards

See here (p. 26) for details.

Code	Title	Hours
AGR 1000	Introduction to Agriculture	3
IMT 1911	Technical Math I	3
AGR 1100	Principles of Agricultural Business Management	3
AGR 1200	Sustainable Agriculture	3
AGR 1300	Principles of Agricultural Marketing and Sales	3

AGR 2991	Field Experience	1
Total Hours		16

Agriculture Robotics and Intelligence Certificate

James Uphaus, PhD, **Chair**
 Phone: (419) 995-8207
 Email: uphaus.j@rhodesstate.edu
 Office: JJC 179M

The Agriculture Robotics and Intelligence certificate provides students with the technical skills to support a career in this emerging field. Courses in this certificate integrate agricultural applications to existing Rhodes State College courses of fluid power, electricity and electronics, programmable logic controllers and robotics and mechatronics. Courses in precision agriculture equipment and introduction to artificial intelligence in agriculture apply industrial robotic concepts towards applications in crop management and integrated pest management. Agricultural robotic technology is increasing in soil sampling, stored grain quality maintenance, and controlled environment agriculture. Local and technical expertise outside of the Rhodes State College supporting region was sought to develop this curriculum so that it would provide training in the anticipated growth area. The courses utilize team learning and individual internships to integrate local and global information towards earning Fanuc Robot Certification. Robotic applications are demonstrated through hands on learning and problem solving exercises.

Program Learning Outcomes

Upon completion, the student will be able to:

- Understand the development, transmission and utilization of power through fluid power circuits and controlling fluid power devices and related equipment.
- Explain the various elements of basic electricity including the identification of electrical symbols as well as interpretation of schematics, cross referencing prints, tracing circuits, interpreting sequential function charts, line drawings and time charts to concentrate on control logic components.
- Apply Programmable Logic Controllers (PLC) and elements needed for an automated industrial control system with program structures, language standards, wiring and troubleshooting methods, as well as, real world communications.
- Utilize robotics in regard to industrial robotic safety standards, to agriculture applications of robots including maintenance and recovery procedures.
- Explain electric, pneumatic, hydraulic equipment control from precision agriculture equipment and field based data.
- Apply field based data to robotic decision and control in agricultural applications

Technical Standards

See here (p. 26) for details.

Agriculture Robotics and Intelligence Certificate

First Year		
First Semester		Hours
MET 2310	Fluid Power	3
AMT 1070	Basic Electricity and Electronics	3
AMT 2030	Programmable Logic Controllers	3
AGR 1500	Precision Agriculture Equipment	3
COM 1110	English Composition	3
Term Hours		15
Second Semester		
FMS 2110	Basic Robotics and Mechatronics	3
AMT 2050	Robot Maintenance	3
AGR 1600	Introduction to Artificial Intelligence in Agriculture	3
GLG 1000	Physical Geology	4
BIO 1310	Environmental Science I	3
Term Hours		16
Total Hours		31

Agricultural Technology

James Uphaus, PhD, **Chair**
 Phone: (419) 995-8207
 Email: uphaus.j@rhodesstate.edu
 Office: JJC 179M

The Agriculture Associates degree program is designed to provide students with practical education in an increasing demand field. The first-year students will learn fundamental Agronomy and Agriculture Business aspects to provide a foundation for their second-year of the curriculum. Students will choose a pathway in either Prescription Mapping or Robotics with Artificial Intelligence. The Prescription Mapping option prepares graduates for careers in soil and water conservation, field application, agronomic consultant technician, and agriculture sales. The Robotics and Artificial Intelligence option prepares students to support and gather information from robotic agricultural equipment.

While completing the Prescription Mapping specialization, the students will acquire fundamental information about Ohio's agricultural soil variation and associated cropping practices, agriculture product sales and return on investment evaluation, and apply those principles to technical skills in creating prescription maps from laboratory and field-based results. While completing the Robotics with Artificial Intelligence specialization, the students will utilize the same fundamental agronomy and agriculture business skills while working with emerging technical innovations.

This technical agriculture program provides a strong foundation for students who wish to earn pesticide application and crop advisor certifications.

Program Learning Outcomes

Upon completion, the student will be able to:

- Communicate effectively in both written and oral form with coworkers, customers, and others in and about agriculture.

- b. Locate and use information and numerical data in solving problems related to agriculture.
- c. Research, design, and use best practices to create environmentally sustainable, productive, and economically viable solutions to agricultural problems and challenges.
- d. Demonstrate initiative, leadership, and planning in building professional relationships in the community, and workplace.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

Agriculture Technology

Associate of Applied Science

First Year**First Semester**

		Hours
SDE 1010	First Year Experience	1
COM 1110	English Composition	3
SOC 1010	Sociology	3
AGR 1000	Introduction to Agriculture	3
AGR 1402	Principles of Crop Management	3
AGR 1404	Introduction to Integrated Pest Management	3

Term Hours 16

Second Semester

CHM 1110	Introductory General Chemistry	4
MTH 1370	College Algebra	4
AGR 1200	Sustainable Agriculture	3
AGR 1401	Introduction to Soils for Agronomic Production	3
AGR 1403	Principles of Nutrient Management	3

Term Hours 17

Second Year**First Semester**

AGR 1100	Principles of Agricultural Business Management	3
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Prescription Mapping or Robotics and Intelligence Track Requirements (see Track details below)	12
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Term Hours 15

Second Semester

BIO 1310	Environmental Science I	3
AGR 1300	Principles of Agricultural Marketing and Sales	3

Prescription Mapping or Robotics and Intelligence Track Requirements (see Track details below)	11
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Term Hours 17

Total Hours 65

Agriculture Technology

Prescription Mapping Track

Second Year**First Semester**

AGR 1500	Precision Agriculture Equipment	3
AGR 1515	Introduction to GPS in Agriculture	3
AVI 1000	Unmanned Aerial Systems	3
CET 2220	Surveying Fundamentals	3

Term Hours 12

Second Semester

AVI 1200	Unmanned Aerial Systems Basic Operation	3
AGR 1501	Prescription Mapping in Agriculture	3
AGR 1540	Introduction to GIS in Agriculture	3
AGR 2970 	Agriculture Technology Capstone	1
AGR 2991	Field Experience	1

Term Hours 11

Total Hours 23

Agriculture Technology

Agriculture Robotics and Intelligence Track

Second Year**First Semester**

AGR 1500	Precision Agriculture Equipment	3
AMT 1070	Basic Electricity and Electronics	3
AMT 2030	Programmable Logic Controllers	3
MET 2310	Fluid Power	3

Term Hours 12

Second Semester

AMT 2050	Robot Maintenance	3
FMS 2110	Basic Robotics and Mechatronics	3
AGR 1600	Introduction to Artificial Intelligence in Agriculture	3

AGR 2970 	Agriculture Technology Capstone	1
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AGR 2991	Field Experience	1
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Term Hours 11

Total Hours 23

 Capstone

Agronomy Certificate

James Uphaus, PhD, **Chair**
 Phone: (419) 995-8207
 Email: uphaus.j@rhodesstate.edu
 Office: JJC 179M

The Agronomy certificate provides students with the skills in agronomy to support a career in this ever-changing field. Most local career opportunities in agriculture require agronomic knowledge and the ability to earn the Certified Crop Advisor certificate. The Agronomy certificate includes courses in soils, crop management, nutrient management, and integrated pest management. The soils class discusses soil properties and formation from glaciation including drainage. Crop management evaluates cropping systems and environmental interactions affecting yield. Nutrient management assesses plant nutrient needs with the 4R program, Tri-State guidelines, and best management practices and nutrient retention. Integrated pest management provides an understanding of economic and environmental aspects of controlling field pests. The courses utilize team learning and individual internships to integrate local and global information. Problem solving exercises and contemporary computer software are integrated into the courses based on input from local agricultural business.

Program Learning Outcomes

Upon completion, the student will be able to:

- Discuss physical and chemical weathering properties that contributed to Ohio soil development including soil and water conservation practices to improve agronomic crop production.
- Plan crop decisions using developmental growth stages, yield expectations, conservation practices and cultural practices for an Ohio farm.
- Develop a nutrient management plan utilizing soil test data, recommended agronomic crop needs, economic principles and input availability.
- Identify common weed, disease and insect pests of Ohio Agronomic crops including integrated pest management principles to develop economic control plans in preparation for obtaining the commercial applicators license.

Technical Standards

See here (p. 26) for details.

Agronomy Certificate

First Year

First Semester

	Hours
AGR 1401 Introduction to Soils for Agronomic Production	3
AGR 1402 Principles of Crop Management	3
AGR 1403 Principles of Nutrient Management	3
AGR 1404 Introduction to Integrated Pest Management	3
CHM 1110 Introductory General Chemistry	4
AGR 2991 Field Experience	1
Term Hours	17
Total Hours	17

Technical Standards

See here (p. 26)for details

Allied Health Profession to Paramedic Certification

Chadwick E. Massie, M.Ed., Paramedic, **Coordinator**
 Phone: (419) 995-8228
 Email: massie.c@rhodesstate.edu
 Office: TL 162B

These courses are designed to prepare the licensed health professional for a Paramedic Certification. Registered nurses, licensed practical nurses and respiratory therapists are eligible to take this coursework. All candidates must have a minimum of two years clinical experience, preferably in a critical care setting; EMT-Basic certification from the state of Ohio; ACLS, PALS or PEPP; TNCC, BTLIS or PHTLS; and an AHA BLS Health Care Provider Certification or its equivalent prior to enrollment.

Students completing the Allied Health Profession to Paramedic Certification courses will be able to challenge the NREMT Paramedic Exam and meet the certification standards set forth by the Ohio Board of EMS and perform all duties of an EMT-Paramedic.

Emergency Medical Services Major (p. 62)

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to prioritize decisions and act quickly in the best interest of the patient.
- Apply knowledge and skills necessary to treat a variety of patients in many different environments.
- Adhere to the ethical and professional standards that govern the EMS profession.
- Demonstrate effective communication skills with empathy and compassion.
- Collect and analyze patient data to effectively treat mechanism of injury or nature of illness.

Technical Standards

See here (p. 26) for details.

Code	Title	Hours
EMS 2310	Allied Health Professional to Medic	5
EMS 2320	Allied Health Professional to Medic Clinical	2
Total Hours		7

American Sign Language Certificate

Joseph Abbott, PhD, **Chair**
 Phone: (419) 995-8856
 Email: abbott.j@rhodesstate.edu
 Office: TL 145E

The Humanities and Social Sciences Department offers an American Sign Language Certificate in which students will learn the basic knowledge and skills to interpret and communicate using American Sign Language.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate knowledge of the Deaf culture heritage and Deaf values through presentations, papers, and written exams.
- Demonstrate expressive and comprehensive skills in American Sign Language.
- Demonstrate knowledge of grammatical features, narratives, target vocabulary, and cultural norms.
- Demonstrate analytical knowledge and recognition of ASL linguistics.
- Describe the knowledge and skills of ASL that will support the understating of study and employment in education of the Deaf, interpreting, and in various professional and paraprofessional occupations where one may encounter members of the Deaf community.
- Demonstrate the ability to effectively communicate in ASL with members of the Deaf community in various settings.

First Year

First Semester		Hours
ASL 1010	American Sign Language I	4
PSY 1010 or SOC 1010	General Psychology or Sociology	3
Term Hours		7

Second Semester

ASL 1020	American Sign Language II	3
Term Hours		3

Second Year

First Semester		Hours
ASL 2010	American Sign Language III	3
Term Hours		3

Second Semester

ASL 2020	American Sign Language IV	3
Term Hours		3
Total Hours		16

 The ePortfolio requirement has been phased out and the ePortfolio indicators are being removed from the site.

Artificial Intelligence and Machine Learning

Jesse Wallace, MS, Chair

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 131

The **Associate in Science (AS) in Artificial Intelligence and Machine Learning Major** focuses on building machine learning models that can be used for predicting, making decision,s and enhancing human capabilities.

The program prepares students for entry-level positions in a variety of fields using artificial intelligence, including the information technology, automotive, healthcare, aerospace, industrial, and manufacturing industries. Program content includes an introduction to artificial intelligence and machine learning, natural language processing, computer vision, and artificial intelligence for business solutions and

other applications. The curriculum also includes coursework in computer programming, math, engineering and statistics.

Program Learning Outcomes

Upon completion, the student will be able to:

- Apply common artificial intelligence (AI) concepts and methodologies, including neural networks/deep learning, machine learning, natural language processing, computer vision, and data science, for analysis and decision making.
- Apply artificial intelligence (AI) project development and machine learning life cycle to address social and business issues, opportunities, and problems.
- Apply statistical analysis and machine learning algorithms to predict usefulness of artificial intelligence (AI) programming solutions.
- Use appropriate programming languages to implement artificial intelligence (AI) solutions.
- Communicate in varied settings, orally and visually and in writing, in a culturally responsive manner.
- Collaborate with diverse individuals and teams to design and implement artificial intelligence (AI) and machine learning solutions.
- Evaluate issues of bias, culture, environment, ethics, regulations, and professional expectations in the field of artificial intelligence (AI) and machine learning.

Technical Standards

See here (p. 24) for details.

First Year

Pre-requisite Semester		Hours
COM 1110	English Composition	3
CPT 1050	Technology Basics for IT Pro	3
MTH 1260	Statistics	3
PSY 1010	General Psychology	3
SDE 1010	First Year Experience	1
Term Hours		13

Fall

AIM 1000	Introduction to Artificial Intelligence	3
HST 1610	American History to 1877	3
MTH 1711	Calculus I	5
POL 1010	Introduction to Political Science	3
Term Hours		14

Spring

COM 1140	Technical Writing	3
CPT 1110	Introduction to Programming Logic and Design	3
CPT 2350	Database Programming	3
MTH 1721	Calculus II	5
Term Hours		14

Second Year

Fall		Hours
AIM 1100	Introduction to Machine Learning	3
AIM 2991	AIM Field Experience	1
LIT 2210 or LIT 2215	Introduction to Literature or Native American Literature	3

PHY 1120	Physics I	4
Term Hours		11
Spring		
AIM 2200	Natural Language Processing	3
AIM 2220	Artificial Intelligence for Computer Vision	3
AIM 2970 	AIM Capstone	2
PHY 1130	Physics II	4
Term Hours		12
Total Hours		64

- appropriate, various skills and methods for conducting basic forensic investigations or crime analysis.
- g. Communicate effectively in writing for a general and critical incident report for both law enforcement and corrections careers.

Technical Standards
See here (p. 26) for details.

Basic Peace Officer Academy - OPOTC Certificate

Chadwick E. Massie, M.Ed., Paramedic, **Coordinator**
Phone: (419) 995-8228
Email: massie.c@rhodesstate.edu
Office: TL 162B

The Basic Peace Officer Training certificate is in compliance with the standards set by the State of Ohio and by the Ohio Peace Officer Training Commission. Upon completion of the Academy, cadets are qualified to take the Ohio Peace officer Training Commission Test. Successful completion allows the student to become a law enforcement officer in any jurisdiction in Ohio. Successful graduates also have the opportunity to earn college credit towards a Rhodes State Criminal Justice degree. Basic Peace Officer Training topics include administration, legal, human relations, firearms, driving, traffic, investigation, patrol, traffic enforcement, civil disorders, defensive tactics, first aid, homeland security and physical conditioning. All skills taught are designed to meet the standards set by the state and the Ohio Peace Officer Training Commission. Students interested in joining the Academy must first pass a physical fitness test.

Rhodes State College offers a unique full-time Police Academy (LAW 2900) that can be completed in 16 weeks and is usually offered in spring through summer. The program is known for being one of the most accelerated in the state of Ohio and boasts new training opportunities that have been added since previous years.

Program Learning Outcomes

Upon completion, the student will be able to:

- Evaluate the nature, causation, and prevention of crime, including the ability to apply and critique the major theories relevant to those causes.
- Communicate effectively, both orally and in writing, and demonstrate basic knowledge of information technology as applied to criminal justice research and practice.
- Develop and demonstrate sufficient critical self-awareness to understand the influence of personal biases and values when interacting with diverse groups.
- Develop proficiency in carrying out the skills required of a criminal justice officer.
- Assemble, analyze, and interpret information for effective problem-solving.
- Apply the skills and methods in criminal justice research, including the acquisition, analysis, interpretation, dissemination, and policy implications of both quantitative and qualitative data, and where

Certificate for the Ohio Police Officer's Basic Training Academy

Basic Police Academy (Full-Time)

First Year

First Semester		Hours
LAW 2900	Basic Police Academy	30
Term Hours		30
Total Hours		30

(Students continuing on for the Associate of Applied Science in Law Enforcement will receive credit for the following courses)

Code	Title	Hours
LAW 2020	Criminal Law	3
HUM 2400	Crisis Management	3
LAW 1660	Ethics in Criminal Justice	3
LAW 1880	Report Writing for Criminal Justice	3
LAW 1130	Introduction to Criminal Justice	3
LAW 2120	Criminal Investigation	4
LAW 2250	Terrorism, Intelligence and Homeland Security	3
LAW 2060	Policing in the 21st Century	3
LAW 2010	Psychology and the Legal System	2
LAW 2200	Juvenile Delinquency	3
Total Hours		30

The Basic Peace Officer Training certificate is in compliance with the standards set by the State of Ohio and by the Ohio Peace Officer Training Commission. Upon completion of the Academy, cadets are qualified to take the Ohio Peace officer Training Commission Test. Successful completion allows the student to become a law enforcement officer in any jurisdiction in Ohio. Successful graduates also have the opportunity to earn college credit towards a Rhodes State Criminal Justice degree. Basic Peace Officer Training topics include administration, legal, human relations, firearms, driving, traffic, investigation, patrol, traffic enforcement, civil disorders, defensive tactics, first aid, homeland security and physical conditioning. All skills taught are designed to meet the standards set by the state and the Ohio Peace Officer Training Commission. Students interested in joining the Academy must first pass a physical fitness test.

Business Administration

Cara Hurd, MACC, **Chair**
 Phone: (419) 995-8323
 Email: rex.c@rhodesstate.edu
 Office: SCI 260N

The objective of the Business Program is to provide quality, up-to-date education for individuals who desire to enter into or advance careers in fields related to accounting, business administration, human resource, supply chain, digital marketing, digital media, and real estate. All business majors are built on a blend of courses that stimulate critical thinking. Degrees and certificates within the Business Program are

designed to prepare students for challenging and rewarding positions in business, industry, education, government, health care, and public service. Certificates provide an opportunity to secure expertise in special areas of concentration, and students may use most coursework to pursue associate-level degrees.

The Accounting, Business Administration, and Human Resource degrees are all accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The Business Administration Major provides a broad base of business and general education course requirements combined with the study of management. The Business Administration Major develops the skills and knowledge necessary to succeed in a modern organization. Students have an opportunity in the second year of their program to select from seven different track specializations including: Accounting, Digital Marketing, Supply Chain Management, Small Business Management, Agriculture Business, ESports Management or Project Management.

This allows students to become more specialized in an area of Business that is of interest to them. The track specializations also provide an easy pathway for students to be able to double major in other business degrees like Accounting, Human Resources, and Digital Marketing & Media. The Business Administration Major prepares graduates to manage a small organization, assume supervisory positions in a large organization, or start a business as an entrepreneur.

Completion of the Business Administration degree is an academic accomplishment that increases employment potential and can be an important steppingstone toward the attainment of a baccalaureate degree. **This associate degree can be earned in the classroom or fully online.**

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the four key managerial functions: 1) planning, 2) organizing, 3) leading, and 4) controlling.
- Apply team leadership skills needed in an entry-level supervisory position.
- Develop the ability to be a problem solver utilizing critical thinking skills as they apply to their chosen profession.
- Prepare written and oral communication in professional formats.
- Utilize software platforms commonly used in the business administration profession.
- Apply ethical and professional behavior while working as an individual and as part of a team.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Business Administration Major (Available in a Traditional and Fully On-line Format)

Associate of Applied Business Degree Structured Course Sequence (4 Semester Plan)

First Year

First Semester		Hours
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
MGT 1010	Principles of Management	3
MTH 1151	Quantitative Reasoning ¹	3
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		16

Second Semester

ACC 1010	Corporate Accounting Principles	4
ECN 1430	Micro Economics	3
MGT 2000	Human Resource Management	3
MKT 1010	Principles of Marketing	3
HST 1620	American History Since 1877	3
Term Hours		16

Second Year

First Semester

AOT 2640	Spreadsheet Software and Applications	3
COM 1160	Business Communications	3
MGT 2010	Organizational Behavior	3
Track Electives (see list below)		6
Term Hours		15

Second Semester

BUS 2100	Business Law	3
BUS 2991	Internship (Practicum)	1
BUS 2992	Internship (Seminar)	1
COM 2110	Public Speaking	3
or COM 2213	or Verbal Judo	
MGT 2490 	Applications in Business Administration	2
Track Electives (see list below)		6
Term Hours		16
Total Hours		63

¹ If planning to transfer, take MTH 1260 or higher.

Accounting Track (select 12 credit hours from the list below):

Code	Title	Hours
ACC 1020	Managerial Accounting Principles	4
ACC 1050	Accounting Software (QuickBooks)	2
ACC 1121	Payroll Accounting	2
ACC 2010	Intermediate Accounting I	4
ACC 2020	Intermediate Accounting II	4

ACC 2111	Cost Accounting	4
ACC 2300	Auditing	4

Marketing Track (select 12 credit hours from the list below):

Code	Title	Hours
MKT 1610	Customer Service	1
MKT 1620	Public Relations	1
MKT 1630	Mobile Marketing	1
MKT 2000	Digital Marketing and Analytics	3
MKT 2210	Comprehensive Sales Techniques	3
MKT 2300	Social Media Marketing	3

Supply Chain Management Track (select 12 credit hours from the list below):

Code	Title	Hours
ACC 1020	Managerial Accounting Principles	4
MGT 2440	Training, Development and Safety	3
or ENV 1300	OSHA Regulations and Safety	
SCM 1100	Supply Chain Management Principles	3
SCM 1200	Logistics and Transportation Management	3
SCM 1300	Purchasing and Negotiation	3

Small Business Management Track (select 12 credit hours from the list below):

Code	Title	Hours
ACC 1020	Managerial Accounting Principles	4
ACC 1050	Accounting Software (QuickBooks)	2
ACC 1121	Payroll Accounting	2
MGT 1050	Principles of Entrepreneurship	3
MGT 1250	Team Building	3
MKT 1610	Customer Service	1
MKT 1620	Public Relations	1
MKT 1630	Mobile Marketing	1
MKT 2210	Comprehensive Sales Techniques	3
MKT 2300	Social Media Marketing	3
SCM 1300	Purchasing and Negotiation	3

Agriculture Business Track (select 12 credit hours from the list below):

Code	Title	Hours
ACC 1050	Accounting Software (QuickBooks)	2
AGR 1000	Introduction to Agriculture	3
AGR 1100	Principles of Agricultural Business Management	3
AGR 1200	Sustainable Agriculture	3
AGR 1300	Principles of Agricultural Marketing and Sales	3
MKT 1610	Customer Service	1
MKT 2300	Social Media Marketing	3

Project Management Track (select 12 credit hours from the list below):

Code	Title	Hours
PGM 2004	Project Management Fundamentals 1	4
PGM 2005	Project Management Fundamentals 2	4
PGM 2006	Project Management Applications	4

Esports Management and Coaching Track (select 12 credit hours from the list below):

Code	Title	Hours
ESP 1000	Esports Foundations	2
ESP 1050	Health and Wellness Coaching	2
ESP 1100	Principles of Managing an Esports Program	3
ESP 1150	Fundamentals of Coaching	3
ESP 1200	Effective Communication for Coaches	3

The Accounting, Business Administration, and Human Resource majors are accredited by the Accreditation Council for Business Schools and Programs (ACBSP)

11520 West 119th Street
Overland Park, KS 66213

Business Administration Certificate

Cara Hurd, MACC, **Chair**
Phone: (419) 995-8323
Email: hurd.c@rhodesstate.edu
Office: SCI 260N

The Business Administration certificate provides students with the knowledge and skills needed for an entry-level supervisory position in a business environment. The curriculum focuses on foundational accounting, management, marketing, and technology skills. This certificate flows seamlessly into the Associate of Applied Business Degree in Business Administration.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the four key managerial functions: 1) planning, 2) organizing, 3) leading and 4) controlling.
- Interpret, analyze, and present reliable and relevant information to financial statement users based upon generally accepted accounting principles.
- Construct an integrated marketing strategy and plan incorporating the marketing mix.

Business Administration Major (p. 46)

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
ACC 1010	Corporate Accounting Principles	4
AOT 2640	Spreadsheet Software and Applications	3
CPT 1250	Computer Applications in the Workplace	3
ECN 1430	Micro Economics	3
or ECN 1410	Macro Economics	
MGT 1010	Principles of Management	3
MKT 1010	Principles of Marketing	3
Total Hours		19

Business Management Certificate

Cara Hurd, MACC, **Chair**
Phone: (419) 995-8323
Email: hurd.c@rhodesstate.edu

Office: SCI 260N

The Business Management certificate provides students with the knowledge and skills needed for an entry-level supervisory position in a business environment. The curriculum focuses on management, leadership, communication, and technology skills. Additionally, the students are introduced to basic marketing, accounting, economic, legal, and human resource concepts. This certificate flows seamlessly into the Associate of Applied Business Degree in Business Administration.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the four key managerial functions: 1) planning, 2) organizing, 3) leading and 4) controlling.
- Develop the ability to be a problem-solver utilizing critical thinking skills as they apply to the business management profession.
- Utilize software platforms commonly used in the business management profession.

Business Administration Certificate (p. 46)

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
ACC 1010	Corporate Accounting Principles	4
AOT 2640	Spreadsheet Software and Applications	3
BUS 2100	Business Law	3
COM 1160	Business Communications	3
CPT 1250	Computer Applications in the Workplace	3
ECN 1430	Micro Economics	3
MGT 1010	Principles of Management	3
MGT 2000	Human Resource Management	3
MGT 2010	Organizational Behavior	3
MKT 1010	Principles of Marketing	3
Total Hours		31

Cardiographic Technician Certificate

Pamela Halfhill, MS, **Chair**
Phone: (419) 995-8366
Email: halfhill.p@rhodesstate.edu
Office: TL 102E

The Cardiographic Technician certificate prepares students to use a variety of instruments and methods to perform diagnostic procedures such as Holter monitoring, stress testing, and electrocardiography. This type of work takes technicians into many different places and situations, from a relatively calm doctor's office to a chaotic emergency room. The variety of workplace environments provides flexibility, challenges, and satisfaction. The certificate courses cover cardiac anatomy and physiology, medical terminology, ECG interpretation, and advanced cardiac diagnostics. Upon completion of this certificate, the student will be eligible to take the Certified Cardiographic Technician (CCT) examination. The CCT examination is for professionals working in the areas of ECG, Holter monitoring, and stress testing.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate understanding of theoretical concepts including the ability to collect and evaluate patient data; and recommend procedures to obtain additional data.
- Initiate, conduct, and independently modify prescribed therapeutic procedures and recommend modifications based on patient response.
- Display and maintain expected levels of professionalism in their appearance, interaction with others, and general conduct while performing their assigned duties.

Technical Standards

See here (p. 26) for details.

Cardiographic Technician Certificate

First Year

First Semester

		Hours
BHS 1390	Medical Terminology	2
BIO 1000	Basic Human Structure and Function	3
BHS 1530	12 Lead ECG Interpretation	1
BHS 1540	Advanced Cardiac Diagnostics	3
Term Hours		9
Total Hours		9

Child Development Associate Certificate

Joseph Abbott, PhD, **Chair**

Phone: (419) 995-8856

Email: abbott.j@rhodesstate.edu

Office: TL 145E

The successful completion of the three-course Child Development Associate (CDA) certificate prepares students for the national assessment/evaluation online test. These classes may be used toward an associate degree for candidates choosing to continue beyond the CDA certificate.

Program Learning Outcomes

Upon completion, the student will be able to:

- Create developmentally appropriate learning activities.
- Explain how to build family and community relationships.
- Demonstrate how to observe, document, and assess in order to support young children and families.
- Demonstrate skills in teaching and analyze young children's learning.
- Exhibit professionalism in the field of early childhood.
- Maintain a portfolio to demonstrate professional philosophy and best practices as an early childhood teacher.

Technical Standards

See here (p. 24) for details.

With the completion of the following three courses, your CDA (Child Development Associate) required course work will be completed, and you will be prepared for the National assessment:

Preschool

Code	Title	Hours
EDU 1080	Classroom Management and Guidance	3
EDU 1300	Curriculum, Observation, and Assessment	3
EDU 2040	Administration and Health Management	3
Total Hours		9

Infant/Toddler

Code	Title	Hours
EDU 1300	Curriculum, Observation, and Assessment	3
EDU 2210	Infant and Toddler Environments	3
EDU 2040	Administration and Health Management	3
Total Hours		9

The Early Childhood Education program is accredited by the:

Ohio Department of Higher Education

University System of Ohio

30 East Broad Street, 36th Floor

Columbus, Ohio 43215

Cisco CCNA Certificate

Jesse Wallace, MS, **Chair**

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 131

Program Description

The CISCO CCNA Certificate will provide the student the knowledge needed to pass the third-party Cisco Certified Network Associate certification test at an authorized Pearson Vue Testing Center.

Network Security Major (p. 83)

Program Learning Outcomes

Upon completion, the student will be able to:

- Identify network fundamentals.
- Identify and configure of LAN switching technologies.
- Describe, implement and verify IP routing technologies.
- Identify and configure WAN technologies.
- Identify and configure infrastructure services.
- Configure and verify network device security.
- Configure infrastructure management.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
CPT 1705	Cisco I - CCNA	3
CPT 1715	Cisco II - CCNA	3
Term Hours		6

Second Semester

CPT 2705	Cisco III - CCNA	3
Term Hours		3
Total Hours		9

Computed Tomography (CT) Certificate

Robert (Andy) Shappell, M.Ed., **Coordinator**
 Phone: (419) 995-8257
 Email: shappell.a@rhodesstate.edu
 Office: TL 102G

The Computed Tomography (CT) Certificate Program is designed to provide radiographers with knowledge and basic skills in the practice of computed tomography (CT). Students will gain didactic knowledge which can be used to fulfill the structured education requirement for the ARRT computed tomography certification exam.

The clinical education portion of the certificate provides basic experience in computed tomography and with completion of the specific mandatory patient exam requirements completed with the student's employer will make them eligible to take the ARRT computed tomography certification exam.

The clinical portion of the certificate provides basic experience in computed tomography but does not complete the clinical competency requirement for the ARRT computed tomography certificate.

Program Learning Outcomes

Upon completion, the student will be able to:

1. Demonstrate clinical competence.
 - 1.1 Position patients accurately.
 - 1.2 Select diagnostic exposure factors.
 - 1.3 Practice appropriate radiation safety.
2. Demonstrate effective communication skills.
 - 2.1 Demonstrate effective verbal communication skills.
 - 2.2 Demonstrate effective written communication skills.
3. Utilize critical thinking.
 - 3.1 Adapt routine procedures to accommodate patient condition.
 - 3.2 Demonstrate proficiency in radiographic patient analysis.
4. Demonstrate professionalism.
 - 4.1 Act professionally.
 - 4.2 Demonstrate cultural awareness.

Technical Standards

See here (p. 26) for details.

Computed Tomography (CT)

Certificate

First Year

First Semester		Hours
RAD 2621	Principles of Computed Tomography	2
RAD 2622	Computed Tomography Procedures	1
Term Hours		3

Second Semester

RAD 2631	Clinical Education I - CT	1
RAD 2632	Clinical Education II - CT	1
Term Hours		2
Total Hours		5

Radiographic Imaging Major

In addition to the general admission requirements for all students, all applicants for the Computed Tomography (CT) Certificate program must hold a current RT(R) certification from the ARRT as CT is a specialization of radiography and the knowledge of x-ray interactions and radiation biology are a necessity for these courses.

Computer Numerical Control Certificate

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu
 Office: JJC 132

Students completing the Computer Numerically Controlled (CNC) Certificate have the skills to operate and program CNC lathes and mills. Students completing this certificate learn to program manually using M and G Codes and using MasterCAM. All students successfully completing the Manufacturing Engineering Technology (FMS) degree are eligible for this certificate.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- b. Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- c. Write programs to operate sophisticated machinery.
- d. Diagnose problems and provide correct, effective solutions.
- e. Apply their growing set of skills to creatively solve technical problems.

Mechanical Engineering Technology Major (p. 77)

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
FMS 2210	CAM/CNC Machining I	3
FMS 2220	CAM/CNC Machining II	3
SDE 1010	First Year Experience	1
Math Elective		

Minimum 3 Credits		
IMT 1911	Technical Math I	3
MTH 1210	Mathematics I	3
MTH 1370	College Algebra	4
Mechanical Elective		
Minimum 7 Credits		
ENV 1300	OSHA Regulations and Safety	3
MET 1000	Engineering Graphics with AutoCAD	3
MET 1010	Blueprint Reading and Sketching	3
MET 1020	Material Science	3
MET 1110	Manufacturing Processes	3
MET 1130	Statics	3
MET 2210	Strength of Materials	3
MET 2310	Fluid Power	3
MET 2440	Computer Aided Design	3
Total Hours		16

Computer Numerical Control (CNC) Machining Certificate

David Haus, PhD, **Dean**
 Phone: (419) 995-8422
 Email: haus.d@rhodesstate.edu
 Office: JJC 117

Students completing the Computer Numerical Control (CNC) Machining Certificate have the skills to operate and program CNC lathes and mills. Additionally students will learn manual machining skills, industrial mechatronics and robotics, and computer applications in the workplace. Students completing this certificate learn to program manually using M and G Codes and using MasterCAM.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Mechanical Engineering Technology Major (p. 77)

Technical Standards

See here (p. 24) for details.

Computer Numerical Control (CNC) Machining Certificate

Code	Title	Hours
AMT 1020	Preventive Maintenance	2
CET 1910	OSHA 10-hr General Safety	1
MET 1110	Manufacturing Processes	3
IMT 1911	Technical Math I	3

IMT 1010	Mechanical and Electrical Print Reading	2
CPT 1250	Computer Applications in the Workplace	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2320	Manual Machining I	2
FMS 2210	CAM/CNC Machining I	3
FMS 2130	Industrial Mechatronics and Robotics	3
FMS 2220	CAM/CNC Machining II	3
FMS 2340	Numerical Control Concepts	2
Total Hours		30

Concrete Technician Certificate

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu
 Office: JJC 132

Concrete Technicians work with engineers, project managers, estimators, and construction crews performing such duties as evaluating fresh and cured concrete specimens to verify compliance with building standards. A Concrete Technician is a person with the training and/or experience required to sit for and successfully pass the American Concrete Institute's (ACI) certification tests for Concrete Field Testing Technician - Grade I, Concrete Laboratory Testing Technicians - Grades I and II. A Concrete Technician will also have the experience required to sit for and successfully pass the Ohio Concrete certification test for Concrete Mix Designers. Furthermore, Concrete Technicians have knowledge of properties of aggregates, construction practices, inspection and test methods, pavement design, and estimating. They are also prepared to work in the public or private sectors as inspectors, testing technicians, quality control personnel, supervisors, and managers.

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully interpret construction drawings.
- Apply their growing set of skills to creatively solve technical problems.
- Accurately compute overall job material and labor costs.
- Utilize safety in all aspects of construction.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Concrete Technician Certificate

First Year		
First Semester		Hours
MET 1000	Engineering Graphics with AutoCAD	3
CET 1220	Construction Materials	3
CET 1450	Concrete Technology I	4
ENV 1000	Introduction to EHS Technology	3
CET 2220	Surveying Fundamentals	3
Term Hours		16
Second Semester		
CET 2210	Pavement Analysis	3

CET 2450	Concrete Technology II	4
CET 2200	Structural Design	3
CET 1910	OSHA 10-hr General Safety	1
CET 2230	Construction Cost and Analysis	3
CET 2970 	Civil Engineering Technology Capstone	2
Term Hours		16
Total Hours		32

Construction Management Certificate

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu
 Office: JJC 132

This 10-course, 30 credit-hour, two-semester certificate is designed to provide the foundational knowledge of construction management. Construction management positions include work assignments in marketing, sales, estimating, and purchasing; field assignments include those in scheduling, cost control, quality, safety, and other items within a construction project. Successful certificate completion will result in earning the OSHA 30-Hour Construction Safety and Health credential and the opportunity to earn the Construction Specifications Institute (CSI) Construction Documents Technologist (CDT) credential.

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully interpret construction drawings.
- Apply their growing set of skills to creatively solve technical problems.
- Accurately compute overall job material and labor costs.
- Utilize safety in all aspects of construction.

Technical Standards

See here (p. 26) for details.

First Year		
Fall		Hours
CET 1100	Construction Documents	3
CET 1110	Construction Methods	3
CET 1130	Construction Drawings	3
CET 1220	Construction Materials	3
CET 2220	Surveying Fundamentals	3
Term Hours		15
Spring		
CET 1230	Quantity Survey	3
CET 2110	Planning and Scheduling	3
CET 2230	Construction Cost and Analysis	3
ENV 1300	OSHA Regulations and Safety	3
MET 1000	Engineering Graphics with AutoCAD	3
Term Hours		15
Total Hours		30

Cyber Security Certificate

Jesse Wallace, MS, **Chair**

Phone: (419) 995-8356
 Email: wallace.j@rhodesstate.edu
 Office: JJC 131

Program Description

This Cybersecurity certificate is designed for the student who seeks to take on growing responsibilities for securing organizational data and network infrastructure against digital threats. Students will build a deeper and broader knowledge of the tools and protocols needed to navigate, use, and manage security technologies. This certificate provides technical and strategic knowledge to help the student fully leverage innovations while moving an organization from a reactive to a predictive approach to risk mitigation. Students will also engage in conversations that will provide insight into the ethical, legal, and social dynamics of cybersecurity.

Network Security Major (p. 83)

Program Learning Outcomes

Upon completion, the student will be able to:

- Follow a structured model in Security Systems Development Life Cycle (SDLC).
- Detect attack methodology and combat hackers from intrusion or other suspicious attempts at connection to gain unauthorized access to a computer and its resources.
- Protect data and respond to threats that occur over the internet.
- Design and implement risk analysis, security policies, and damage assessment.
- Plan, implement and audit operating systems' security in a networked, multi-platform, and cross platform environment.
- Provide contingency operations that include administrative planning process for incident response, disaster recovery, and business continuity planning within information security

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
CPT 1705	Cisco I - CCNA	3
CPT 2540	Computer and Network Security	3
CPT 2545	Scripting for Cybersecurity Professionals	3
CPT 2550	Cryptography and Encryption	3
CPT 2555	Network Forensics	3
CPT 1940	Introduction to Cybersecurity	3
CPT 1945	Introduction to the Internet of Things	3
CPT 1950	Security Awareness	3
CPT 1955	Firewall Essentials	3
CPT 1715	Cisco II - CCNA	3
Total Hours		30

Cybersecurity Fundamentals Certificate

Jean A. Wisuri, MA, **Chair**
 Phone: (419) 995-8870
 Email: wisuri.j@rhodesstate.edu

Office: SCI 151A

This Cybersecurity Fundamentals certificate prepares IT professionals and IT students for a career in IT infrastructure covering troubleshooting, configuring, and managing networks, hardware, and software. This certificate also introduces students to the information needed for securing organizational data and network infrastructure against digital threats. This certificate will start students on the path of earning the industry-recognized CompTIA A+, Network+, and Security+ credentials.

Cybersecurity Fundamentals Highlights

- Prepares students to sit for Industry Certifications in the following courses
 - a. CompTIA A+ (CPT 1605)
 - b. CompTIA Network+ (CPT 2020)
 - c. CompTIA Security+ (CPT 1950)
- Financial aid eligible for those who qualify
- Completed in one term
- 100% online

Program Learning Outcomes

Upon completion, the student will be able to:

- a. **Perform** installation, maintenance, and troubleshooting processes for most devices.
- b. **Summarize** physical security and common attacks while securing the wired and wireless networks.
- c. **Perform** installation, configuration, and troubleshooting of common network devices.
- d. **Perform** threat analysis and respond with appropriate mitigation techniques.

Technical Standards

See here (p. 187) for details.

First Semester		Hours
CPT 1605	IT Essentials	3
CPT 1940	Introduction to Cybersecurity	3
Term Hours		6
Second Semester		Hours
CPT 2020	Network Administration	6
CPT 1950	Security Awareness	3
CPT 1970	Cybersecurity Applications	1
Term Hours		10
Total Hours		16

Dental Assisting Certificate

Jill M. Hay, RDH, M.Ed, **Coordinator**
 Phone: (419) 995-8327
 Email: hay.j@rhodesstate.edu
 Office: Cook Hall 122

The Dental Assisting certificate program is designed for persons interested in working as basic qualified dental personnel or dental assistants. Students will gain knowledge and skills such as taking x-rays, record keeping, scheduling appointments, and an introduction to working

with dental materials. Those who successfully complete the curriculum will be competent in technical, interpersonal, and management skills expected of a Dental Assistant.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Demonstrate entry-level competence necessary to provide dental assisting services to individuals of all ages and from any population.
- b. Apply dental assisting knowledge in the provision of safe and effective dental assisting care within the scope of the Ohio revised Code.
- c. Exhibit professional conduct in dental assisting care and decision making.
- d. Assume the role of a dental assistant in clinical practice settings.
- e. Engage in life-long learning through continue credit and non-credit education.

Dental Hygiene Major (p. 53)

Technical Standards

See here (p. 26) for details.

First Year

First Semester		Hours
DAS 1011	Dental Assisting Techniques	1
DAS 1020	Dental Assisting Clinic	1
DAS 1201	Introduction to Dental Terminology and Basic Oral Anatomy	1
DAS 1460	Oral Radiography	3
DAS 1511	Dental Assisting Concepts	2
DHY 1019	Nitrous Oxide Sedation	0.5
DAS 2141	Dental Assisting Materials	1
SDE 1010	First Year Experience	1
Term Hours		10.5
Total Hours		10.5

Once the student is admitted into the Dental Assisting program, the program admitted students must show completion of the below requirements **three weeks prior** to start of term:

- a. Complete 16 hours of observation of a dental assistant in a dental office.
- b. Attend a Spring semester mandatory Dental Assisting comprehensive orientation with the dental hygiene department chairperson.
- c. Provide written results of physical and dental examinations, completion of required laboratory tests and completion of required immunizations.
- d. Complete the Hepatitis B series of three inoculations or Hepatitis B titre.
- e. Complete the American Heart Association (Healthcare Provider) or American Red Cross (Basic Life Support for Healthcare Providers) course. CPR certification must be maintained throughout the Dental Assisting Program.

Dental Hygiene

Jill M. Hay, RDH, M.Ed, **Coordinator**
 Phone: (419) 995-8327

Email: hay.j@rhodesstate.edu
Office: CK 122

A Career in Dental Hygiene

A registered dental hygienist is a licensed member of the oral health team who is responsible for assessing the oral health status of his/her patient and providing individualized preventive treatment. Men and women choose this caring profession because it is a challenging and rewarding career with the security of a professional license and the responsibility of direct patient care. Treatment often provided by a dental hygienist includes: taking social, medical and dental histories; assessing the patient's oral health and planning preventive treatment; making radiographic surveys (x-rays); providing individual oral health care instructions; removing deposits from teeth (cleaning); administering fluoride therapy; and placing dental sealants. Most dental hygienists practice in a private dental office. However, some seek employment in public health settings, specialty practices, school systems, industry, federal services and higher education. The need for licensed dental hygienists continues to grow as the demand for access to preventive oral health care increases.

The Associate Degree program at Rhodes State College provides the student with an excellent dental hygiene education, encouraging personal and professional growth. The faculty are committed to offering the highest level of instruction to each student. All clinical instruction, assessment and evaluation is provided by licensed dental hygienists and dentists in the modern, well-equipped Dental Hygiene Clinic. Dental health activities are integrated throughout the program preparing graduates to be vital members of the community. The curriculum is a combination of classroom, laboratory and clinical courses providing the student with the knowledge and skills necessary to practice dental hygiene. Emphasis is given to assisting the student to appreciate the value of comprehensive dental hygiene care.

Mission Statement

The Dental Hygiene Program prepares students to become competent oral healthcare professionals.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate entry-level competence necessary to provide educational, clinical, and consultative services to individuals of all ages and from any population by assuming the role of a dental hygienist in clinical and non-clinical practice settings.
- Assess the overall health of all patients and develop individualized comprehensive dental hygiene care plans.
- Apply biomedical science and general education knowledge to the practice of dental hygiene.
- Apply dental and dental hygiene science knowledge in the provision of safe and effective dental hygiene care within the scope of the Ohio Revised Code and established professional standards of dental hygiene practice.
- Participate in community activities which promote the importance of oral and general health.
- Assume the responsibility of life-long learning through continued credit and non-credit education by being a participating member in dental hygiene professional associations.

- Analyze current research and apply information to the practice of dental hygiene in private and public health settings.

Notice to Prospective or Current Dental Hygiene Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences required to complete the program. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession.

Bloodborne Pathogens

Dental hygiene students provide services in the oral cavity where they come in contact with blood and saliva. Although diseases may be encountered, research indicates that risks are negligible when optimal infection control is practiced. Upon entering the program, current infection control measures and practice are presented to the students by qualified faculty. Compliance of these practices is assessed and evaluated throughout the students' clinical experience to ensure a safe working environment.

Prior to entering the program, all new Health Sciences Division students will receive the Division of Health Sciences Infectious Disease Policy. This comprehensive document demonstrates the College's commitment to protecting students' rights, to educating students about infectious diseases, and to taking every reasonable precaution to provide a safe educational and work environment.

Dental Hygiene Licensure

Graduates of the program are awarded an Associate Degree of Applied Science. Upon successful completion of the program, the National Board Dental Hygiene Examination, the American Board of Dental Examiners (ADEX) Dental Hygiene Examination, and the Ohio Jurisprudence Examination, graduates will be eligible to apply for state licensure.

Reentry or Admission with Advanced Standing

Students seeking reentry to the Dental Hygiene Program **may be accepted** one time on a space-available basis. A student who withdrew or was academically disqualified from the previous academic year must be in good standing with the College and follow the prescribed procedures stated in the program's Re-entry Policy. This document is published in the Clinic Manual and is available upon request from the Office of the Chairperson of Dental Hygiene.

Advanced standing may be granted to a transfer student when courses are equivalent and were completed within the accepted time frame:

Dental Hygiene courses: within the previous academic year

Related (Basic) Studies courses: within the previous five years

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply.

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation. Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Radiation Monitoring

For educational and training purposes, students under the age of 18 are held to the same radiation exposure limits as members of the general public (1mSv/year). This limit is 1/50 that of the occupational exposure limit which is 50mSv/year (National Council on Radiation Protection and Measurements). The occupational radiation exposure of radiologic personnel engaged in general x-ray activity are typically considerably lower exposures than this limit. All students are monitored while in areas of possible radiation exposure.

Dental Hygiene

Associate of Applied Science Degree

Structured Course Sequence (5 Semester Plan)

First Year

		Hours
Fall		
BIO 1110	Anatomy and Physiology I	4
COM 1110	English Composition	3
DHY 1010	Dental Hygiene Preclinic	4
DHY 1200	Orofacial Anatomy	2
DHY 1460	Oral Radiography	3
DHY 1511	Preventive Concepts I	3

Term Hours **19**

Spring

BHS 1330	Foundations in Pharmacology	1
BIO 1120	Anatomy and Physiology II	4
DHY 1030	Dental Hygiene Clinic I	3
DHY 1301	Oral Histology and Pathology	3
DHY 1521	Preventive Concepts II	3
DHY 1660	Pain Control Management	2

Term Hours **16**

Summer

BIO 1400	Microbiology	4
DTN 1220	Principles of Nutrition	2
SOC 1010	Sociology	3
MTH 1370 or MTH 1151	College Algebra or Quantitative Reasoning	3-4

Term Hours **12-13**

Second Year

Fall		
DHY 2010	Dental Hygiene Clinic II	4
DHY 2140	Dental Materials	2
DHY 2340	Periodontology	2
DHY 2510	Preventive Concept III	2
CHM 1120	Introductory Organic and Biochemistry	4

Term Hours **14**

Spring

DHY 2020	Dental Hygiene Clinic III	4
DHY 2540 	Dental Hygiene Capstone Course	1
DHY 2770	Community Dental Health	2
DHY 2662	Current Concepts	1
PSY 1010	General Psychology	3

Term Hours **11**

Total Hours **72-73**

 Capstone Course

Prerequisites:

Students should check course prerequisites before registering. Prerequisites are listed in the Course Description section (p. 117).

Prerequisites:

Students should check course prerequisites before registering. Prerequisites are listed in the Course Description section (p. 102).

In addition to the general education admission requirements for all students, students who are seeking entry into the Dental Hygiene Program will have their name placed on a qualified list after they meet the program qualifications listed below:

- Attend a program specific briefing.
- Have a minimum of 2.75 grade point average (GPA) for any previous college level course at the time of selection and matriculation.
- Be remediation free in math, writing, reading, and science.

Names are listed on the qualified list, in order, using the date on which the documentation was received. In the event that two (2) or more students qualify on the same day, the date of the application to the College is used to rank order.

Students admitted into the Dental Hygiene Program must show completion of the following requirements prior to the first day of classes:

- Complete SDE 1010 First Year Experience or have previous college experience.
- Complete 16 hours of observation of a dental hygienist in a dental office. Four (4) of these hours can be earned by completing treatment as a patient in the Dental Hygiene Clinic.
- Attend mandatory Dental Hygiene comprehensive orientation.
- Provide written results of physical and dental examinations, completion of required laboratory tests and completion of required immunizations.
- Complete the American Heart Association (Healthcare Provider) or American Red Cross (Basic Life Support for Healthcare Providers) course. CPR certification must be maintained through graduation.

Dental Hygiene Program admits students once a year in Fall Semester.

The program in dental hygiene is accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The Commission's web address is: <http://www.ada.org/100.aspx>. The program has held this accreditation status since inception in 1976.

Digital Marketing Certificate

Cara Hurd, MACC, **Chair**
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Email: hurd.c@rhodesstate.edu
Office: SCI 260N

The Digital Marketing certificate provides students with the knowledge and skills needed for an entry-level digital marketing position. The Digital Marketing certificate curriculum focuses on a broad variety of technical skill sets, including digital marketing, digital analytics, social media marketing, Photoshop, and Microsoft Office. This certificate flows seamlessly into the Associate of Applied Business Degree in Digital Marketing and Media.

Program Learning Outcomes

Upon completion, the student will be able to:

- Construct an integrated marketing strategy and plan incorporating the marketing mix.
- Apply digital marketing and social media marketing strategies to build brand awareness in marketing communications.
- Create graphic and digital design layouts focusing on user experience using industry standard software

- Create graphic and digital design layouts, websites, and videos focusing on user experience using industry standard software.
- Develop the ability to be a problem solver utilizing critical thinking skills as they apply to their chosen profession.
- Prepare written and oral communication in professional formats.
- Apply ethical and professional behavior while working as an individual and as part of a team.

Digital Marketing and Media Major (p. 57)

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
CPT 1250	Computer Applications in the Workplace	3
MKT 1010	Principles of Marketing	3
MKT 2300	Social Media Marketing	3
Term Hours		9
Second Semester		
CPT 2650	Creating and Editing Digital Images	3
CPT 2700 or CPT 2750	Digital Video Editing or HTML and CSS	3
MKT 2000	Digital Marketing and Analytics	3
Term Hours		9
Total Hours		18

Digital Marketing and Media

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 Office: SCI 260N

The **Digital Marketing and Media Major** is designed to provide hands-on education for individuals desiring to enter, advance or improve their skills in the growing fields of digital marketing and media. This degree provides a broad base of marketing knowledge with an emphasis on cutting-edge digital and social media marketing skillsets. The degree also focuses on hands-on technology and software skills that are critical in the fields of digital marketing and media. Students have an opportunity to select from two different track specializations (Marketing or Media) while completing this degree. (Please see below for additional details on these tracks.)

The track specializations provide an easy pathway for students to be able to double major in the Business Administration Degree or pick up additional related certificates. Completion of the Digital Marketing and Media degree is an academic accomplishment that increases employment potential and can be an important stepping stone toward the attainment of a baccalaureate degree. **This associate's degree can be earned fully online.**

Program Learning Outcomes

Upon completion, the student will be able to:

- Construct an integrated marketing strategy and plan incorporating the marketing mix.

Marketing Track (See Academic Plan tab for specific course details)

Students complete courses in communication, customer service, public relations, mobile marketing, sales techniques, video editing, and website development. This track is for students who desire career positions as social media managers, public relations specialists, digital marketing associates, sales representatives, customer service representatives, and other challenging marketing-related jobs.

Media Track (See Academic Plan tab for specific course details)

Students approach media from creative and technical perspectives. Students will take advantage of the latest software to design and produce advertisements and websites, create animation, edit digital pictures and digital video, and produce a variety of other media communication vehicles that meet the needs of the digital marketplace. This track is for students who desire career positions as website developers, publishers, illustrators, graphic designers, multimedia producers, social media managers, and digital marketing associates. Course content covers objectives for various certifications, including:

- Adobe ACE Dreamweaver
- Adobe ACE InDesign
- Adobe ACE Photoshop
- Adobe ACE Illustrator
- Adobe ACE Animate
- Adobe ACE After Effects
- Adobe ACE Premiere Pro

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Digital Marketing and Media Associate of Applied Business Degree

First Year

First Semester

COM 1110	English Composition	3
CPT 1210	Introduction to Digital and Emerging Technologies	3
CPT 1250	Computer Applications in the Workplace	3
ECN 1430	Micro Economics	3
MKT 1010	Principles of Marketing	3
SDE 1010	First Year Experience	1
Term Hours		16

Second Semester

CPT 2650	Creating and Editing Digital Images	3
HST 1620	American History Since 1877	3
MKT 2000	Digital Marketing and Analytics	3
MTH 1151	Quantitative Reasoning ¹	3
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
SOC 1010	Sociology	3
Media or Marketing Track Requirements (See Track Details Below)		3
Term Hours		18

Second Year

First Semester

CPT 1580	Introduction to Graphic Design and Layout	3
CPT 2670	Graphics Software and Applications	3
MKT 2300	Social Media Marketing	3
Media or Marketing Track Requirements (See Track Details Below)		6
Term Hours		15

Second Semester

BUS 2991	Internship (Practicum)	1
BUS 2992	Internship (Seminar)	1
COM 2213	Verbal Judo	3
MGT 2010	Organizational Behavior	3
MKT 2490 	Applications in Digital Marketing and Media	2
Media or Marketing Track Requirements (See Track Details Below)		3-5
Term Hours		13-15
Total Hours		62-64

¹ If planning to transfer, take MTH 1260 or higher.

Marketing Track Requirements

First Year

Second Semester

AOT 2640	Spreadsheet Software and Applications	3
Term Hours		3

Second Year

First Semester

COM 1160	Business Communications	3
MKT 2210	Comprehensive Sales Techniques	3
Term Hours		6

Second Semester

CPT 2700	Digital Video Editing or CPT 2750 or HTML and CSS	3
MKT 1610	Customer Service	1
MKT 1620	Public Relations	1
Term Hours		5
Total Hours		14

Media Track Requirements

First Year

Second Semester

CPT 2700	Digital Video Editing	3
Term Hours		3

Second Year

First Semester

CPT 2750	HTML and CSS	3
CPT 2760	Animation	3
Term Hours		6

Second Semester

CPT 2770	Animation II	3
Term Hours		3
Total Hours		12

Digital Media Technology Certificate

Cara Hurd, MACC, **Chair**

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Office: SCI 260N

The Digital Video and Graphic Specialist certificate is designed for students who are interested in building their skill sets in the Adobe Creative Cloud Suite. The Digital Video and Graphic Specialist Certificate curriculum focuses on a broad variety of digital media skillsets including graphic design, photo-editing, video editing, website creation, and animation. This certificate flows seamlessly into the Associate of Applied Business Degree in Digital Marketing and Media.

Program Learning Outcomes

Upon completion, the student will be able to:

- Create and edit digital graphic layouts, digital images, and websites.
- Apply video production, compression, and editing skills.
- Produce visually innovative motion graphics and animation.

Digital Marketing and Media Major (p. 57)

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
CPT 1210	Introduction to Digital and Emerging Technologies	3
CPT 1580	Introduction to Graphic Design and Layout	3
CPT 2670	Graphics Software and Applications	3
CPT 2750	HTML and CSS	3
CPT 2760	Animation	3
Term Hours		15
Second Semester		
CPT 2650	Creating and Editing Digital Images	3
CPT 2700	Digital Video Editing	3
CPT 2770	Animation II	3
Term Hours		9
Total Hours		24

Electro-Mechanical Engineering Technology

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@RhodesState.edu
 Office: JJC 132

The Electro-Mechanical Engineering Technology Program offers students the opportunity to build a career maintaining integrated manufacturing systems found in advanced manufacturing. The program leads students through a mechatronics approach to maintaining and troubleshooting highly-automated, complex manufacturing systems that include programmable logic controllers, robots, various types of drives, sensors, photoeyes, and electrohydraulics and electropneumatics. Graduates will be able to work as Maintenance Technicians in most manufacturing settings.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation for the benefits that cultural diversity brings to a multidisciplinary team.
- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Electro-Mechanical Engineering Technology

Associate of Applied Science Degree

First Year

First Semester		Hours
COM 1110	English Composition	3
PHY 1120	Physics I	4
SDE 1010	First Year Experience	1
EET 1110	Circuit Analysis I	3
MTH 1370	College Algebra	4
Term Hours		15
Second Semester		
PHY 1130	Physics II	4
MET 1020	Material Science	3
EET 1120	Circuit Analysis II	3
MET 1110	Manufacturing Processes	3
SOC 1010	Sociology	3
Term Hours		16

Second Year

First Semester		
MTH 1430	Trigonometry	3
MET 2210	Strength of Materials	3
MET 1000	Engineering Graphics with AutoCAD	3
EET 1330	Digital Circuits	4
MET 2991 or EET 2991	Field Experience or Field Experience	1
Term Hours		14
Second Semester		
TECHNICAL ELECTIVE		5-6
MET 1130	Statics	3
EET 1130	Electronics	4
COM 1140	Technical Writing	3
MET 2970  or EET 2970	MET Department Capstone or Electronic Engineering Technology Capstone	2
Term Hours		17-18
Total Hours		62-63

 Capstone

Technical Electives:

Code	Title	Hours
AMT 1100	Welding and Fabrication	3
EET 2030	Motor Controls	3
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2900	Electric Codes and Application	2
EET 2911	Programmable Logic Controllers	3
ENV 1300	OSHA Regulations and Safety	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3

GET 1500	Special Topics in Engineering Technology	1-10
IMT 2170	Industrial Motor Drives	2
MET 2310	Fluid Power	3
FMS 2210	CAM/CNC Machining I	3
FMS 2220	CAM/CNC Machining II	3

 Capstone Course

Electro-Mechanical Systems Technology Certificate

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 Office: JJC 132

This certificate prepares students to meet the demands of a career in electro-mechanical technology combining electrical circuits and mechanical technology. The program prepares students to operate, test, and maintain modern integrated electro-mechanical systems. In addition to quality classroom and laboratory instruction, students will gain real-world experiences through internship opportunities.

Technicians use state-of-the-art measuring and diagnostic equipment. While engineering principles, mathematics, and physics provide a theoretical base, practical (hands-on) experience is also important. Technicians will learn to design, build, and troubleshoot electronic circuits on their own. Those interested in the Electro-Mechanical Systems Technology certificate should have an aptitude for mathematics, science, and technical work.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Electro-Mechanical Systems Major (p. 59)

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
Math Elective		
Minimum 3 Credits		
MTH 1210	Mathematics I	3
MTH 1370	College Algebra	4
MTH 1430	Trigonometry	3
Drafting Elective		
Minimum 3 Credits		
MET 1000	Engineering Graphics with AutoCAD	3
MET 1010	Blueprint Reading and Sketching	3

Electrical Elective		
Minimum 6 Credits		
EET 1110	Circuit Analysis I	3
EET 1120	Circuit Analysis II	3
Fluid Power Elective		
Minimum 3 Credits		
MET 2310	Fluid Power	3
Mechanical Elective		
Minimum 6 Credits		
AMT 1100	Welding and Fabrication	3
MET 1020	Material Science	3
MET 1110	Manufacturing Processes	3
MET 1130	Statics	3
MET 2210	Strength of Materials	3
Manufacturing Automation Elective		
Minimum 9 Credits		
CPT 1120	Introduction to VB Programming	3
CPT 1250	Computer Applications in the Workplace	3
EET 1330	Digital Circuits	4
EET 2030	Motor Controls	3
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2900	Electric Codes and Application	2
EET 2911	Programmable Logic Controllers	3
ENV 1300	OSHA Regulations and Safety	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3
FMS 2210	CAM/CNC Machining I	3
FMS 2220	CAM/CNC Machining II	3
FMS 2340	Numerical Control Concepts	2
IMT 2170	Industrial Motor Drives	2
IMT 2260	Industrial Electronic Controls	3
MET 2440	Computer Aided Design	3
Total Hours		30

Electronic Engineering Technology

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@RhodesState.edu
 Office: JJC 132

Electronic Engineering Technology encompasses the study of electronic engineering technologies. Students desiring a broad-based education or who desire to possibly pursue a bachelor's degree in Electronic Engineering Technology should consider enrolling in the Electronic Engineering Technology program.

Electronic engineering technicians use state-of-the-art measuring and diagnostic equipment. While engineering principles, mathematics, and physics provide a theoretical base, practical (hands-on) experience is also important. Technicians will learn to design, build, and troubleshoot electronic circuits on their own. Students begin by analyzing basic series and parallel DC and AC circuits and progress through amplifiers and integrated circuits. The program also includes digital logic, microprocessor studies, and programmable logic controllers. These devices monitor and control various processes automatically. The aim of

the curriculum is to teach hardware and software programming design and implementation of this equipment, as well as the development of software needed for programming it.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Electronic Engineering Technology Major Associate of Applied Science Degree

First Year

First Semester		Hours
COM 1110	English Composition	3
PHY 1120	Physics I	4
SDE 1010	First Year Experience	1
EET 1110	Circuit Analysis I	3
MTH 1370	College Algebra	4
ENV 1300	OSHA Regulations and Safety	3
Term Hours		18

Second Semester

MTH 1430	Trigonometry	3
PHY 1130	Physics II	4
EET 2900	Electric Codes and Application	2
EET 1120	Circuit Analysis II	3
SOC 1010	Sociology	3
Term Hours		15

Second Year

First Semester		Hours
COM 2213 or GER 1011 or COM 2110	Verbal Judo or Conversational German or Public Speaking	3
EET 2030	Motor Controls	3
CPT 1120	Introduction to VB Programming	3
EET 2911	Programmable Logic Controllers	3
EET 1330	Digital Circuits	4
EET 2991	Field Experience	1
Term Hours		17

Second Semester

TECHNICAL ELECTIVE		2
EET 1130	Electronics	4

EET 2310	Microcontroller Fundamentals	4
EET 2970	Electronic Engineering Technology Capstone	2
Term Hours		12
Total Hours		62

See here (p. 29) for Portfolio and Capstone information.

Capstone

Please consult an advisor or the course description (p. 117) section of this catalog.

Prerequisites:

Students should check course prerequisites before registering.

Technical Electives:

Code	Title	Hours
AMT 1100	Welding and Fabrication	3
AMT 2060	Controls and Instrumentation	3
CPT 2320	C# Programming	3
EET 2200	Panel Wiring and Arc Flash Safety	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3
GET 1500	Special Topics in Engineering Technology	1-10
IMT 2170	Industrial Motor Drives	2
IMT 2260	Industrial Electronic Controls	3

 Portfolio

 Capstone

Rhodes State College's Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Electronic Systems Technology Certificate

J. Erik Robey, BS, PE/PS, **Chair**

Phone: (419) 995-8071

Email: robey.e@RhodesState.edu

Office: JJC 132

The program prepares students to meet the demands of a career in electro-mechanical technology combining electrical circuits and mechanical technology. The program prepares students to operate, test, and maintain modern integrated electro-mechanical systems. In addition to quality classroom and laboratory instruction, students will gain real-world experiences through internship opportunities.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- Write programs to operate sophisticated machinery.

- d. Diagnose problems and provide correct, effective solutions.
- e. Apply their growing set of skills to creatively solve technical problems.

Electronic Engineering Major (p. 60)

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
Math Elective		
Minimum 3 Credits		
IMT 1911	Technical Math I	3
IMT 1921	Technical Math II	3
MTH 1210	Mathematics I	3
MTH 1370	College Algebra	4
MTH 1430	Trigonometry	3
Electrical Elective		
Minimum 13 Credits		
CPT 1120	Introduction to VB Programming	3
CPT 2320	C# Programming	3
EET 1110	Circuit Analysis I	3
EET 1120	Circuit Analysis II	3
EET 1130	Electronics	4
EET 1330	Digital Circuits	4
EET 2030	Motor Controls	3
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2310	Microcontroller Fundamentals	4
EET 2900	Electric Codes and Application	2
EET 2911	Programmable Logic Controllers	3
ENV 1300	OSHA Regulations and Safety	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3
IMT 2170	Industrial Motor Drives	2
IMT 2260	Industrial Electronic Controls	3
Total Hours		16

Rhodes State College's Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Emergency Medical Services

Chadwick E. Massie, M.Ed., Paramedic, **Coordinator**

Phone: (419) 995-8228

Email: massie.c@rhodesstate.edu

Office: TL 162B

As important members of the healthcare team, paramedics perform a wide variety of functions both on and off the streets. The professional paramedic is qualified by education and certification to provide pre-hospital care under the supervision of a medical director. In addition, the paramedic may also hold administrative duties within his/her organization.

Program Goals

Paramedic:

- To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician and/or Emergency Medical Responder levels.

Advanced Emergency Medical Technician:

- To prepare competent entry-level Advanced Emergency Medical Technician in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains.

Mission Statement

The Emergency Medical Services Program exists to prepare students as competent, professional emergency medical services providers.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Demonstrate the ability to prioritize decisions and act quickly in the best interest of the patient.
- b. Apply knowledge and skills necessary to treat a variety of patients in many different environments.
- c. Adhere to the ethical and professional standards that govern the EMS profession.
- d. Demonstrate effective communication skills with empathy and compassion.
- e. Systematically collect and analyze patient data to effectively treat mechanism of injury or nature of illness.

Notice to Prospective or Current EMS Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, therefore preventing you from completing the program. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

Associates Degree in Technical Studies with an emphasis in Fire Science

Individuals who wish to pursue an associated degree in technical studies utilizing their Fire Fighter training should contact the EMS program chair. College credit will be awarded for state certification in the following courses:

Code	Title	Hours
EMS 1150	Volunteer Firefighter	2
EMS 1160	Level I Transition Firefighter	4
EMS 1170	Level I Firefighter	5
EMS 1180	Level II Firefighter	5
EMS 1190	Fire Safety Inspector	3

See here (p. 35) regarding requirements for the Associate of Technical Studies.

Re-Entry into Certification Program

Students seeking re-entry to the Emergency Medical Services Program Paramedic Certification **may be accepted** one time on a space-available basis. A student who withdrew or was academically disqualified from the previous academic year must be in good standing with the College. Students must score a minimum of 80% on an EMS reentry exam.

Placement Testing

Please refer to the General Allied Health Qualifications section here (p. 11).

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply.

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation. Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Emergency Medical Services Associate of Applied Science Degree

Structured Course Sequence (4 Semester Plan)

First Year

Fall

		Hours
BIO 1110	Anatomy and Physiology I	4
BHS 1390	Medical Terminology	2
COM 1110	English Composition	3
MTH 1151	Quantitative Reasoning	3
SOC 1010	Sociology	3
SDE 1010	First Year Experience	1

Term Hours

16

Spring

BHS 1330	Foundations in Pharmacology	1
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BIO 1120	Anatomy and Physiology II	4
EMS 1580	EMT-Basic	7
PSY 1010 or SOC 1320	General Psychology or American Cultural Diversity	3
Term Hours		15
Second Year		
Fall		
EMS 2210	Paramedic I	13
EMS 2215	Paramedic Clinical	2.5
Term Hours		15.5
Spring		
EMS 2220	Paramedic II	13
EMS 2225	Paramedic Field Experience	2.5
EMS 2260 	EMS Capstone	1
Term Hours		16.5
Total Hours		63

 Capstone Course

See General Education Requirements (p. 29) page for Capstone information.

Prerequisites:

Students should check course prerequisites before registering.

Once the student is admitted into the Emergency Medical Services program, the program admitted students must show completion of the below requirements prior to the first day of class start of term:

- Be 18 years of age or older.
- Possess valid current Ohio EMT Card.
- Submit a high school transcript to the Office of Admissions.
- Complete a physical examination including laboratory tests and completion of required immunizations.
- Be able to meet the technical standards of the EMS program. These standards specify skills necessary to participate in learning activities and professional practice.
- Complete an American Heart Association, BLS, Health Care Provider, CPR course prior to first day of class and must be kept current through certification course(s) completion.
- Complete an interview with the Emergency Medical Services program chair or director of clinical education.

Accreditation

State:

The program is fully accredited by the Ohio Department of Public Safety, Division of Emergency Medical Services. Ohio Accreditation Number 318.

Inquiries regarding accreditation should be directed to:

Ohio Department of Public Safety,
Division of Emergency Medical Services
1970 West Broad Street
Columbus, OH 43218
1-800-233-0785
<http://ems.ohio.gov/>

National: This program is fully accredited with the Committee on Accreditation of Educational Programs for Emergency Medical Services Profession. Program #600609.

Inquiries regarding the Letter of Review should be directed to:

CoAEMSP
8301 Lakeview Parkway
Suite 111-212
Rowlett, TX 73088
Phone: 214-703-8445
www.coaemsp.org

Environmental Health Safety Certificate

David Haus, PhD, **Dean**
Phone: (419) 995-8422
Email: haus.d@rhodesstate.edu
Office: JJC 117

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain and apply OSHA safety and environmental regulations related to manufacturing.
- Explain the organization of a manufacturing facility.
- Apply the principles, systems, and tools involved with operational and personal excellence.

Technical Standards

See here (p. 24) for details.

Environmental-Health-Safety

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3
OET 1100	Operations Management	3
ENV 1000	Introduction to EHS Technology	3
MET 1010	Blueprint Reading and Sketching	3
ENV 1210	Environmental Laws and Regulations	3
ENV 1300	OSHA Regulations and Safety	3
IMT 1911	Technical Math I	3
MET 1110	Manufacturing Processes	3
OET 1110	Introduction to Operations Excellence	3
AMT 2970 	Troubleshooting Capstone	3
Total Hours		30

ESports Management and Coaching Certificate

Jean A. Wisuri, MA, **Chair**
Phone: (419) 995-8870
Email: wisuri.j@rhodesstate.edu
Office: SCI 151A

This Esports Management and Coaching certificate provides students insight into a quickly growing, internationally recognized competitive sport. Students in this program will collaborate with Esports coaches

with an established Esports team. Esports is a growing industry projected to be valued at \$1.4 billion. Esports (also known as electronic sports, e-sports, or esports) is a form of competitive sports using video games.

Esports Highlights

- Courses identify key elements of coaching and of managing a team
- Learn how to support the physical and mental well-being of Esports athletes
- Financial aid eligible for those who qualify
- Complete in one term
- 100% online

Program Learning Outcomes

Upon completion, the student will be able to:

- Identify key elements of coaching.
- Identify key elements of managing a team.
- Demonstrate effective communication skills.
- Demonstrate how to support the physical and mental well-being of esports athletes.
- Create an esports team.

Career Opportunities

- Head Esports Coach
- Assistant Esports Coach
- Social Media Management
- LAN Center Management
- Broadcasting
- Sports Commentating (Shoutcasting)
- Content Creator
- Organization Management
- Esports Program Development

Technical Standards

See here (p. 187) for details

First Year		
First Semester		Hours
ESP 1000	Esports Foundations	2
ESP 1050	Health and Wellness Coaching	2
ESP 1100	Principles of Managing an Esports Program	3
ESP 1150	Fundamentals of Coaching	3
Term Hours		10
Second Semester		
ESP 1200	Effective Communication for Coaches	3
ESP 1900	Esports Applications: Team Planning Strategy	3
Term Hours		6
Total Hours		16

Family Services Worker Certificate

Diane Haller, LISW-S, ACSW, LICDC-CS, **Coordinator**

Phone: (419) 995-8202

Email: haller.d@rhodesstate.edu

Office: TL 102K

The Family Services Worker certificate was developed at the request of West Ohio Community Action Partnership to provide their employees with training for the position of family service worker at their agency. Interested students should contact the Coordinator.

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain the scope and main features of the field, such as its development, theories, practices, and interactions of human systems.
- Demonstrate competency in core helping skills such as listening, writing, speaking, observation, interviewing, intake assessment, social assessment, intervention methods, record-keeping, goal planning, case management, group facilitation, crisis intervention, referrals, advocacy, cultural competence, orientation, education and prevention services.
- Behave professionally, ethically and legally in their responsibilities to consumers, colleagues, practice settings, employers, society, to self, and to the profession.
- Assess awareness of their own strengths, limitations, attitudes, values, personalities, interpersonal/reaction styles and how these may affect their professional practice.
- Perform entry-level skills competently in a professional setting by having participated in experiential training and reflection (learning by doing/experience).

Technical Standards

See here (p. 26) for details.

First Year		
First Semester		Hours
HUM 1150	Interviewing Techniques in Addictions, Mental Health and Social Work	3
HUM 2100	Case Management in Addictions, Mental Health and Social Work	3
Term Hours		6
Second Semester		
HUM 2230	Issues and Ethics in Helping	3
HUM 2310	Group Dynamics/Intervention	3
Term Hours		6
Total Hours		12

Food Technology Certificate

David Haus, PhD, **Dean**

Phone: (419) 995-8426

Email: haus.d@rhodesstate.edu

Office: JJC 117

The Food Science Technology Certificate curriculum is designed to introduce students to the procedures, testing, and reporting related to all aspects of the Food Technology industry. Students will learn about maintenance, quality, safety, procurement, shipping, and production. The

curriculum also prepares students to sit for two industry-recognized certifications: Hazard Analysis and Critical Control Points (HACCP) and Servsafe Manager's training.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate awareness of basic food production techniques and common lab techniques used to measure food production parameters.
- Apply knowledge of current food safety regulations and food quality management systems.
- Interpret risks present in food production and offer mitigation strategies.
- Implement the scientific method to solve problems and think critically

Technical Standards

See here (p. 26) for details.

First Year

First Semester		Hours
FST 1000	Introduction to Food Science	3
FST 1200	Food Quality	3
IMT 1911 or MTH 1260	Technical Math I or Statistics	3
FST 1300	Food Plant Operations	3
FST 1100	Food Processing	3
AGR 1000	Introduction to Agriculture	3
CUL 1011	Food Service Sanitation/Safety	2
Term Hours		20
Total Hours		20

Forensic Mental Health Certificate

Patricia Hampshire, DHS, LISW-S, HS-BCP, **Chair**
 Phone: (419) 995-8852
 Email: hampshire.p@rhodesstate.edu
 Office: TL 102L

The Forensic Mental Health certificate is designed to explore the dynamics of mental health as it relates to individuals involved in the criminal justice system. This certificate is an enhancement for students who are interested in the field of human services/social work within the realm of criminal justice. This certificate provides an advantage of knowledge to criminal justice or helping professionals who are looking to get a better understanding and influence of mental health by an individual's involvement in the criminal justice system.

The certificate focuses on areas including mental health/substance abuse diagnoses, ethical behavior whether in criminal justice or human services, the examination of race in the criminal justice system, crisis interventions, criminal behavior, and the psychology of the legal system.

Program Learning Outcomes

Upon completion, the student will be able to:

- Explain the scope and main features of the field, such as its development, theories, practices, and interactions of human systems.

- Demonstrate competency in core helping skills such as listening, writing, speaking, observation, interviewing, intake assessment, social assessment, intervention methods, record-keeping, goal planning, case management, group facilitation, crisis intervention, referrals, advocacy, cultural competence, orientation, education and prevention services.
- Behave professionally, ethically and legally in their responsibilities to consumers, colleagues, practice settings, employers, society, to self, and to the profession.
- Assess awareness of their own strengths, limitations, attitudes, values, personalities, interpersonal/reaction styles and how these may affect their professional practice.
- Perform entry-level skills competently in a professional setting by having participated in experiential training and reflection (learning by doing/experience).

Technical Standards

See here (p. 26) for details.

Forensic Mental Health Certificate

First Year

Fall		Hours
LAW 2022 or HUM 2030	Criminal Minds or Criminal Minds	3
HUM 2400	Crisis Management	3
LAW 2010 or HUM 2040	Psychology and the Legal System or Psychology and the Legal System	2
Term Hours		8
Spring		
LAW 1980 or HUM 1980	The Color of Justice or The Color of Justice	2
HUM 2170	Dynamics of Mental Health and Substance Use	3
HUM 2230 or LAW 1660	Issues and Ethics in Helping or Ethics in Criminal Justice	3
Term Hours		8
Total Hours		16

Graphic Design and Digital Imaging Certificate

Cara Rex, MACC, **Chair**
 Phone: (419) 995-8323
 Email: rex.c@rhodesstate.edu
 Office: SCI 260N

Digital Marketing and Media Major (p. 57)

Students approach media from creative and technical perspectives. Students will take advantage of the latest software to design and produce advertisements, create content for websites, create animation, edit digital pictures and digital video, and produce a variety of other media communication vehicles that meet the needs of the digital marketplace. This certificate flows seamlessly into the Associate of Applied Business Degree in Digital Marketing and Media

. This certificate content covers objectives for various certifications, including:

- Adobe ACE InDesign
- Adobe ACE Photoshop
- Adobe ACE Illustrator
- Adobe ACE Animate
- Adobe ACE After Effects
- Adobe ACE Premiere Pro

Program Learning Outcomes

Upon completion, the student will be able to:

- Create and edit digital graphic layouts, digital images and websites.
- Apply video production, compression, and editing skills.
- Produce visually innovative motion graphics and animation.

Technical Standards

See here (p. 24) for details.

Graphic Design and Digital Imaging Certificate

Freshman

First Semester

		Hours
CPT 1580	Introduction to Graphic Design and Layout	3
CPT 2650	Creating and Editing Digital Images	3
CPT 2670	Graphics Software and Applications	3

Term Hours 9

Second Semester

CPT 2700	Digital Video Editing	3
CPT 2760	Animation	3
CPT 2770	Animation II	3

Term Hours 9

Total Hours 18

Health Care Administration (Northwest Ohio Allied Health Education Consortium)

Ann Best, MHS, Assistant Dean, Health Sciences and Public Service

Phone: (419) 995-8080

Email: best.a@rhodesstate.edu

Office: CK 224D

Rhodes State College partners with Terra State Community College through the Northwest Ohio Allied Health Education Consortium to provide general education coursework for the Health Care Administration AAS degree. Students apply for the program and take all technical coursework online through Terra State Community College.

"The Health Care Administration program provides a solid values-driven foundation of knowledge regarding the healthcare industry combined with the discipline to apply that knowledge in a professionally competent manner to advance the health of the local community. Emphasis is placed on building strong communication skills and organizational competence that highlight the effective health care manager. This program is designed to prepare students to continue their education into a bachelor's degree in Health Care Administration while meeting the industry's desire for professionally educated individuals prepared

in a career-oriented associate degree program" (Terra State Community College website - see link below).

Specific information about the program is available on the Terra State Community College web site

Certification

Please note that this career path requires at least a bachelor's degree to enter the workforce.

- Apply to Terra State Community College
- Provide transcripts from Rhodes State College

Rhodes State College and Terra State Community College are each accredited by the Higher Learning Commission.

Higher Learning Commission

230 South LaSalle Street

Chicago, IL 60604

Health Care Technology

Andrea Liles, PT, MPT, Chair

Phone: (419) 993-7420

Email: liles.a@rhodesstate.edu

Office: TL 102D

The Health Care Technology degree is designed to meet the ever-changing needs of the healthcare delivery system by preparing students with cross-training in more than one health care skill. In addition to offering specialized training opportunities, the associate degree program provides the student with foundational knowledge in science, patient management, and communication skills that are required of all health professionals.

The degree features a flexible curriculum that meets the rapidly changing needs of the health community. It will provide the student with skills in more than one occupational role, thus making the student highly marketable. The student will work closely with an academic advisor to tailor the degree to his/her skills and interests.

The following are possible certificates that students can pursue:

- Activity Directing Certificate
- Addictions Services
- Advanced Emergency Medical Technician Certificate
- Advanced Nursing Assistant
- Basic Emergency Medical Technician Certificate
- Cardiographic Technician Certificate
- Dental Assisting Certificate
- Medical Assisting Certificate
- Medical Billing and Coding certificate
- Nurse Assistant Certificate
- Paramedic Certificate
- Patient Care Technician
- Personal Care Aide
- Phlebotomy Certificate
- Practical Nursing Certificate
- Sterile Processing Technician

Program Learning Outcomes

Upon completion of the degree the student will be able to:

- Demonstrate knowledge of the structure and function of the human body.
- Demonstrate effective verbal and written communication skills.
- Demonstrate effective clinical problem solving by evaluating information from multiple perspectives and formulating unbiased, logical conclusions.
- Demonstrate cultural awareness as measured through effective interpersonal and collaborative skills with individuals and groups.
- Demonstrate professional behaviors.
- Effectively communicate and interact with the consumer and a variety of healthcare team members.
- Demonstrate technical competency in selected areas of specialization.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details

Health Care Technology

Associate of Applied Science

First Year

First Semester		Hours
SDE 1010	First Year Experience	1
COM 1110	English Composition	3
BHS 1390	Medical Terminology	2
LIFE AND PHYSICAL SCIENCE ELECTIVE		3
MATHEMATICS ELECTIVE		3
HEALTH CARE TECHNOLOGY ELECTIVE		3
Term Hours		15

Second Semester

SOCIAL AND BEHAVIORAL SCIENCE ELECTIVE		3
SOCIAL AND BEHAVIORAL SCIENCE ELECTIVE		3
HUMANITIES OR COMMUNICATION ELECTIVE		3
HEALTH CARE TECHNOLOGY ELECTIVE		3
LIFE AND PHYSICAL SCIENCE ELECTIVE		4
Term Hours		16

Second Year

First Semester

BHS 1160	Medical Law-Ethics Healthcare	2
HUMANITIES ELECTIVE		3
HEALTH CARE TECHNOLOGY ELECTIVES		11
Term Hours		16

Second Semester

HCT 2500	 Health Care Technology Capstone	1
HEALTH CARE TECHNOLOGY ELECTIVES		12
Term Hours		13
Total Hours		60

Recommended General Education Course Electives

IMPORTANT: See Academic Advisor for assistance to select appropriate electives in general education for desired pathway.

Communication

Code	Title	Hours
COM 1140	Technical Writing	3
COM 1200	Writing in the Sciences	3
COM 1980	Research and Writing	1
COM 2213	Verbal Judo Required for PTA, RAD	3
COM 2400	Composition and Literature	3

Humanities

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking	3
HST 1011	Western Civilization I	3
HST 1333	World Civilization I	3
HST 1610	American History to 1877	3
HST 1620	American History Since 1877	3

HST 2300	Technology and Civilization	3
HST 2510	History of Latin America	3
HST 2521	Women in World History	3
LIT 2210	Introduction to Literature	3
LIT 2215	Native American Literature	3
LIT 2310	Literature and the Holocaust	3
LIT 2250	The American Short Story	3
LIT 2228	African-American Literature	3
LIT 1450	Introduction to Film	3
LIT 2241	World Literature I	3
LIT 2242	World Literature II	3
LIT 2260	Fantasy Literature	3
LIT 2301	British Literature I	3
LIT 2305	Introduction to Shakespeare	3
LIT 2450	Themes in Literature and Film	3
LIT 2227	Literature of Graphic Novels	3

Mathematics

Code	Title	Hours
MTH 1151	Quantitative Reasoning Option for DHY, NSG, OTA, Required for EMS, RES	3
MTH 1190	Finite Mathematics/Business	3
MTH 1260	Statistics Option for NSG, OTA, Required for PTA	3
MTH 1370	College Algebra Option for DHY, Required for RAD	4

Social and Behavioral Sciences

Code	Title	Hours
ANT 2411	Cultural Anthropology	3
POL 1010	Introduction to Political Science	3
PSY 1010	General Psychology Option for NSG, Required for DHY, EMS, OTA, PTA, RAD	3
PSY 1730	Abnormal Psychology Required for OTA	3
PSY 2150	Lifespan Psychology Required for PTA	3
PSY 2200	Social Psychology	3
PSY 2301	Educational Psychology	3
SOC 1010	Sociology Option for NSG, Required for DHY, EMS, OTA, RES	3
SOC 1200	Death and Dying	3
SOC 1210	Family Sociology	3
SOC 1320	American Cultural Diversity Option for EMS	3
SOC 2211	World Religions: History, Belief, and Practice	3
SOC 2300	Social Problems	3

Life and Physical Sciences

Code	Title	Hours
BIO 1000	Basic Human Structure and Function Option for practical nursing, Required for paramedic, phlebotomy, and medical billing/coding certificates	3
BIO 1210	Biology I	4
BIO 1110	Anatomy and Physiology I Required for DHY, EMS, NSG, OTA, PTA, RAD, RES	4
BIO 1120	Anatomy and Physiology II Option for PN certificate, Required for DHY, EMS, NSG, OTA, PTA, RAD, RES	4
BIO 1400	Microbiology Required for DHY and NSG	4
CHM 1110	Introductory General Chemistry	4

CHM 1120	Introductory Organic and Biochemistry Required for DHY, RES	4
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Health Care Technology Electives

Note: To complete the degree, students must earn a minimum of 30 credit hours in Health Care Technology electives, which may equate to one certificate equal to or greater than 30 credits, or at least two certificates combined with enough Health Care Technology hours to satisfy the degree requirement.

Activity Directing Certificate

Code	Title	Hours
HUM 1310	Activity Directing I	3
HUM 1320	Activity Directing II	3

Addiction Services Certificate

Code	Title	Hours
HUM 1710	Substance-Related and Addictive Disorders	3
HUM 2710	Addictions Counseling	3

Advanced Emergency Medical Technician Certificate

Code	Title	Hours
EMS 1580	EMT-Basic	7
EMS 1120	Advanced EMT	8

Advanced Nursing Assistant

Code	Title	Hours
BHS 2120	Introduction to Nursing	2
BHS 2110	Growth and Development: Lifespan	2

Basic Emergency Medical Technician Certificate

Code	Title	Hours
EMS 1580	EMT-Basic	7

Cardiographic Technician Certificate

Code	Title	Hours
BHS 1530	12 Lead ECG Interpretation	1
BHS 1540	Advanced Cardiac Diagnostics	3
BHS 1540L		0

Dental Assisting Certificate

Code	Title	Hours
DAS 1011	Dental Assisting Techniques	1
DAS 1020	Dental Assisting Clinic	1
DAS 1201	Introduction to Dental Terminology and Basic Oral Anatomy	1
DAS 1460	Oral Radiography	3
DAS 1511	Dental Assisting Concepts	2
DAS 2141	Dental Assisting Materials	1
DHY 1019	Nitrous Oxide Sedation	0.5

Medical Assisting Certificate

Code	Title	Hours
MAT 1100	Introduction to Medical Assisting	3
MAT 1100L		0
MAT 1200	Clinical Medical Assisting I	4
MAT 1200L		0
MAT 1300	Medical Office Procedures I	3
MAT 1400	Clinical Medical Assisting II	6
MAT 2410	Medical Office Coding	4
MAT 2320	Medical Office Procedures II	2
MAT 2320L		0
MAT 2310	Healthcare Reimbursement	3
MAT 2510	Medical Assisting Clinical (Practicum)	2
MAT 2520	 Capstone for Medical Assisting	2

Medical Billing and Coding Certificate

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3
MAT 2310	Healthcare Reimbursement	3
MAT 2410	Medical Office Coding	4
MAT 2420	Medical Coding - Advanced	2
MAT 2430	Electronic Health Records and Procedures	3

Nurse Assistant Certificate

Code	Title	Hours
BHS 1140	State Tested Nurse Aide Training	5

Paramedic Certificate

Code	Title	Hours
EMS 1580	EMT-Basic	7
EMS 2210	Paramedic I	13
EMS 2215	Paramedic Clinical	2.5
EMS 2220	Paramedic II	13
EMS 2225	Paramedic Field Experience	2.5

Patient Care Technician

Code	Title	Hours
BHS 1100	Patient Care Technician I	4
BHS 1120	Patient Care Technician II	4

Personal Care Aide

Code	Title	Hours
BHS 1000	Introduction to Patient Care	2

Phlebotomy Certificate

Code	Title	Hours
BHS 1840		3
BHS 1850	Phlebotomy Clinical	1

Practical Nursing Certificate

Code	Title	Hours
BHS 2110	Growth and Development: Lifespan	2
BHS 2120	Introduction to Nursing	2
DTN 1220	Principles of Nutrition	2
PNS 1200	Foundations of Practical Nursing	6
PNS 1200C		
PNS 1200L		

NSG 1721	Pharmacology for Nursing	2
PNS 1202	Adult Medical-Surgical Nursing	10
PNS 1203	PN-Issues and Trends	1
PNS 1204	Maternal Child Nursing	5

Sterile Processing Technician

Code	Title	Hours
STP 1000	Sterile Processing I	3
STP 1200	Sterile Processing II	2
STP 1207	Directed Practice For Sterile Processing	6

 Capstone

To complete the degree, students must earn a minimum of 30 credit hours in Health Care Technology electives, which may equate to one certificate equal to or greater than 30 credits, or at least two certificates combined with enough Health Care Technology hours to satisfy the degree requirement. An additional 30 credit hours must be completed in general education and basic related coursework.

Human Resource

Cara Hurd, MACC, **Chair**

Phone: (419) 995-8323

Email: rex.c@rhodesstate.edu

Office: SCI 260N

The objective of the Business Program is to provide quality, up-to-date education for individuals who desire to enter into or advance careers in fields related to accounting, business administration, human resource, supply chain, digital marketing, digital media, and real estate. All business majors are built on a blend of courses that stimulate critical thinking. Degrees and certificates within the Business Program are designed to prepare students for challenging and rewarding positions in business, industry, education, government, health care, and public service. Certificates provide an opportunity to secure expertise in special areas of concentration, and students may use most coursework to pursue associate-level degrees.

The Accounting, Business Administration, and Human Resource degrees are all accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

The Human Resource Major provides the practical skills and theory necessary to enter or advance in the human resource department of a small to large organization. Students prepare for generalist careers where they will use human resource skill sets, including employee selection, placement, benefits, compensation, training, development, safety, and labor relations. This degree also provides a foundation for individuals wanting to pursue the Associate Professional in Human Resources (aPHR) or Professional in Human Resources (PHR) professional certifications that are offered by the HR Certification Institute.

This degree can be earned in a fully online format.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the five key human resource functions: 1) selection, 2) training, 3) compensation, 4) benefits and 5) labor relations.

- b. Generate decisions based on analysis of data related the five key human resource functions.
- c. Develop the ability to be a problem-solver utilizing critical thinking skills as they apply to their chosen profession.
- d. Prepare written and oral communication in professional formats.
- e. Utilize software platforms commonly used in the business administration profession.
- f. Apply ethical and professional behavior while working as an individual and as part of a team.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Human Resource Major

(Available in a Blended (Traditional and On-line and Full On-Line Format)

Associate of Applied Business Degree

Structured Course Sequence (4 Semester Plan)

First Year

First Semester

		Hours
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
MGT 1010	Principles of Management	3
MTH 1151	Quantitative Reasoning ¹	3
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		16

Second Semester

ACC 1010	Corporate Accounting Principles	4
COM 2110	Public Speaking	3
or COM 2213	or Verbal Judo	
HST 1620	American History Since 1877	3
MGT 2000	Human Resource Management	3
MGT 2410	Employee Selection and Placement	3
Term Hours		16

Second Year

First Semester

AOT 2640	Spreadsheet Software and Applications	3
COM 1160	Business Communications	3
ECN 1430	Micro Economics	3
MGT 2440	Training, Development and Safety	3
MGT 2435	Benefits and Compensation	3
Term Hours		15

Second Semester

MGT 2010	Organizational Behavior	3
MGT 2060	Employee and Labor Relations	3
MGT 2530 	Applications in Human Resources	2
BUS 2100	Business Law	3
BUS 2991	Internship (Practicum)	1

BUS 2992	Internship (Seminar)	1
Elective (Must take at least 2 credit hours of elective classes)		2
See Options Below		

Term Hours	15
Total Hours	62

¹ If planning to transfer, take MTH 1260 or higher.

See here (p. 29) for Capstone information.

Prerequisites:

Students should check course prerequisites before registering.

Prerequisites are listed in the Course Tab (p. 117).

Basic/Related Elective Options

Code	Title	Hours
ACC 1050	Accounting Software (QuickBooks)	2
ACC 1121	Payroll Accounting	2
MKT 1010	Principles of Marketing	3
MKT 1610	Customer Service	1
MKT 1620	Public Relations	1

The Accounting, Business Administration, and Human Resource majors are accredited by the Accreditation Council for Business Schools and Programs (ACBSP)

11520 West 119th Street
Overland Park, KS 66213

Certificates

To be eligible for the following certificates, a student must have received a grade of "C" or better for each course required for the certificate and completed all required courses within four years of applying for the certificate.

Prerequisites may be required for courses listed for each certificate. Please see the course descriptions.

Human Resource Management Certificate (p. 72)

Human Resource Management Certificate

First Year

First Semester		Hours
MGT 1010	Principles of Management	3
MGT 2435	Benefits and Compensation	3
MGT 2440	Training, Development and Safety	3
Term Hours		9

Second Semester

MGT 2000	Human Resource Management	3
MGT 2060	Employee and Labor Relations	3

MGT 2410	Employee Selection and Placement	3
Term Hours		9
Total Hours		18

Human Resource Management Certificate

Cara Hurd, MACC, **Chair**
 Phone: (419) 995-8323
 Email: hurd.c@RhodesState.edu
 Office: SCI 260N

The Human Resource certificate provides students with the knowledge and skills needed for an entry-level human resource position. The human resource certificate curriculum focuses on human resource skill sets, including employee selection, placement, benefits, compensation, training, development, safety, and labor relations. This certificate also provides a foundation for individuals wanting to pursue the Associate Professional in Human Resources (aPHR) or Professional in Human Resources (PHR) professional certifications that are offered by the HR Certification Institute. This certificate flows seamlessly into the Associate of Applied Business Degree in Human Resource.

Human Resource Major (p. 70)

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the five key human resource functions: 1) selection, 2) training, 3) compensation, 4) benefits and 5) labor relations.
- Generate decisions based on analysis of data related the five key human resource functions.
- Develop the ability to be a problem-solver utilizing critical thinking skills as they apply to the Human Resource Profession.

Technical Standards

See here (p. 24) for details.

Human Resource Management Certificate

First Year		
First Semester		Hours
MGT 1010	Principles of Management	3
MGT 2435	Benefits and Compensation	3
MGT 2440	Training, Development and Safety	3
Term Hours		9
Second Semester		
MGT 2000	Human Resource Management	3
MGT 2060	Employee and Labor Relations	3
MGT 2410	Employee Selection and Placement	3
Term Hours		9
Total Hours		18

Industry 4.0 Certificate

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu

Office: JJC 132

This Industry 4.0 certificate is the first level of an overarching concept that brings together various solutions that connect factories and their components through intelligent use of data. While the benefits of smart technologies are widely recognized in the industry, there remains a significant labor skills gap; industries need employees who are skilled and experienced in robotics, smart manufacturing processes and Industry 4.0 technologies. This certificate can be embedded in any of the college's Engineering Technology degrees.

Program Learning Outcomes

Upon completion, the student will be able to:

- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
EET 1110	Circuit Analysis I	3
EET 2911	Programmable Logic Controllers	3
MET 2310	Fluid Power	3
Term Hours		9

Second Semester

AMT 1080	Mechanical Drive Systems	3
EET 1120	Circuit Analysis II	3
FMS 2110	Basic Robotics and Mechatronics	3
Term Hours		9
Total Hours		18

Laboratory Science Technology

Amanda Kuck, MS, **Coordinator**
 Phone: (419) 995-8879
 Email: kuck.a@RhodesState.edu
 Office: SCI 260P

This 65-credit hour concentration in the Associate of Science degree is designed to prepare students for employment as entry-level laboratory technicians. The curriculum has a strong foundation in chemistry and biology and was developed primarily from an industry perspective to prepare students for employment in a broad range of fields, including chemical, biological, environmental, industrial, and food analysis. The curriculum includes field experience to develop hands-on skills in a laboratory setting. The degree concentration not only prepares the student for immediate employment, but can also transfer smoothly to local universities to continue toward a bachelor's degree.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop a sound scientific knowledge foundation for work in the laboratory setting.

- b. Perform laboratory tests with accuracy and precision.
- c. Utilize safe laboratory practices.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

AS-Laboratory Science Technology

First Year

First Semester

	Hours
BIO 1210 Biology I	4
CHM 1010 General Chemistry I	4
CPT 1250 Computer Applications in the Workplace	3
PSY 1010 General Psychology	3
SDE 1010 First Year Experience	1
Term Hours	15

Second Semester

BIO 1220 Biology II	4
CHM 1210 General Chemistry II	4
COM 1110 English Composition	3
MTH 1260 Statistics	3
SOC 1010 Sociology	3
Term Hours	17

Second Year

First Semester

CHM 1310 Organic Chemistry I	5
COM 1140 Technical Writing	3
COM 2110 Public Speaking or COM 2213 or Verbal Judo	3
LST 1210 Experimental Design	1
MTH 1370 College Algebra	4
HST 1011 Western Civilization I or HST 1012 or Western Civilization II or HST 2510 or History of Latin America or HST 2521 or Women in World History or LIT 2310 or Literature and the Holocaust	3
Term Hours	19

Second Semester

BIO 2820  Associate of Science Capstone	1
COM 2400 Composition and Literature	3
LST 1220 Internship Experience	1
MUS 1010 Music Appreciation I or LIT 1450 or Introduction to Film or THR 1010 or Introduction to Theatre	3
SOC 1320 American Cultural Diversity	3

HST 1011 Western Civilization I	3
or HST 1012 or Western Civilization II	
or HST 2300 or Technology and Civilization	
or HST 2510 or History of Latin America	
or HST 2521 or Women in World History	
or LIT 2310 or Literature and the Holocaust	

Term Hours 14

Total Hours 65

 Capstone

Liberal Arts Certificate

Joseph Abbott, PhD, **Chair**

Phone: (419) 995-8856

Email: abbott.j@RhodesState.edu

Office: TL 145E

The Liberal Arts certificate will introduce you to a wide range of exciting subjects in the arts, humanities, and social sciences. Moreover, the Liberal Arts certificate will help you build a solid foundation for a future career by increasing your writing, speaking, and critical thinking skills. In addition, you can transfer your credits to a more advanced program, such as the Associate of Arts or the Associate of Science degree.

The Liberal Arts certificate can be a great way to earn a credential in a short amount of time or as a stepping-stone to an Associate of Arts, Associate of Science, or Bachelor's degree program in the Arts and Humanities, Business, Technology, and Public Service. The 30-semester hour certificate can be compiled in two semesters, and all courses are offered online or in a hybrid format, as well as in the traditional classroom. The Liberal Arts certificate will prepare developing professionals with the skills they need to be successful in a wide range of careers by covering a mixture of subjects in the arts, humanities, and social sciences. In addition, students who are completing an associate degree can add credentials to their resume by completing the Liberal Arts certificate.

The Liberal Arts Certificate will provide students with an overview and broad foundation in the humanities and liberal arts. The courses in the certificate are embedded in the Transfer Module certificate, the Associate of Arts degree, and the Associate of Science degree. The American and global/world traditions courses are required by most Ohio four-year public institutions.

Liberal Arts Certificate Highlights

Complete the certificate in 2 semesters (full time)

Can start any semester (fall, spring, or summer)

All classes are offered online, hybrid, or in the traditional classroom setting.

Transfer 100% of courses into the TM Certificate, Associate of Arts degree, or Associate of Science degree

Program Learning Outcomes

Upon completion students will be able to:

- a. Demonstrate the ability to communicate effectively.
- b. Demonstrate the ability to evaluate arguments in a logical fashion.
- c. Employ the methods of inquiry characteristic of natural sciences, social sciences, and the arts and humanities.

- d. Demonstrate understanding of our global and diverse culture and society.
- e. Examine the importance of engaging in our democratic society through informed citizenship.

Career Opportunities

The Liberal Arts certificate will help students compete in the global job market, analyze information, think critically, connect in a multi-cultural environment, and share their ideas with clarity through written and oral communication. Upon completion, the Liberal Arts Certificate will give students the ability to work in a range of positions including:

- Retail or sales manager
- Customer service associate
- Social and human services assistant
- Administrative support specialist

Liberal Arts Certificate

First Year

First Semester		Hours
COM 1110	English Composition	3
COM 2110 or COM 2213	Public Speaking or Verbal Judo	3
MUS 1010 or LIT 1450 or THR 1010	Music Appreciation I or Introduction to Film or Introduction to Theatre	3
LIT 2241 or LIT 2242 or LIT 2301 or LIT 2310	World Literature I or World Literature II or British Literature I or Literature and the Holocaust	3
SOC 1010	Sociology	3
Term Hours		15

Second Semester

COM 2400	Composition and Literature	3
HST 1011 or HST 1012 or HST 2521	Western Civilization I or Western Civilization II or Women in World History	3
PSY 1010	General Psychology	3
SOC 1320	American Cultural Diversity	3
SOC 2211 or PHL 1011	World Religions: History, Belief, and Practice or Introduction to Philosophy	3
Term Hours		15
Total Hours		30

LPN to ADN Transition Program

Tammy Segovia, MSN/Ed, RN, **Nursing Program Administrator**
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 Office: CK 224A

A special program has been developed for LPNs who might choose to extend their course of study and apply for admission to the Program with advanced standing. LPNs who meet the general College admission requirements may enroll in "General Studies" and "Related Courses" (see the Academic Plan). A student must be a graduate of a state-approved school of practical nursing, submit proof of a current, unrestricted

Ohio single-state LPN license or a compact/multistate license (MSL) valid within Ohio and the Nurse Licensure Compact (NLC) states, and have a minimum cumulative college GPA of 2.5. Students will be admitted into the transitional coursework based on space availability. Students who have an active, unencumbered Ohio single-state LPN license or a compact/multistate license (MSL) valid within Ohio and the Nurse Licensure Compact (NLC) states are not required to complete or submit evidence of satisfactorily completing a State Tested Nurse Aide certificate course. Students qualify for the transitional program after the acceptance requirements are completed. The applied education and nursing clinical courses must be completed within three (3) calendar years.

Acceptance Requirements

- a. General College Requirements (see General Admissions Procedures (p. 11).)
- b. Must be remediation free in math, English, reading, and science.
- c. Proof of current and unrestricted Ohio single-state LPN license or a compact/multistate license (MSL) valid within Ohio and the Nurse Licensure Compact (NLC) states.
- d. College cumulative GPA of 2.5 or higher. If the cumulative GPA is between 2.25 and 2.49, the student is conditionally accepted into the LPN to RN Transition Program with the stipulation that a grade of 80% or higher must be achieved in all transition coursework (NSG 1421, NSG 1423, and NSG 1424).
- e. Declaration of Nursing as the major course of study.

Additional Requirements upon acceptance into the LPN to RN Program

- a. Evidence of sufficient physical and mental health to engage in the practice of nursing.
- b. Current American Heart Association certification in CPR (BLS Health Care Provider).
- c. Completed health and immunization form.
- d. Criminal background check.
- e. Drug Screen.
- f. Nursing Orientation.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Prioritizes factors to promote patient centered care.
- b. Evaluates the interprofessional teamwork approach in achieving quality patient care.
- c. Synthesizes Evidence-Based Practice (EBP) while providing patient care.
- d. Critiques interventions to promote Quality and Safety in patient care.
- e. Adapts the tools of technology to communicate effectively, manage knowledge, mitigate error and support decision making,

Technical Standards

See here (p. 26) for details.

General Studies

Must be taken before enrollment in Required Transition courses:

Code	Title	Hours
BHS 2110	Growth and Development: Lifespan	2
BIO 1110	Anatomy and Physiology I	4
BIO 1120	Anatomy and Physiology II	4
COM 1110	English Composition	3
DTN 1220	Principles of Nutrition	2
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3

Advanced Standing Courses / ITAG

Code	Title	Hours
NSG 1320	Foundations of Nursing Advanced Standing Credit for LPN	5
NSG 1323	Adult Health Advanced Standing Credit for LPN ²	3
NSG 1324	OB Advanced Standing for LPN ²	2
NSG 1326	Psychosocial Advanced Standing Credit for LPN ²	2

Required Transition Courses

Code	Title	Hours
NSG 1421	OB Transition for LPN to RN ³	1
NSG 1423	Medical-Surgical I for the LPN to RN ³	6
NSG 1424	Psychosocial Transition for LPN to RN ³	1

Other Required Courses

Code	Title	Hours
BHS 1711	Pathophysiology for Healthcare	2
BIO 1400	Microbiology	4
MTH 1260	Statistics	3
or MTH 1151	Quantitative Reasoning	
NSG 1721	Pharmacology for Nursing	2

Required Advanced Nursing Courses

Code	Title	Hours
NSG 2522	Adult Health II	6
NSG 2525 	Essentials of Nurse Practice	9

 Capstone

² Awarded after successful completion of NSG 1421, NSG 1424 and NSG 1423 Medical-Surgical I for the LPN to RN.

³ Must be successfully completed before progressing to advanced nursing courses.

The Associate Degree Nursing Program is approved by the Ohio Board of Nursing (OBN), 17 S. High St., Suite 660, Columbus, Ohio 43215, (614) 466-3947, <https://nursing.ohio.gov/>; and continuing accreditation by the Accreditation Commission for Education in Nursing (ACEN), Inc., 3390 Peachtree Road, NE, Ste. 1400, Atlanta, GA 30326, (404) 975-5000; email: info@acenursing.org; website: <http://www.acenursing.org>.

Manufacturing Engineering Technology

J. Erik Robey, BS, PE/PS, Chair
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Office: JJC 132

The application of flexible manufacturing systems (FMS) to the totally automated factory requires technicians who can function in the world of robots, computerized numerical controlled (CNC) machines, computer-aided drafting and design (CADD), automated warehousing systems, and the total flexible manufacturing network. Manufacturing Engineering Technology is designed specifically to prepare students for technician-level employment in the fields of robotics, automated systems and associated areas under the broad umbrella of flexible manufacturing systems. The curriculum combines course offerings from the Electronic Engineering Technology and Mechanical Technology programs and includes four FMS technical courses while maintaining the same general studies and related studies currently required by those majors.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Manufacturing Engineering Technology Associate of Applied Science Degree

First Year		
First Semester		Hours
COM 1110	English Composition	3
PHY 1120	Physics I	4
SDE 1010	First Year Experience	1
EET 1110	Circuit Analysis I	3
MTH 1370	College Algebra	4
ENV 1300	OSHA Regulations and Safety	3
Term Hours		18
Second Semester		
EET 1330	Digital Circuits	4
MET 1020	Material Science	3
FMS 2110	Basic Robotics and Mechatronics	3
MET 1110	Manufacturing Processes	3
SOC 1010	Sociology	3
Term Hours		16
Second Year		
First Semester		
COM 2213	Verbal Judo	3
or GER 1011	or Conversational German	
or COM 2110	or Public Speaking	

FMS 2210	CAM/CNC Machining I	3
EET 2911	Programmable Logic Controllers	3
MET 1000	Engineering Graphics with AutoCAD	3
MET 2310	Fluid Power	3
MET 2991 or EET 2991	Field Experience or Field Experience	1
Term Hours		16
Second Semester		
TECHNICAL ELECTIVE		5-6
FMS 2130	Industrial Mechatronics and Robotics	3
FMS 2220	CAM/CNC Machining II	3
MET 2970  or EET 2970	MET Department Capstone or Electronic Engineering Technology Capstone	2
Term Hours		13-14
Total Hours		63-64

See here (p. 29) for Capstone information.

 Capstone

Prerequisites:

Students should check course prerequisites before registering.
Prerequisites are listed in the Course tab (p. 117).

Technical Electives

Code	Title	Hours
AMT 1100	Welding and Fabrication	3
EET 2030	Motor Controls	3
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2900	Electric Codes and Application	2
GET 1500	Special Topics in Engineering Technology	1-10
IMT 2170	Industrial Motor Drives	2
IMT 2260	Industrial Electronic Controls	3

Mammography Certificate

Robert (Andy) Shappell, M.Ed., **Coordinator**

Phone: (419) 995-8257

Email: shappell.a@rhodesstate.edu

Office: TL 102G

The Mammography certificate is designed to provide radiographers with knowledge and basic skills in the practice of mammography. Students will gain didactic knowledge that can be used to fulfill the structured education requirement for the ARRT mammography certification exam.

The clinical education portion of the certificate provides basic experience in computed tomography and with completion of the specific mandatory patient exam requirements completed with the student's employer will make them eligible to take the ARRT mammography certification exam.

The clinical portion of the certificate provides basic experience in computed tomography but does not complete the clinical competency requirement for the ARRT computed tomography certification.

Program Learning Outcomes

Upon completion, the student will be able to:

1. Demonstrate clinical competence.

2. Demonstrate effective communication skills.
3. Utilize critical thinking.
4. Demonstrate professionalism.

Technical Standards

See here (p. 26) for details.

Mammography Certificate

First Year

First Semester		Hours
RAD 2721	Principles of Mammography	1
RAD 2722	Mammographic Procedures	1
Term Hours		2

Second Semester

RAD 2731	Clinical Education I - Mammography	1
RAD 2732	Clinical Education II - Mammography	1
Term Hours		2
Total Hours		4

Radiographic Imaging Major

In addition to the general admission requirements for all students, all applicants for the Mammography Certificate program must hold a current RT(R) certification from the ARRT as mammography is a specialization of radiography and the knowledge of x-ray interactions and radiation biology are a necessity for these courses.

Marketing Certificate

Cara Hurd, MACC, **Chair**

Phone: (419) 995-8323

Email: hurd.c@rhodesstate.edu

Office: SCI 260N

The Marketing certificate provides students with the knowledge and skills needed for an entry-level marketing position. The curriculum focuses on a broad variety of marketing and technology skill sets including customer service, public relations, mobile marketing, digital marketing, digital analytics, social media marketing, sales techniques, communications, Microsoft Office, and Photoshop. This certificate flows seamlessly into the Associate of Applied Business Degree in Digital Marketing and Media.

Digital Marketing and Media Major (p. 57)

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Construct an integrated marketing strategy and plan incorporating the marketing mix.
- b. Apply digital marketing and social media marketing strategies to build brand awareness in marketing communications.
- c. Develop the ability to be a problem-solver utilizing critical thinking skills as they apply to the marketing profession.

Technical Standards

See here (p. 24) for details.

First Year**First Semester**

		Hours
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
ECN 1430	Micro Economics	3
MKT 1010	Principles of Marketing	3

Term Hours	12
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Second Semester

CPT 2700 or CPT 2750	Digital Video Editing or HTML and CSS	3
MKT 1610	Customer Service	1
MKT 1620	Public Relations	1
MKT 2000	Digital Marketing and Analytics	3
CPT 2650	Creating and Editing Digital Images	3

Term Hours	11
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Second Year**First Semester**

MKT 2210	Comprehensive Sales Techniques	3
MKT 2300	Social Media Marketing	3
CPT 1580	Introduction to Graphic Design and Layout	3

Term Hours	9
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Total Hours	32
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Mechanical Engineering Technology

J. Erik Robey, BS, PE/PS, Chair
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu
 Office: JJC 132

Mechanical Engineering Technicians help engineers design, develop, test, and manufacture mechanical devices, including tools, engines, and machines. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report their findings. Often Mechanical Engineering Technicians design equipment and make working models to test. When involved in manufacturing, these technicians frequently determine the strength, quality, quantity, and cost of materials. Technicians who specialize in Mechanical Design may take the rough sketches produced by an engineer and convert them into detailed drawings. They might also provide illustrations and exploded views of machinery for operating or maintenance manuals. Mechanical Engineering Technicians also help engineers design, develop, test, and manufacture machinery, industrial robotics, and other equipment.

The curriculum provides the skills to become a Mechanical Engineering Technician. Practical, hands-on, learning experience is incorporated with principle and theory. Students learn how to make sketches and rough layouts, record data, tabulate calculations, analyze results, and write informative reports. Those interested in the Mechanical Engineering Technology major should have an aptitude for mathematics, science, and technical work. Upon completion of the coursework, the student will receive an Associate of Applied Science Degree in Mechanical Engineering Technology.

Employment opportunities are excellent for individuals who have completed a two-year program in mechanical engineering technology.

Completion of the degree prepares the graduate for entry into today's global industrial world in a number of job classifications such as design technicians, detailers, draftsmen, engineering technicians, lab technicians, metallurgical technicians, quality control technicians, troubleshooters, and test technicians. Graduates have the solid foundation needed to continue on to a bachelor's degree in engineering technology, engineering science, and eventually become a licensed Professional Engineer pursuant to the Ohio Revised Code.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to employ effective written, oral and visual communication in a technical environment by collecting, analyzing, and summarizing information and trends.
- Demonstrate an appreciation of the benefits that cultural diversity brings to a team.
- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Mechanical Engineering Technology Associate of Applied Science Degree

First Year**First Semester**

COM 1110	English Composition	3
PHY 1120	Physics I	4
SDE 1010	First Year Experience	1
MTH 1370	College Algebra	4
ENV 1300	OSHA Regulations and Safety	3

Term Hours	15
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Second Semester

MTH 1430	Trigonometry	3
PHY 1130	Physics II	4
MET 1020	Material Science	3
SOC 1010	Sociology	3
MET 1110	Manufacturing Processes	3

Term Hours	16
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Second Year**First Semester**

COM 2213 or GER 1011 or COM 2110	Verbal Judo or Conversational German or Public Speaking	3
MET 1000	Engineering Graphics with AutoCAD	3
MET 1130	Statics	3
MET 2310	Fluid Power	3
MET 2991	Field Experience	1

Term Hours	13
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Second Semester

TECHNICAL ELECTIVE		5-6
MET 2440	Computer Aided Design	3
COM 1140	Technical Writing	3
MET 2970 	MET Department Capstone	2
MET 2210	Strength of Materials	3
Term Hours		16-17
Total Hours		60-61

 Capstone course

See here (p. 29) Portfolio and Capstone information.

Prerequisites:

Students should check course prerequisites before registering.

Technical Electives:

Code	Title	Hours
AMT 1100	Welding and Fabrication	3
EET 1110	Circuit Analysis I	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3
GET 1500	Special Topics in Engineering Technology	1-10
IMT 2820	Mechanical Power Transmission Systems	2
MET 1010	Blueprint Reading and Sketching	3

Rhodes State College's Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Mechanical Systems Technology Certificate

David Haus, PhD, **Dean**

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Email: haus.d@rhodesstate.edu

Office: JJC 117

Mechanical Systems Technicians help engineers design, develop, test, and manufacture mechanical devices, including tools, engines, and machines. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report their findings. Often Mechanical Systems Technicians design equipment and make working models to test. When involved in manufacturing, these technicians frequently determine the strength, quality, quantity, and cost of materials. Technicians who specialize in Mechanical Systems may take the rough sketches produced by an engineer and convert them into detailed drawings. They might also provide illustrations and exploded views of machinery for operating or maintenance manuals.

This certificate provides the skills to become a Mechanical Systems Technician. Practical, hands-on, learning experience is incorporated with principle and theory. Students learn how to make sketches and rough layouts, record data, tabulate calculations, analyze results, and write informative reports. Those interested in the Mechanical Systems Technology certificate should have an aptitude for mathematics, science, and technical work. Students gain experience in blueprint reading, sketching, CAD, manufacturing processes and safety.

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully troubleshoot and provide correct, effective solutions for maintaining and fixing mechanical systems.
- Apply their growing set of skills to creatively solve technical problems.
- Design, program, and operate equipment safely
- Analyze the functions of mechanical systems.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
Math Elective		
Minimum 6 Credits		
MTH 1210	Mathematics I	3
MTH 1370	College Algebra	4
MTH 1430	Trigonometry	3
Mechanical Elective		
Minimum of 24 Credits		
ENV 1300	OSHA Regulations and Safety	3
FMS 2210	CAM/CNC Machining I	3
FMS 2220	CAM/CNC Machining II	3
MET 1000	Engineering Graphics with AutoCAD	3
MET 1010	Blueprint Reading and Sketching	3

MET 1110	Manufacturing Processes	3
MET 1020	Material Science	3
MET 1130	Statics	3
MET 2210	Strength of Materials	3
MET 2310	Fluid Power	3
MET 2440	Computer Aided Design	3
Total Hours		30

Medical Assisting Certificate

Cheryl Kuck, MS, **Coordinator**
 Phone: (419) 995-8256
 Email: kuck.c@rhodesstate.edu
 Office: TL 102H

The Medical Assisting certificate prepares students as a multi-skilled healthcare professional who is qualified to perform administrative, clinical, and laboratory procedures within an outpatient health care environment. Medical assistants are the only Allied Health profession that are trained in both administrative and clinical skills.

Duties may include

As a medical assistant, you will be the health care provider's assistant, increasing productivity in the workplace and improving patient outcomes. Medical assistants are essential members of the health care team that work closely with providers in the offices in handling patient care.

Clinical Duties

- Take medical histories
- Measure and record patients' vital signs
- Prepare patients for examination, and explain treatment procedures to patients
- Assist the medical professional during exams and minor office surgeries
- Collect and prepare laboratory specimens, like drawing blood
- Perform basic laboratory tests
- Instruct patients about medications and special diets
- Prepare and administer medications as directed by a medical professional
- Authorize prescription refills as directed
- Remove sutures and change dressings
- In the state of Ohio, the medical assistant may also perform clinical duties as directed by a certified nurse practitioner and a physician assistant.

Administrative Duties

- Use clinical and computer applications
- Answer telephones, greet patients and schedule appointments

- Update and file patient medical records, typically in an electronic health record
- Apply medical codes to services and diagnoses
- Facilitate submission of insurance forms
- Arrange for hospital admissions, surgeries, imaging, and laboratory services
- Handle correspondence, billing, and bookkeeping
- Purchase supplies and maintain administrative and clinical equipment

With advanced skills, education and/or experience, medical assistants may:

- Advance to office manager with supervisory functions
- Oversee compliance with federal, state and regulatory agencies
- Establish & utilize computer information systems, creating spreadsheets and databases
- Be responsible for the overall financial management of the office

The U. S. Department of Labor predicts that the employment of medical assistants is expected to grow by 18.0 percent from 2020 to 2030, much faster than the average for all occupations as the health services industry expands due to technological advances in medicine, and a growing and aging population. Employment growth is driven by the increase in the number of group practices, clinics, and other health care facilities that need personnel who are cross-trained and can provide considerable flexibility to the physician office. Medical assistants primarily work in outpatient settings with good hours. This allows for a better balance in life between work, family and personal life. Because of Rhodes State accreditation with the Commission on Accreditation of Allied Health Education Programs (CAAHEP), Rhodes State students are eligible to take the Certified Medical Assistant (CMA) Certification Exam given by the American Association of Medical Assistants (AAMA).

Mission Statement

The goal of the Medical Assisting program is to prepare medical assistants who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to perform medical office administrative skills including the utilization of the electronic health record.
- Demonstrate the ability to perform clinical and laboratory duties associated with assisting a provider in the diagnosis and treatment of patients in a variety of healthcare settings.
- Demonstrate professional behaviors and attitudes consistent with the delivery of safe, ethical, legal and compassionate patient care.
- Communicate and collaborate professionally and effectively with patients, healthcare team, and third-party providers in diverse environments.

- e. Prepare for successfully passing a national medical assisting certification exam.
- f. Assume responsibility for continued career development as related to an ever-changing health care system.

Notice to Prospective or Current Medical Assisting Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, therefore, preventing you from completing the certificate. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession. Because health care employers routinely perform background checks on prospective employees, a criminal record may also prevent you from obtaining employment in your chosen field after graduation.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" Grade Policy (p. 25)

Criminal Background Checks and Drug Screening (p. 25)

Recommended High School Coursework (p. 25)

Health Insurance (p. 25)

First Year

Summer

		Hours
BIO 1000	Basic Human Structure and Function	3-4
or BIO 1110	or Anatomy and Physiology I	
BHS 1390	Medical Terminology	2
COM 1110	English Composition	3
MAT 1100	Introduction to Medical Assisting	3
MAT 1200	Clinical Medical Assisting I	4
Term Hours		15-16

Fall

BHS 1160	Medical Law-Ethics Healthcare	2
MAT 1300	Medical Office Procedures I	3
MAT 1400	Clinical Medical Assisting II	6
MAT 2410	Medical Office Coding	4
Term Hours		15

Spring

MAT 2320	Medical Office Procedures II	2
MAT 2310	Healthcare Reimbursement	3
MAT 2510	Medical Assisting Clinical (Practicum)	2
MAT 2520	Capstone for Medical Assisting	2
Term Hours		9
Total Hours		39-40

 Capstone

The Medical Assisting Certificate is accredited by the Commission on Accreditation of Allied Health Education Program [CAAHEP, upon the recommendation of the Medical Assisting Education Review Board (MAERB)].

CAAHEP
9355 113th St. N, #7709
Seminole, FL 33775
Phone: 727-210-2350
<https://www.caahep.org/>.

Medical Billing and Coding Certificate

Cheryl Kuck, MS, **Coordinator**
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Email: kuck.c@rhodesstate.edu
Office: TL 102H

Students in the Medical Billing and Coding certificate are trained for entry-level coding and billing positions in a wide variety of healthcare settings such as physician medical offices, clinics, medical insurance companies, and various other health-oriented organizations. Students will develop skills that impact medical reimbursement and are essential for the financial stability of every healthcare organization providing patient services and treatment. Skill sets include application of ICD-10-CM, CPT and HCPCS coding systems, medical terminology, anatomy and physiology, electronic health records, processing insurance claims, and reimbursement practices.

Program Learning Outcomes

Upon completion, the student will be able to:

- Transform narrative descriptions of procedures and diagnoses into numerical billing format utilizing ICD-10-CM, CPT and HCPCS classification system.
- Identify the procedures for patient record retrieval and reimbursement
- Apply computer and information literacy skills using electronic health records software.
- Interpret coding guidelines and federal regulations for accurate code number assignment and completion of billing forms.
- Ensure document compliance for services being billed.
- Demonstrate effective communication skills, professional behaviors, critical thinking, and problem solving skills.
- Prepare for successfully passing a national certifying exam as a medical coder.

Technical Standards

See here (p. 26) for details.

First Year

First Semester		Hours
BIO 1000	Basic Human Structure and Function	3-4
or BIO 1110	or Anatomy and Physiology I	
BHS 1390	Medical Terminology	2
MAT 2410	Medical Office Coding	4
MAT 2430	Electronic Health Records and Procedures	3
Term Hours		12-13
Second Semester		
BHS 1160	Medical Law-Ethics Healthcare	2
CPT 1250	Computer Applications in the Workplace	3
MAT 2310	Healthcare Reimbursement	3
MAT 2420	Medical Coding - Advanced	2
Term Hours		10
Total Hours		22-23

Medical Laboratory Technology (Northwest Ohio Allied Health Education Consortium)

Ann Best, MHS, Assistant Dean, Health Sciences and Public Service

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Office: CK 224D

Overview

Rhodes State College partners with Marion Technical College through the Northwest Ohio Allied Health Education Consortium to provide general education coursework for the Medical Lab Technology degree. Students apply for the program and take all technical and clinical coursework through Marion Technical College.

"Medical Lab Technicians (MLTs) perform a wide variety of laboratory tests which aid the physician in the diagnosis and treatment of disease. MLTs provide compatible blood components for transfusion, perform chemical analysis of body fluids, classify blood cells, and identify microorganisms. They work in a variety of settings such as hospitals, clinics, industry, research, and independent laboratories" (Marion Technical College web site, see link below).

Specific information about the Medical Lab Technology program is available on the Marion Technical College web site.

Certification

Students completing the Medical Laboratory Technology major are eligible to take the certification exam offered by the American Society of Clinical Pathologists (ASCP), 33 West Monroe, Suite 1600, Chicago, IL 60603, 312-541-4999, www.ascp.org. Successful completion results in an MLT (ASCP) certification.

General Education courses taken at Rhodes State College either pre-requisite to MLT program admission or concurrently during the following program semesters.

First Year

First Semester		Hours
BHS 1390	Medical Terminology	2
CHM 1120	Introductory Organic and Biochemistry	4
MTH 1260	Statistics	3
Term Hours		9
Second Semester		
BIO 1000	Basic Human Structure and Function	3
Term Hours		3
Third Semester		
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
Term Hours		6
Second Year		
First Semester		
COM 2400	Composition and Literature	3
PSY 1010	General Psychology	3
Term Hours		6
Total Hours		24

See MLT Catalog for Technical Coursework Sequence

Marion Technical College MLT Program Requirements – the program has limited enrollment

- Apply to Marion Technical College
- Provide transcripts from Rhodes State College with a 2.5 minimum accumulative grade point average (on 4.0 scale)
- Demonstrate an 18 minimum composite score on ACT **or provide evidence of** successful completion of college-level required program courses with a minimum accumulative grade point average of 2.5 or higher.
- Complete observation minimum of four (4) observation hours, see MLT Application packet
- Submit MLT application packet
- See this link for other program pre-requisite requirements
- Refer to Program Handbook for other program details.

Rhodes State College and Marion Technical College are each accredited by the Higher Learning Commission.
Higher Learning Commission
230 South LaSalle Street

Chicago, IL 60604

The MLT Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences

(NAACLS, 5600 North River Road, Suite 720, Rosemont, IL 60018-5519, 773-714-8880) www.naacls.org.

Medical Scribe (Northwest Ohio Allied Health Education Consortium)

Ann Best, MHS, Assistant Dean, Health Sciences and Public Service
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Email: best.a@rhodesstate.edu
Office: CK 224D

Overview

Rhodes State College partners with Terra State Community College through the Northwest Ohio Allied Health Education Consortium to provide general education coursework for the Medical Scribe Certificate. Students apply for the program and take all technical coursework through Terra State Community College.

"The Medical Scribe Certificate prepares a certified or licensed healthcare professional to be trained in medical documentation to assist a healthcare provider. Medical Scribes serve as a personal assistant to the provider; performing documentation in the electronic health record (EHR), gathering information for the patient's visit, partnering with the provider to deliver the pinnacle of efficient patient care. The primary function of a scribe is the creation and maintenance of the patient's medical record, which is done under the supervision of the attending provider. The scribe will document the patient's story, the provider's interaction with the patient, the procedures performed, the results of laboratory studies, and other pertinent information" (Terra State Community College web site; see link below.)

Specific information about the program is available on the Terra State Community College web site

- Apply to Terra State Community College
- Provide transcripts from Rhodes State College

Rhodes State College and Terra State Community College are each accredited by the Higher Learning Commission.
Higher Learning Commission
230 South LaSalle Street
Chicago, IL 60604

Microcontrollers Certificate

J. Erik Robey, BS, PE/PS, Chair
Phone: (419) 995-8071
Email: robey.e@rhodesstate.edu
Office: JJC 132

Students who obtain the Microcontroller Certificate have demonstrated their ability to install, integrate, and program microcontrollers. Microcontrollers are commonly used in products and equipment that require a small dedicated computer to control functions.

Electronic Engineering Technology Major (p. 60)

Program Learning Outcomes

Upon completion, the student will be able to:

- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
Math Elective		
Minimum 3 Credits		
IMT 1911	Technical Math I	3
MTH 1370	College Algebra	4
MTH 1210	Mathematics I	3
Manufacturing Elective		
Minimum 13 Credits		
CPT 1120	Introduction to VB Programming	3
CPT 2320	C# Programming	3
EET 1110	Circuit Analysis I	3
EET 1120	Circuit Analysis II	3
EET 1330	Digital Circuits	4
EET 2310	Microcontroller Fundamentals	4
ENV 1300	OSHA Regulations and Safety	3
EET 2900	Electric Codes and Application	2
IMT 2260	Industrial Electronic Controls	3
IMT 2820	Mechanical Power Transmission Systems	2
MET 1000	Engineering Graphics with AutoCAD	3
or MET 1010	Blueprint Reading and Sketching	
or MET 1020	Material Science	
or MET 1110	Manufacturing Processes	
or MET 1130	Statics	
or MET 2210	Strength of Materials	
or MET 2440	Computer Aided Design	
Total Hours		16

 Capstone

Rhodes State College's Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Equipment Service Certificate

J. Erik Robey, BS, PE/PS, Chair
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Email: robey.e@rhodesstate.edu
Office: JJC 132

The Equipment Service Certificate provides students with the basic knowledge of electricity, robotics, fluid power, and industrial drives and prepares them maintain, troubleshoot, repair, install, and adjust a variety of machines. Students can earn industry credentials for FANUC Robots and Parker-Hannafin Hydraulics and Pneumatics.

Manufacturing Engineering Technology Major (p. 75)

Program Learning Outcomes

Upon completion, the student will be able to:

- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
AMT 1080	Mechanical Drive Systems	3
IMT 2400	Introduction to Fluid Power	3
IMT 2080 or MET 1110	Introduction to Electricity or Manufacturing Processes	3
FMS 2130	Industrial Mechatronics and Robotics	3
Term Hours		12
Total Hours		12

Network Security

Jesse Wallace, MS, Chair

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Email: wallace.j@rhodesstate.edu

Office: JJC 131

The Network Security Major stresses the design, installation, security, and maintenance of a computer network. This major also provides the coursework that will train the students to design, build, and implement complete end-to-end security solutions. The coursework will also provide exposure to various digital, computer, and network forensic methods, VPNs, secure remote access, and disaster recovery techniques. Course content covers objectives for various certifications including:

- A+
- Cisco Certified Network Associate
- Cisco Certified CyberOps Associate
- Microsoft Certified Solutions Associate
- Linux+
- LPIC-1
- Red Hat Certified System Administrator
- VMware Certified Professional
- Security +
- Palo Alto ACE

Program Learning Outcomes

Upon completion, the student will be able to:

- Follow a structured model in Security Systems Development Life Cycle (SDLC).
- Detect attack methodology and combat hackers from intrusion or other suspicious attempts at connection to gain unauthorized access to a computer and its resources.
- Protect data and respond to threats that occur over the internet.

- Design and implement risk analysis, security policies, and damage assessment.
- Plan, implement and audit operating systems' security in a networked, multi-platform and cross platform environment.
- Provide contingency operations that include administrative planning process for incident response, disaster recovery, and business continuity planning within information security.
- Identify and configure infrastructure services.
- Configure and verify network device security.
- Configure infrastructure management.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details

Network Security Major

Associate of Applied Science Degree

Structured Course Sequence (4 Semester Plan)

First Year

First Semester		Hours
COM 1110	English Composition	3
CPT 1410	Microsoft I	3
CPT 1415	Microsoft II	3
CPT 1605	IT Essentials	3
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		16

Second Semester

COM 1140	Technical Writing	3
HST 1620	American History Since 1877	3
CPT 1705	Cisco I - CCNA	3
CPT 1620	Linux Administration I	3
CPT 1715	Cisco II - CCNA	3
MTH 1151 or MTH 1260	Quantitative Reasoning or Statistics	3
Term Hours		18

Second Year

First Semester

CPT 2705	Cisco III - CCNA	3
CPT 2715	Cisco IV - CCNA	3
CPT 2930	Ethical Hacking I	3
CPT 2935	Ethical Hacking II	3
CPT 2991	Field Experience	1
CPT 1625	Linux Administration II	3
Term Hours		16

Second Semester

CPT 2940	Virtualization I	3
CPT 2560	Server and Infrastructure Integration	3
CPT 2960	CCNA Security	3
CPT 2965	 Applications of Network Security	3

CPT 1420	Microsoft III	3
Term Hours		15
Total Hours		65

See here (p. 29) for Capstone information.

Prerequisites:

Students should check course prerequisites before registering.

 The ePortfolio requirement has been phased out and the ePortfolio indicators are being removed from the site.

 Capstone

CISCO CCNA Certificate (p. 49)

The CISCO CCNA Certificate will provide the student the knowledge needed to pass the third-party Cisco Certified Network Associate certification test at an authorized Pearson Vue Testing Center.

First Year

First Semester		Hours
CPT 1705	Cisco I - CCNA	3
CPT 1715	Cisco II - CCNA	3
Term Hours		6
Second Semester		
CPT 2705	Cisco III - CCNA	3
Term Hours		3
Total Hours		9

Cyber Security Certificate (p. 52)

This Cybersecurity certificate is designed for the student who seeks to take on growing responsibilities for securing organizational data and network infrastructure against digital threats. Students will build a deeper and broader knowledge of the tools and protocols needed to navigate, use, and manage security technologies. This certificate provides technical and strategic knowledge to help the student fully leverage innovations while moving an organization from a reactive to a predictive approach to risk mitigation. Students will also engage in conversations that will provide insight into the ethical, legal, and social dynamics of cybersecurity.

Code	Title	Hours
CPT 1705	Cisco I - CCNA	3
CPT 2540	Computer and Network Security	3
CPT 2545	Scripting for Cybersecurity Professionals	3
CPT 2550	Cryptography and Encryption	3
CPT 2555	Network Forensics	3
CPT 1940	Introduction to Cybersecurity	3
CPT 1945	Introduction to the Internet of Things	3
CPT 1950	Security Awareness	3
CPT 1955	Firewall Essentials	3
CPT 1715	Cisco II - CCNA	3
Total Hours		30

IT-Network Security Certificate (p. 84)

Ransomware. Network breaches. Vulnerable infrastructure. Sometimes, we feel as if nothing can be done about these cybercriminals. In the

Network Security program, we do something. We learn what criminals do and how to stop them. We will look at the ways they criminals work, and we learn the best practices to prevent them from gaining access to our networks.

Freshman

First Semester		Hours
CPT 1705	Cisco I - CCNA	3
CPT 1715	Cisco II - CCNA	3
Term Hours		6
Second Semester		
CPT 2705	Cisco III - CCNA	3
CPT 2715	Cisco IV - CCNA	3
CPT 2930	Ethical Hacking I	3
CPT 2935	Ethical Hacking II	3
Term Hours		12
Total Hours		18

Red Hat Systems Administrator Certificate (p. 106)

The Red Hat System Administrator certificate will provide the student with the knowledge needed to pass the RHCSA (Red Hat Certified System Administrator Exam) – EX200

First Year

First Semester		Hours
CPT 1620	Linux Administration I	3
Term Hours		3
Second Semester		
CPT 1715	Cisco II - CCNA	3
Term Hours		3
Total Hours		6

Network Security Certificate

Jesse Wallace, MS, Chair

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 130

Ransomware. Network breaches. Vulnerable infrastructure. Sometimes, we feel as if nothing can be done about these cybercriminals. In the Network Security program, we do something. We learn what criminals do and how to stop them. We will look at the ways they criminals work, and we learn the best practices to prevent them from gaining access to our networks.

Program Learning Outcomes

Upon completion, the student will be able to:

- Follow a structured model in Security Systems Development Life Cycle (SDLC).
- Detect attack methodology and combat hackers from intrusion or other suspicious attempts at connection to gain unauthorized access to a computer and its resources.
- Protect data and respond to threats that occur over the internet.

- d. Design and implement risk analysis, security policies, and damage assessment.
- e. Plan, implement and audit operating systems' security in a networked, multi-platform and cross platform environment.

Network Security Major (p. 83)

Technical Standards

See here (p. 24) for details.

Freshman

First Semester		Hours
CPT 1705	Cisco I - CCNA	3
CPT 1715	Cisco II - CCNA	3
Term Hours		6
Second Semester		
CPT 2705	Cisco III - CCNA	3
CPT 2715	Cisco IV - CCNA	3
CPT 2930	Ethical Hacking I	3
CPT 2935	Ethical Hacking II	3
Term Hours		12
Total Hours		18

State Tested Nurse Aide Certificate

Larissa Simpson, MSN, RN, STNA Coordinator

Phone: (419) 995-8046

Email: simpson.l@rhodesstate.edu

Office: CK 206

The State Tested Nurse Aide Certificate (STNA) is completed in one semester and provides the student with the knowledge and skills necessary to provide basic care to patients. Course content is based on the current Standards and Guidelines from the Ohio Department of Health. The course includes a lecture, a laboratory, and a 16-hour clinical component. Students are required to submit health and immunizations records prior to starting the clinical experience. All students who successfully complete this course are eligible to take the State Tested Nurse Aide Certification credential examination.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Acquire knowledge essential to the role of the STNA.
- b. Demonstrate competent performance of assigned STNA skills.
- c. Complete required clinical application of skills.

Technical Standards

See here (p. 26) for details.

First Year

First Semester		Hours
BHS 1140	State Tested Nurse Aide Training	5
Term Hours		5
Total Hours		5

Nursing

Melissa Harvey, EdD, RN, Chair, Nursing Services

Phone: (419) 995-8347

Email: harvey.m@rhodesstate.edu

Office: TL 102J

Tammy Segovia, MSN/Ed, RN, Nursing Program Administrator

Phone: (419) 995-8203

Email: segovia.t@rhodesstate.edu

Office: CK 224A

The Associate Degree Nursing program is designed for qualified men and women interested in providing patient care as members of the health team. The curriculum is a blend of general education, basic education/ applied education, and nursing technical courses providing graduates with the skills necessary to competently and safely care for patients and their families.

Various community healthcare settings are utilized for students to apply the nursing process in identifying and meeting the needs of patients. A nursing laboratory and a simulation laboratory contain equipment for practicing skills and provide settings for independent study as well as instructor-supervised study. Graduates of the program receive an Associate of Applied Science Degree and are eligible to take the national licensing examination (NCLEX-RN) to become a Registered Nurse. Upon licensure, the RN is able to work in acute care, long-term care, and community healthcare agencies to apply competent patient-centered nursing care. The RN will be able to provide collaborative evidence-based care through principles of quality and safety and informatics.

The Associate Degree Nursing Program is approved by the Ohio Board of Nursing (OBN), 17 S. High St., Suite 660, Columbus, Ohio 43215, (614) 466-3947, <https://nursing.ohio.gov/>; and continuing accreditation by the Accreditation Commission for Education in Nursing (ACEN), Inc., 3390 Peachtree Road, NE, Ste. 1400, Atlanta, GA 30326, (404) 975-5000; email: info@acenursing.org; website: <http://www.acenursing.org>.

Mission Statement

The Associate Degree Nursing Education Program serves to change lives, build futures, and improve communities by providing an opportunity for students with diverse learning needs to obtain an affordable, quality entry-level professional nursing education, and thereby, meet the community's need for nurses.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Prioritizes factors to promote patient-centered care.
- b. Evaluates the interprofessional teamwork approach in achieving quality patient care.
- c. Synthesizes Evidence-Based Practice (EBP) while providing patient care.
- d. Critiques interventions to promote quality and safety in patient care.
- e. Adapts the tools of technology to communicate effectively, manage knowledge, mitigate error and support decision making.

Additional Information

Students will be assigned to day or evening or weekend clinical experiences in the Nursing Programs {Associate Degree Nursing (ADN), Practical Nursing (PN), LPN to ADN Transition}. Specific qualification information for each nursing program is found within the program

sections. Any questions pertaining to these criteria should be directed to the Office of Advising or to the Nursing office.

Some students may choose to extend their course of study beyond the recommended plan due to academic deficiencies, employment commitments, or personal choice. If a student chooses to extend their course of study, it is the student's responsibility to notify the Nursing office.

Admission or Reentry for Clinical Placement

Students seeking admission or reentry into a nursing clinical course will be reviewed and a decision made by the Program Administrator (or designee) and faculty based on space-availability and the following criteria (see the Associate Degree Nursing Admission Requirements for detailed admission criteria):

- Rhodes State College students in good standing and those that meet admission or reentry requirements for the nursing program may be permitted to register for the appropriate Nursing course.
- Transfer students in good standing and those that meet admission requirements may be permitted to register for the appropriate Nursing course.
- Admission or reentry may or may not be granted based upon review of qualifying data, including GPA requirements.
- Science courses must be completed within the previous five-years (exceptions may be granted by the Program Administrator).
- Students who are out one year or more from a Nursing Clinical course are evaluated on an individual basis to ensure competency in previous coursework. Contact the Nursing office for additional information.

The availability of space will not be known until grades have been reported for the term immediately preceding the desired term of reentry. Students will be notified of placement in time to register if space is available.

Pursuant to the Ohio Revised Code 4723 and rule 4723-5-12 of the Ohio Administrative Code, students who reenter or are readmitted to an Ohio school of nursing must "meet the curriculum requirements effective at the time of readmission."

Associate Degree Program Completion

The student is expected to complete the clinical nursing coursework within three years of beginning the first semester of the nursing clinical program.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science

(BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply.

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation. Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the

health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Nursing

Associate of Applied Science

Registered Nursing Program Sequence

Pre-requisite Semester		
BHS 2110	Growth and Development: Lifespan	2
BHS 2120 or NSG 1990	Introduction to Nursing or Independent Study in NSG	2
BIO 1110	Anatomy and Physiology I	4
COM 1110	English Composition	3
MTH 1260 or MTH 1151	Statistics or Quantitative Reasoning	3
SDE 1010	First Year Experience	1
Term Hours		15
First Year		
First Semester		
BHS 1711	Pathophysiology for Healthcare	2
BIO 1120	Anatomy and Physiology II	4
NSG 1510	Fundamentals of Nursing	6
Term Hours		12
Second Semester		
NSG 1523	Adult Health I	6
NSG 1524	Care of Childbearing Family	3
SOC 1010	Sociology	3
Term Hours		12
Second Year		
First Semester		
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2
NSG 2521	Psychosocial Nursing	3
NSG 2522	Adult Health II	6
Term Hours		13
Second Semester		
BIO 1400	Microbiology	4
NSG 2525 	Essentials of Nurse Practice	9
Term Hours		13
Total Hours		65

 Capstone Course

See here (p. 29) for Capstone information.

Note: Students may elect to take general education courses and sciences prior to beginning the first nursing clinical course.

Acceptance Requirements

All Acceptance Requirement Criteria including Nursing Technical Standards must be met for entrance into the Associate Degree Nursing (ADN) program.

Criteria

- General College requirements (see General Admissions Procedures (p. 11).)
- Must be remediation free in math, English, reading, and science.
- Completion of Pre-requisite nursing semester (see Academic Plan). BHS-2110 and BIO-1110 must be successfully completed within five years and BHS-2120 within two years of program entry. Age review may be requested by the student to the Program Administrator if the student is currently working in a healthcare field.
- Must be 18 years old before the first Nursing Clinical course begins.
- College cumulative GPA of 2.5 or higher.
- Certificate of completion of state-approved nurse aide training course.
- Declaration of Nursing as the major course of study.

Additional Requirements upon acceptance into the Nursing Program

- Evidence of sufficient physical and mental health to engage in the practice of nursing.
- Current American Heart Association CPR Certification (BLS Healthcare Provider).
- Completed health and immunization form.
- Criminal background check.
- Drug screening.
- Nursing Orientation.

The Associate Degree Nursing Program is approved by the Ohio Board of Nursing (OBN), 17 S. High St., Suite 660, Columbus, Ohio 43215, (614) 466-3947, <https://nursing.ohio.gov/>; and continuing accreditation by the Accreditation Commission for Education in Nursing (ACEN), Inc., 3390 Peachtree Road, NE, Ste. 1400, Atlanta, GA 30326, (404) 975-5000; email: info@acenursing.org; website: <http://www.acenursing.org>.

Occupational Therapy Assistant

Krystal Hannouz, BS, COTA/L, **Coordinator**

Phone: (419) 995-8259

Email: hannouz.k@rhodesstate.edu

Office: TL 105E

Occupational Therapy is an evidence-based, science-driven profession that helps others increase participation and independence in everyday life activities (occupations) in all of their environments (home, work, school, community, etc.). Occupational therapists (OTs) and occupational therapy assistants (OTAs) help people of all ages through therapeutic use of activities. Under the supervision of an OT, an OTA will develop and provide therapeutic strategies that will help their clients gain the physical, cognitive, psychological and developmental skills necessary for everyday life. They also provide adaptive equipment or techniques to carry out life tasks as needed; educate clients, families, and caregivers; and address prevention. The OTA works with a team of other professionals in a variety of settings including but not limited to: hospitals, school systems,

community mental health centers, nursing homes, home health agencies, and private practice.

Our program provides state-of-the-art equipment and technology, inter-professional learning opportunities, and extensive clinical experiences for students to be job ready upon graduation.

Credentialing Required After Graduation

After successfully completing this accredited Occupational Therapy Assistant Program, the graduate is eligible to take the National Certification Examination for the Occupational Therapy Assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be a COTA.

NBCOT
One Bank Street
Suite 300
Gaithersburg, MD 20878
(301) 990-7979
email: info@nbcot.org
<http://www.nbcot.org/>

In addition, all states require licensure to practice; however, Ohio and most other state licenses are based on passing of the NBCOT Certification Exam. After achieving licensure, the individual will be a COTA/L.

Mission Statement

The Rhodes State OTA Program prepares students to be competent, professional occupational therapy assistants.

Program Learning Outcomes

Upon completion, the student will be able to:

- Exhibit therapeutic use of self as part of the therapeutic process with individuals and groups, demonstrating an appreciation of the uniqueness of every individual.
- Demonstrate entry-level competency as a generalist in areas where occupational therapy is practiced using effective clinical reasoning, gathering and sharing data, developing, implementing and modifying interventions, and conducting activity analysis.
- Communicate effectively with clients, through documentation, and in intra and interprofessional collaborations with other health care team members.
- Demonstrate professional behaviors and attitudes and behave in a manner that respects the dignity of others.

Notice to Prospective or Current Occupational Therapy Assistant Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, therefore preventing you from completing the program. A felony conviction may affect your ability to sit for the National Certification Examination for the Occupational Therapy Assistant (NBCOT exam) or attain state licensure. Because health care employers routinely perform background checks on prospective employees, a criminal record may also prevent you from obtaining employment.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Note in addition to courses required for all Health Division Programs, the OTA program requires a "C" or better in PSY 1730, Abnormal Psychology

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply. **You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation.** Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug

screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Occupational Therapy Assistant Associate of Applied Science Degree Structured Course Sequence (6 Semester Plan)

Pre-requisite Semester

BHS 1000	Introduction to Patient Care	2
BHS 1390	Medical Terminology	2
BIO 1110	Anatomy and Physiology I	4
COM 1110	English Composition	3
MTH 1260 or MTH 1151	Statistics or Quantitative Reasoning	3
SDE 1010	First Year Experience	1

Term Hours 15

First Year

Fall

BIO 1120	Anatomy and Physiology II	4
OTA 1021	Occupational Therapy Principles and Practice	3
OTA 1030	Therapeutic Activities and Occupations	2
OTA 1050	Anatomy and Pathology I for OTA	3

Term Hours 12

Spring

OTA 1060	Anatomy and Pathology II for OTA	2
OTA 1141	OTA Therapeutic Procedures I	4
PSY 1010	General Psychology	3
SOC 1010	Sociology	3

Term Hours 12

Summer

OTA 2130	OTA Therapeutic Procedures II	4
PSY 1730	Abnormal Psychology	3

Term Hours 7

Second Year

Fall

OTA 2140	Occupational Therapy for Pediatrics	3
OTA 2151	Psychosocial Occupational Therapy	4
OTA 2161	OTA Therapeutic Procedures III	2

Term Hours 9

Spring

OTA 2170	Fieldwork I ¹	4
OTA 2180	Fieldwork II ¹	4
OTA 2200 	Capstone for Occupational Therapy Assistant	2

Term Hours 10

Total Hours 65

* Program Qualification Requirements: completion of pre-requisite semester with "B-" or better in Introduction to Patient Care and "C" or better in all other courses. (Program also requires "C" or better in all OTA courses, Anatomy and Physiology II, and Abnormal Psychology.)

 Capstone Course

¹ These courses involve full-time field work in clinical sites and must be completed no later than 18 months after completion of academic preparation.

Prerequisites:

Students should check course prerequisites before registering. Prerequisites are listed in the Course Tab (p. 117).

The Occupational Therapy Assistant Program is accredited by the:

Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)
6116 Executive Boulevard, Suite 200
North Bethesda, MD 20852-4929
Email: accred@aota.org
(301) 652-6611
www.acoteonline.org

This program has been accredited since its inception in 1997.

The Occupational Therapy Assistant (OTA) Program is a limited enrollment program. The program allows enrollment of thirty (30) qualified students each fall semester. If more than thirty are qualified, students will be ranked by date of qualification. Remaining students will be placed on a waitlist for enrollment the following fall semester.

Qualification requires the following:

1. Completion of all pre-requisite courses with the following required grades:

- BHS-1000 (*Introduction to Patient Care*)*: B- or better
- BHS-1390 (*Medical Terminology*): C or better
- BIO-1110 (*Anatomy and Physiology I*): C or better
- COM-1110 (*English Composition*): C or better
- MTH-1260 (*Statistics*) or MTH-1151 (*Quantitative Reasoning*): C or better
- SDE-1010 (*First Year Experience*): C or better

NOTE: BHS-1390 and BIO-1110 must be successfully completed within five years and BHS-1000 within two years of program entry. This may be waived by the Program Chair if the applicant is currently working in a healthcare field.

2. Forty hours of observation which can be met through live observation and virtually through video assignments. Specifications can be found in the OTA Information Packet on the program's webpage. Forms and/or video assignments will be collected in BHS-1000.

3. Eighteen years of age at the time of the first clinical experience.

Operations Excellence Certificate

David Haus, PhD, **Dean**
Phone: (419) 995-8422
Email: haus.d@rhodesstate.edu
Office: JJC 117

Students in the program will learn how to implement lean systems in manufacturing, office, and service settings. They will focus on how to improve processes, plan, manage, and sustain continuous improvement

and create strategic plans. The completion of this coursework prepares students toward the Six Sigma Black Belt.

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Describe each of the major aspects of lean systems
- b. Explain specific techniques related to establishing and maintaining a lean system
- c. Identify applications of lean techniques in manufacturing, service, and office settings
- d. Recognize the challenges and methods for managing and planning in a lean organization
- e. Discuss the organizational requirements to successfully sustain continuous improvement
- f. Control the flow of material with appropriate process documentation in the most efficient manner, while employing lean principles, operational flow strategies, value stream mapping, inventory control, and scheduling
- g. Develop skills to manage operations and strategically plan for the long-term viability of a manufacturing business for the purpose of promoting the mission, vision and core values

Technical Standards

See here (p. 24) for details.

Operations Excellence

The completion of this coursework prepares students toward the Six Sigma Black Belt.

Code	Title	Hours
OET 1100	Operations Management	3
OET 1110	Introduction to Operations Excellence	3
OET 1120	Tools of Operations Excellence ¹	4
OET 2015	Statistics for SPC ¹	3
OET 2021	Advanced Tools of Operations Excellence ¹	3
OET 2120	Quality Management Systems	3
OET 2210	Logistics and Supply Chain	3
OET 2510	Lean Systems	3
OET 2970	Cost Analysis and Estimating	4
OET 2980	OET Capstone	3
Total Hours		32

¹ Completion of this coursework prepares students toward the Six Sigma Greenbelt.

Transfer Module Certificate

Joseph Abbott, PhD, **Chair**
Phone: (419) 995-8856
Email: abbott.j@rhodesstate.edu
Office: TL 145E

The Transfer Module certificate allows students to complete a 38-40 semester hour block of guaranteed transferable general education courses that are common to a variety of associate and bachelor's degree programs across Ohio's public colleges and universities. The Ohio Transfer Module certificate provides students with exposure to a wide range of academic disciplines by including courses in the fine arts and

humanities, mathematics, natural and physical sciences, and social and behavioral sciences.

The Transfer Module certificate provides a strong general education foundation to help students acquire the knowledge and skills to achieve success in the 21st century. The Transfer Module certificate includes coursework in oral and written communication, mathematics, fine arts and humanities, physical and natural sciences, and social and behavioral sciences. The courses in the certificate has Ohio's Transfer 36 designation and are embedded in the Associate of Arts (AA) and Associate of Science (AS) degrees, as well as the Liberal Arts Certificate.

The Ohio Transfer Module certificate at Rhodes State College satisfies the 36-40 semester hours of transferrable courses, required by all Associate of Arts, Associate of Science, and baccalaureate degree programs across Ohio's public colleges and universities. Some of Ohio's four-year public colleges and universities will allow students with a completed TM to transfer into a bachelor's degree program without requiring any additional general education courses.

Students completing Associate of Applied Business (AAB), Associate of Applied Science (AAS), or Associate of Technical Studies (ATS) degrees who wish to pursue a bachelor's degree at one of Ohio's four-year public colleges or universities can add the Transfer Module certificate to provide a complete set of transferable general education courses.

The Transfer Module Certificate Highlights

- Meets Ohio's Transfer 36 general education requirements for all Associate of Arts, Associate of Science, and bachelor's degree programs across Ohio's public colleges or universities.
- Complete the certificate in three semesters (full time)
- Can start any semester (Fall, Spring, or Summer)
- Most classes are offered fully online; all classes are offered hybrid or in the traditional classroom setting.
- Transfer 100% of courses into the Liberal Arts Certificate, Associate of Arts degree, Associate of Science degree, or a bachelor's degree at one of Ohio's four-year public colleges or universities.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to communicate effectively.
- Demonstrate the ability to evaluate arguments in a logical fashion.
- Employ the methods of inquiry characteristic of natural sciences, social sciences, and the arts and humanities.
- Demonstrate understanding of our global and diverse culture and society.
- Examine the importance of engaging in our democratic society through informed citizenship.

Career Opportunities

The Transfer Module certificate is designed to meet the general education requirements for Associate of Arts, Associate of Science, and bachelor's degree programs across Ohio's public colleges or universities.

The Transfer Module certificate focuses on the knowledge and skills necessary to be successful in the 21st century, including critical and creative thinking, teamwork and problem solving, oral and written communication, mathematical and information literacy, and knowledge

of human cultures and ethical reasoning. These highly-valued skills are sought after by a variety of careers in business and public service.

Ohio Transfer Module Certificate

First Year

First Semester		Hours
COM 1110	English Composition	3
MTH 1151	Quantitative Reasoning	3-5
or MTH 1190	or Finite Mathematics/Business	
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
or MTH 1430	or Trigonometry	
or MTH 1611	or Business Calculus	
or MTH 1711	or Calculus I	
or MTH 1721	or Calculus II	
or MTH 2660	or Calculus III	
or MTH 2670	or Differential Equations	
or MTH 2680	or Elementary Linear Algebra	
LIT 2210	Introduction to Literature	3
or LIT 2215	or Native American Literature	
or LIT 2227	or Literature of Graphic Novels	
or LIT 2228	or African-American Literature	
or LIT 2241	or World Literature I	
or LIT 2242	or World Literature II	
or LIT 2250	or The American Short Story	
or LIT 2260	or Fantasy Literature	
or LIT 2301	or British Literature I	
or LIT 2310	or Literature and the Holocaust	
or LIT 2450	or Themes in Literature and Film	
or MUS 1010	or Music Appreciation I	
or THR 1010	or Introduction to Theatre	
SOC 1010	Sociology	3
or HST 2510	or History of Latin America	
or POL 1010	or Introduction to Political Science	
or SOC 1200	or Death and Dying	
or SOC 1210	or Family Sociology	
or SOC 1320	or American Cultural Diversity	
or SOC 2211	or World Religions: History, Belief, and	
or SOC 2300	Practice	
	or Social Problems	

Term Hours		12-14
Second Semester		
BIO 1210	Biology I	4
or BIO 1110	or Anatomy and Physiology I	
or CHM 1110	or Introductory General Chemistry	
or PHY 1120	or Physics I	
COM 2400	Composition and Literature ¹	3
or COM 1140	or Technical Writing	
or COM 1160	or Business Communications	
or COM 1200	or Writing in the Sciences	
HST 1620	American History Since 1877	3
or HST 1011	or Western Civilization I	
or HST 1012	or Western Civilization II	
or HST 1610	or American History to 1877	
or HST 2521	or Women in World History	

PSY 1010 or PSY 1730 or PSY 2150 or PSY 2200 or PSY 2301	General Psychology or Abnormal Psychology or Lifespan Psychology or Social Psychology or Educational Psychology	3
Term Hours		13
Second Year		
First Semester		
COM 2110 or COM 2213	Public Speaking ² or Verbal Judo	3
BIO 1120 or BIO 1400 or BIO 2121 or CHM 1120 or PHY 1130	Anatomy and Physiology II or Microbiology or Introduction to Human Genetics or Introductory Organic and Biochemistry or Physics II	4
OTM General Education Elective ³		3-4
OTM General Education Elective ³		3-4
Term Hours		13-15
Total Hours		38-42

¹ For the AA and the AS degrees, COM 2400 is required

² COM 2110 or COM 2213 is recommended

³ Select any OTM general education course on this plan of study that is not used to meet another requirement

One Year Maintenance Certificate

J. Erik Robey, BS, PE/PS, **Chair**
Phone: (419) 995-8071
Email: robey.e@rhodesstate.edu
Office: JJC 132

Students completing the One Year Maintenance Certificate have demonstrated that they have completed the coursework to be considered for multi-skilled maintenance positions in a manufacturing facility. Multi-skilled maintenance personnel are able to work on electronic, mechanical, hydraulic, and pneumatic systems.

Mechanical Engineering Technology Major (p. 77)

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully troubleshoot and provide correct, effective solutions for maintaining equipment.
- Apply their growing set of skills to creatively solve technical problems.
- Design, program, and operate equipment safely
- Analyze the functions of manufacturing technology.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
Math Elective		
Minimum 3 Credits		
IMT 1921	Technical Math II	3
MTH 1210	Mathematics I	3
MTH 1370	College Algebra	4
Electrical Elective		
Minimum 9 Credits		
EET 1110	Circuit Analysis I	3
EET 1120	Circuit Analysis II	3
EET 1130	Electronics	4
EET 1330	Digital Circuits	4
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2030	Motor Controls	3
EET 2310	Microcontroller Fundamentals	4
EET 2900	Electric Codes and Application	2
IMT 2080	Introduction to Electricity	3
IMT 2260	Industrial Electronic Controls	3
MET 1050	CAD for Electronics	2
Mechanical Elective		
Minimum 9 Credits		
MET 1000	Engineering Graphics with AutoCAD	3
MET 1010	Blueprint Reading and Sketching	3
FMS 2210	CAM/CNC Machining I	3
FMS 2220	CAM/CNC Machining II	3
FMS 2320	Manual Machining I	2
IMT 2810	Millwright Tools and Equipment	2
IMT 2820	Mechanical Power Transmission Systems	2
MET 1020	Material Science	3
MET 1110	Manufacturing Processes	3
Technical Elective		
Minimum 9 Credits		
AMT 1100	Welding and Fabrication	3
AMT 1080	Mechanical Drive Systems	3
AMT 2970	 Troubleshooting Capstone	3
AMT 2550	Fundamentals of Plumbing and Pipefitting	2
FMS 2110	Basic Robotics and Mechatronics	3
EET 2911	Programmable Logic Controllers	3
FMS 2130	Industrial Mechatronics and Robotics	3
IMT 2400	Introduction to Fluid Power	3
IMT 2170	Industrial Motor Drives	2
IMT 2710	Fundamentals of Refrigeration	2
IMT 2740	Advanced Refrigeration and HVAC	3
IMT 2750	Wastewater Treatment and Operation	2
IMT 2850	Power Plant Equipment	3
Total Hours		30

 The ePortfolio requirement has been phased out and the ePortfolio indicators are being removed from the site.

 Capstone

Paramedic Certificate

Chadwick E. Massie, M.Ed., Paramedic, **Coordinator**
 Phone: (419) 995-8228
 Email: massie.c@rhodesstate.edu
 Office: TL 162B

Students interested in the Paramedic certificate must be certified as an Ohio EMT. BHS 1390 Medical Terminology, EMS 1040 EMS Anatomy and Physiology or BIO 1000 Basic Human Structure and Function must also be completed prior to entry into the certificate (min. grade "C").

Emergency Medical Services Major (p. 62)

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to prioritize decisions and act quickly in the best interest of the patient.
- Apply knowledge and skills necessary to treat a variety of patients in many different environments.
- Adhere to the ethical and professional standards that govern the EMS profession.
- Demonstrate effective communication skills with empathy and compassion.
- Systematically collect and analyze patient data to effectively treat mechanism of injury or nature of illness.

With the Paramedic Certificate, students will also be able to:

- Meet requirements to take the National Registry Paramedic examination.
- Perform all duties of the Paramedic.
- Initiate full cardiac monitoring, endotracheal intubation, perform manual defibrillation and synchronized cardioversion, perform appropriate drug therapy, relieve tension pneumothorax, and perform cricothyrotomy when authorized by a medical director.

Technical Standards

See here (p. 26) for details.

See Acceptance Into Dental Hygiene, Emergency Medical Services, Medical Assisting, and Respiratory Care Majors here (p. 25).

Paramedic Certificate

First Year

First Semester		Hours
EMS 2210	Paramedic I	13
EMS 2215	Paramedic Clinical	2.5
Term Hours		15.5
Second Semester		
EMS 2220	Paramedic II	13
EMS 2225	Paramedic Field Experience	2.5
Term Hours		15.5
Total Hours		31

Prerequisite or corequisite: BHS 1390 Medical Terminology, EMS 1040 EMS Anatomy and Physiology or BIO 1000 Basic Human Structure and

Function (min. grade "C"). These courses are prerequisites only, no co-requisite option.

Patient Care Technician Certificate

Cheryl Kuck, MS, **Coordinator**
 Phone: (419) 995-8256
 Email: kuck.c@RhodesState.edu
 Office: TL 102H

The Patient Care Technician certificate is a short-term technical certificate designed to be completed in two semesters. This multi-skilled entry-level position is ideal for students seeking immediate employment in the health care field or to facilitate further career advancement.

Doctors, nurses and other healthcare professionals rely on Patient Care Technicians (PCTs) to assist with the critical day-to-day care of patients in healthcare facilities, hospitals, and nursing homes.

PCTs may perform the following tasks:

- Provide bedside patient care
- Distribute and administer patient care supplies
- Perform safety checks and ensure cleanliness in patient rooms
- Complete documentation about patient condition, including vital signs, mood, appetite, and any pain they are experiencing.
- Monitor a patient's blood pressure, heart rate, and pulse on a routine basis and perform basic lab procedures
- Escort patients to X-rays and other diagnostic imaging procedures
- Change patient bandages and clean affected areas

Upon completion of the course work, the student is eligible to take the Patient Care Technician certification exam offered by the American Medical Certification Association (AMCA).

Mission Statement

To prepare students to be a multi-skilled health care worker who can safely and competently deliver essential bedside care to patients.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate knowledge of the health care delivery system and the legal, ethical, and professional standards within the role of the Patient Care Technician (PCT).
- Apply the PCT knowledge and skills to function as members of a health care team to provide basic patient care to a diverse population of clients in multiple patient care settings.
- Understand and practice infection control per CDC, OSHA, and facility guidelines.
- Communicate effectively and appropriately in interactions with a diverse patient population and as a member of the health care team.

Technical Standards

See here (p. 26) for details.

Patient Care Technician Certificate

First Year

First Semester		Hours
BIO 1000 or BIO 1110	Basic Human Structure and Function or Anatomy and Physiology I	3-4
BHS 1390	Medical Terminology	2
BHS 1100	Patient Care Technician I	4
Term Hours		9-10
Second Semester		
BHS 1160	Medical Law-Ethics Healthcare	2
BHS 1120	Patient Care Technician II	4
Term Hours		6
Total Hours		15-16

Personal Care Aide Certificate

Andrea Liles, MPT, **Chair**
 Phone: (419) 993-7420
 Email: liles.a@RhodesState.edu
 Office: TL 102D

The Personal Care Aide certificate is embedded within the pre-requisite semester for the Occupational Therapy Assistant, Physical Therapist Assistant, and Respiratory Care curriculums to enable students to work part time in a health care field while completing their program. It can also be a stand-alone certificate for job-ready employment. Additionally, the certificate can be used to meet the technical requirements of the Associate degree in Health Care Technology.

Personal care aides monitor the condition of people with disabilities or chronic illnesses and help them with daily living activities. They can work in a variety of settings, including clients' homes, group homes, and day services programs. Most aides work full time, although part-time work is common. Work schedules may vary. Those working in certified home health, hospice or group home agencies will need to provide evidence of formal training as provided within the curriculum.

The certificate involves training and competency necessary for Ohio Medicaid services including:

- Patient care communication
- Vital signs assessment
- Infection control – hand hygiene, standard precautions, and sterile technique
- Transfer techniques and bed mobility
- Lift equipment
- Body mechanics
- Patient positioning
- Ambulatory aides and wheelchairs
- Basic ADL training and home safety
- Managing basic medical equipment
- Health Insurance Portability & Accountability Act (HIPPA)
- Professionalism
- Medical Documentation
- Evidence Based Practice

- Interdisciplinary medical team roles and responsibilities
- Medical Ethics

Mission Statement

This certificate prepares the student to be a Personal Care Aid.

Program Learning Outcomes

Upon completion, the student will be able to:

- Perform basic responsibilities of patient's personal care.
- Demonstrate knowledge of the structure and function of the human body.
- Demonstrate effective interpersonal communication skills and professionalism.
- Understand and practice healthcare standards of professionalism.

Technical Standards

See here (p. 26) for details.

Personal Care Aide Certificate

First Year

First Semester		Hours
BIO 1110	Anatomy and Physiology I	4
BHS 1000	Introduction to Patient Care	2
Term Hours		6
Total Hours		6

Phlebotomy Certificate

Dawn Bell, AAS, CMA (AAMA), AHI, **Coordinator**
 Phone: 419-995-8836
 Email: bell.d@rhodesstate.edu
 Office: TL 105B

This Phlebotomy certificate is designed to provide students with the didactic knowledge and clinical practice to become employed as a phlebotomist.

Mission Statement:

The successful student in the structured Phlebotomy program will acquire and demonstrate the knowledge and skills required to act as a phlebotomist in the healthcare setting.

Program Learning Outcomes

Upon completion, the student will be able to:

- Perform safe and proper preparation, collection and processing of specimens including venipuncture and capillary puncture.
- Demonstrate knowledge of infection control and safety in the collection and processing of specimens that minimize risk to patients, self, and others.
- Demonstrate professional conduct and apply legal, social, and ethical responsibilities within the health care environment.

Technical Standards

See here (p. 26) for details.

Code	Title	Hours
BHS 1845	Phlebotomy Principles and Practice	2
BHS 1850	Phlebotomy Clinical	1
Total Hours		3

Physical Therapist Assistant

Andrea Liles, PT, MPT, **Chair**
 Phone: (419) 993-7420
 Email: liles.a@rhodesstate.edu
 Office: TL 102D

Physical Therapist Assistants (PTAs) are skilled technical health personnel who provide physical therapy services under the direction and supervision of a physical therapist. PTAs work as part of a team to implement selected components of patient interventions (treatment), obtain data related to the interventions provided, and make modifications in selected interventions either to progress the patient as directed by the physical therapist or to ensure patient safety and comfort. PTAs assist the physical therapist in the treatment of individuals of all ages, from newborns to the geriatric population, who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives.

The Associate Degree program at Rhodes State College provides the student with an excellent physical therapist assistant education encouraging personal and professional growth. In the PTA program the student will take part in challenging classroom, laboratory, and clinical experiences to gain the knowledge necessary to function as an integral, critical thinking member of a rehabilitation team. The curriculum is a combination of general education, applied physical therapy sciences, technical skills, and clinical education courses. The clinical component provides students with supervised clinical learning experiences in a variety of settings with exposure to different patient populations.

After successful completion of both the didactic and clinical components of the PTA curriculum and attainment of the Associate of Applied Science degree from Rhodes State College, students seeking licensure as a PTA must submit an application to register for the National Physical Therapy Examination for PTAs administered by the Federation of State Boards of Physical Therapy. Additionally, the student must submit a separate application to the licensing authority of the jurisdiction (state) in which the applicant is seeking licensure. In the state of Ohio, the Occupational Therapy, Physical Therapy, and Athletic Trainers Board is the jurisdiction licensing authority. The state of Ohio requires licensure to practice physical therapy. Licensure enables the PTA to seek employment as a part of a dynamic health care team in a variety of health care settings such as hospitals, nursing homes, rehabilitation centers, sports medicine clinics, and outpatient treatment centers.

Program Mission Statement

The Rhodes State College Physical Therapist Assistant Program prepares students to be competent, professional physical therapist assistants.

Program Learning Outcomes

Upon completion, the student will be able to:

- Perform in a safe manner that minimizes the risk to patient, self, and others.
- Demonstrate expected clinical behaviors in a professional manner in all situations.

- Perform in a manner consistent with established legal standards, standards of the profession, and ethical guidelines.
- Adapt the delivery of physical therapy services with consideration for patients' differences, values, preferences, and needs.
- Communicate in ways that are congruent with situational needs.
- Participate in self-assessment and develop plans to improve knowledge, skills, and behaviors.
- Demonstrate clinical problem solving.
- Perform selected interventions and associated data collection skills in a competent manner.
- Produce quality documentation in a timely manner to support the delivery of physical therapy services.
- Participate in the efficient delivery of physical therapy services.

Notice to Prospective or Current Physical Therapist Assistant Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, therefore preventing you from completing the program. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4

DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply.

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation. Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Physical Therapist Assistant Associate of Applied Science Degree

Pre-requisite Semester		
BHS 1000	Introduction to Patient Care	2
BHS 1390	Medical Terminology	2
BIO 1110	Anatomy and Physiology I	4
COM 1110	English Composition	3
MTH 1260	Statistics	3
SDE 1010	First Year Experience	1
Term Hours		15
First Year		
Fall		
BIO 1120	Anatomy and Physiology II	4
PTA 1000	Fundamentals of Physical Therapy for the PTA	2
PTA 1110	Functional Anatomy for the PTA	3
PTA 1140	Therapeutic Modalities for the PTA	4
Term Hours		13
Spring		
COM 2213	Verbal Judo	3
SOC 1010	Sociology	3
PTA 1200	Therapeutic Exercise for the PTA	4
PTA 1220	Clinical Kinesiology for the PTA	4
Term Hours		14
Second Year		
Fall		
PSY 2150	Lifespan Psychology	3
PTA 2010	PTA Seminar I ^{*first 5 weeks}	1
PTA 2020	Clinical Application I ^{*first 5 weeks}	2
PTA 2100	Physical Therapy for the Medically Complex Patient	4
PTA 2120	Functional Neurorehabilitation	4
Term Hours		14
Spring		
PTA 2200	Clinical Application II	3
PTA 2220	Clinical Application III	3
PTA 2250 	Capstone Course for the PTA	2
Term Hours		8
Total Hours		64

Program Qualification Requirements: completion of pre-requisite semester with "B-" or better in Introduction to Patient Care and "C" or better in all other pre-requisite semester courses.

*Courses in program are sequential. All PTA courses and Anatomy and Physiology II require a "C" or better for program continuation.

 Capstone Course

Prerequisites:

Students should check course prerequisites before registering. Prerequisites are listed in the Course Tab (p. 117).

The Physical Therapist Assistant (PTA) program is a limited enrollment program. The program allows enrollment of thirty (30) qualified students each fall semester. If more than thirty are qualified, students will be ranked by date of qualification. Remaining students will be placed on a waitlist for the next fall semester.

PTA Program Eligibility Requirements:

1. Completion of all pre-requisite courses with the following required grades:

- BHS-1000* (Introduction to Patient Care): B- or better
- BHS-1390 (Medical Terminology): C or better
- BIO-1110 (Anatomy and Physiology I): C or better
- COM-1110 (English Composition): C or better
- MTH-1260 (Statistics): C or better
- SDE-1010 (First Year Experience): C or better

NOTE: BIO-1110 and BHS-1390 must be successfully completed within 5 years and BHS-1000 within 2 years of entry into the program. This requirement may be waived by the program coordinator with submission of proof of employment in a health care field.

2. Completion of 20 hours of observation in two (2) different clinical settings - ten (10) hours each in two different settings (one inpatient such as hospital or skilled nursing facility and one outpatient facility), using the verification forms provided in the PTA Program Information Packet on the program webpage.

3. Conduct an interview with a licensed Physical Therapist (PT) or Physical Therapist Assistant (PTA) using the guided Interview provided in the PTA Program Information Packet on the program webpage.

4. The student must be at least 18 years of age by the start of the first clinical experience (fall semester of the second year of the PTA program).

This PTA Program at Rhodes State College is accredited by the:

Commission on Accreditation in Physical Therapy Education (CAPTE)
3030 Potomac Ave., Suite 100
Alexandria, Virginia 22305-3085
telephone: (703) 706-3245
email: accreditation@apta.org
website: www.capteonline.org

If needing to contact the program/institution directly, please call the Program Coordinator at 419-993-7420 or via email aa.liles.a@RhodesState.edu.

Power Skills for Business and Industry Certificate

Joseph Abbott, PhD, Chair
Phone: (419) 995-8856
Email: abbott.j@rhodesstate.edu
Office: TL 145E

The Power Skills for Business and Industry certificate teaches skills in decision-making, problem-solving, communication, and self-awareness that you need to stay competitive in the modern, global business environment. Students are provided with training in leadership and

interpersonal skills with the goal of increasing individual performance, work productivity, and personal growth.

Designed with both the employer and employee in mind, the Power Skills for Business and Industry Certificate is developed to provide you with the skills to contribute to positive customer experiences, to facilitate more collaborative work environments, and to help businesses support today's multi-generational and diverse employee population and economic marketplace.

Many of the must-have skills for tomorrow's top-performing employees are behavioral. Research by business and industry leadership consistently indicates that employers are looking for employees who can adapt to change, prioritize, work effectively in team environments, and communicate effectively in business contexts. These skills and others like them have become known as "power" skills, and they are essential in the workplace of the future.

Power Skills for Business and Industry Certificate

- Complete the certificate in one semester (full time)
- Can start any semester (Fall, Spring, or Summer)
- All classes are offered online, hybrid, or in the traditional classroom setting.
- Students can add credentials to their resume by completing the Power Skills for Business and Industry Certificate as part of another degree or certificate.
- Courses can transfer into other programs, such as the Associate of Arts or Associate of Science degree

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Demonstrate the ability to communicate effectively.
- b. Demonstrate the ability to evaluate arguments in a logical fashion.
- c. Employ the methods of inquiry characteristic of natural sciences, social sciences, and the arts and humanities.
- d. Demonstrate understanding of our global and diverse culture and society.
- e. Examine the importance of engaging in our democratic society through informed citizenship.

Career Opportunities

The Power Skills for Business and Industry Certificate teaches skills that are applicable to a wide variety of careers and for every stage of a specific career.

Power Skills for Business and Industry Certificate

First Year		Hours
First Semester		
COM 2110	Public Speaking	3
COM 2213	Verbal Judo	3
MGT 1010	Principles of Management	3
MGT 1250	Team Building	3
MKT 1610	Customer Service	1

SOC 1320	American Cultural Diversity	3
Term Hours		16
Total Hours		16

Practical Nursing Certificate

Melissa Harvey, EdD, RN, **Chair, Nursing Services**

Phone: (419) 995-8347

Email: harvey.m@rhodesstate.edu

Office: TL 102J

Hazel Homes, DNP, RN, **Program Coordinator**

Phone: (419) 995-8816

Email: harvey.m@rhodesstate.edu

Office: CK 230G

This one-year certificate program prepares the graduate to provide direct basic nursing care as a practical nurse under the supervision of a registered nurse, licensed physician, dentist, optometrist, or podiatrist.

The curriculum integrates classroom, campus laboratory, and clinical instruction for skills that the practical nurse performs to contribute to the nursing care of patients. Supervised clinical experiences are scheduled in a variety of healthcare settings. The student must demonstrate technical knowledge, manual dexterity, interpersonal skills, caring behavior, and commitment to professional ethics.

The program is approved by the Ohio Board of Nursing (OBN), 17 S. High St., Suite 660, Columbus, Ohio 43215, (614) 466-3947; <https://nursing.ohio.gov/>. The graduate is eligible to take the national licensing exam for Practical Nurses (NCLEX-PN). Graduates are then encouraged to continue their education through articulation into the Associate Degree Nursing Program.

Applicants must be 18 years of age or older prior to entering the first practical nursing clinical course. Some students may choose to extend their course of study beyond the usual one-year plan due to academic deficiencies, employment commitments, or personal choice. If a student extends his/her course of study beyond the one-year time frame, the student is responsible to notify the Nursing office. The student is expected to complete the practical nursing clinical coursework within two years of beginning the first semester of the Practical Nursing Program.

To be eligible for a Practical Nurse Certificate, a student must have received a grade of "C" or better in all required coursework.

Program Learning Outcomes

Upon completion, the student will be able to:

- Integrate knowledge from the physical, psychosocial and nursing sciences to implement basic nursing care for individuals across the life-span.
- Apply principles of caring behavior with patients, patient's families, members of the health care team, and peers.
- Integrate concepts of health maintenance and promotion activities as individualized for patients by members of the health care team as identified in the plan of care.
- Contribute to the nursing process when caring for patients experiencing common health problems.
- Perform basic nursing care skills safely by adhering to scientific principles in accordance with evidence-based practice.

- Demonstrate accountability for managing the basic nursing care for a group of patients as a member of the health care team.
- Adhere to the legal and ethical standards of practical nursing.

Admission or Reentry for Advanced Clinical Placement in Practical Nursing

Students who seek acceptance into the Practical Nursing program must meet all admission requirements. Students who have withdrawn in good standing from the practical nursing clinical course sequence may request readmission within one year as space is available. Remedial study may be required. Requests for readmission will be evaluated on an individual basis.

Transfer students with college credit for potentially equivalent courses should submit course syllabi and materials for equivalency evaluation. Advanced placement may be granted if courses are equivalent and were completed within the accepted time frame.

Students in the Associate Degree Nursing (ADN) Program who seek a major change to the Practical Nursing (PN) program will be considered before transfer students. Advanced standing into the PN program may be awarded to Rhodes State College ADN students that have successfully completed at least the first nursing clinical course of the ADN academic plan. ADN students must successfully complete the PN program curriculum and any associated coursework to receive a certificate of completion. Students may then elect to re-enter the ADN program through the LPN to ADN Transition Program. All qualifications must be met.

Pursuant to the Ohio Revised Code 4723 and rule 4723-5-12 of the Ohio Administrative Code, students who reenter or are readmitted to an Ohio school of nursing must "meet the curriculum requirements effective at the time of readmission."

Science and applied general/basic education courses will be evaluated on an individual basis to determine equivalency.

To be eligible for a Practical Nurse Certificate, a student must have received a grade of "C" or better in all required coursework.

Technical Standards

See here (p. 26) for details.

Pre-requisite Semester		Hours
BHS 2120	Introduction to Nursing	2
BIO 1000	Basic Human Structure and Function (or BIO 1110 & BIO 1120)	3
BHS 2110	Growth and Development: Lifespan	2
Term Hours		7
First Year		
Fall		
COM 1110	English Composition	3
PNS 1200	Foundations of Practical Nursing	6
SOC 1010	Sociology	3
DTN 1220	Principles of Nutrition	2
Term Hours		14
Spring		
PNS 1202	Adult Medical-Surgical Nursing	10

NSG 1721	Pharmacology for Nursing	2
Term Hours		12
Second Year		
Summer		
PNS 1203	PN-Issues and Trends	1
PNS 1204	Maternal Child Nursing	5
Term Hours		6
Total Hours		39

Acceptance into the Practical Nursing Certificate Program

Students must complete the Practical Nursing (PN) program acceptance requirements as well as the technical standards to be admitted into the PN program. Applicants who do not meet the qualifications should meet with an advisor in The Office of Advising and Counseling to plan a course of study.

Acceptance Requirements

- General college requirements (See General Admissions Procedures (p. 11).)
- Must be remediation free in math, English, reading, and science.
- Complete the Pre-requisite practical nursing semester (see Certificate Plan of Study). BHS-2110 and BIO-1000 (or BIO 1120) must be successfully completed within five years and BHS-2120 within two years of program entry. The age requirement may be waived by the Program Administrator if the applicant is currently working in a healthcare field.
- College GPA of 2.0 or higher.
- Declaration of Practical Nursing as the major course of study.
- Certificate of completion of state-approved nurse aide training course.

Additional Requirements upon acceptance into LPN Program

- Evidence of sufficient physical and mental health to engage in the practice of nursing.
- Current American Heart Association certification in CPR (BLS Healthcare Provider).
- Completed Health and Immunizations Form.
- Criminal background check.
- Drug screen.
- Nursing Orientation.

Prescription Mapping in Agriculture Certificate

James Uphaus, PhD, **Chair**
 Phone: (419) 995-8207
 Email: uphaus.j@rhodesstate.edu
 Office: JJC 179M

The Prescription Mapping certificate will provide students with the skills in prescription mapping to support and operate precision field equipment. Students will learn to collect, securely move and evaluate quality data across multiple platforms. Instruction will include problem solving exercises with field data collection, interpretation and writing prescription

maps from multiple data layers. Field and office based computer and data platforms will be utilized in the instruction. Courses in unmanned aerial vehicle (UAV) operation will provide students the understanding of safe operation and data collection with UAV sensors. Students will be prepared for UAV licensing exam. This is a dynamic curriculum developed to integrate emerging technologies. All courses integrate global and local information along with technology to train students in assessing and working with field variation.

Program Learning Outcomes

Upon completion, the student will be able to:

- Apply mapping elements and symbols to compose topography data and contour lines building on surveying terminology and fundamentals.
- Use maps to measure distance, compute area, analyze spatial patterns to manipulate spatial data from geodatabases to digitize and geocode data.
- Transfer data across various GPS systems in agriculture to improve agriculture efficiency through technology applications.
- Develop intermediate and mastery skills in flying UAV components while learning FAA regulations in preparation for the FAA part 107 examination
- Explain electric, pneumatic, hydraulic equipment control from precision agriculture equipment and field-based data.
- Utilize contemporary agriculture software to develop agronomic and economically sensible prescription mapping plans utilizing data from multiple sources.

Technical Standards

See here (p. 26) for details.

Prescription Mapping in Agriculture Certificate

First Year		
First Semester		Hours
CET 2220	Surveying Fundamentals	3
AGR 1540	Introduction to GIS in Agriculture	3
AGR 1515	Introduction to GPS in Agriculture	3
AVI 1000	Unmanned Aerial Systems	3
COM 1110	English Composition	3
Term Hours		15
Second Semester		
AVI 1200	Unmanned Aerial Systems Basic Operation	3
AGR 1500	Precision Agriculture Equipment	3
AGR 1501	Prescription Mapping in Agriculture	3
GLG 1000	Physical Geology	4
BIO 1310	Environmental Science I	3
Term Hours		16
Total Hours		31

Pre-Gaming Design Certificate

Cara Hurd, MACC, **Chair**
 Phone: (419) 995-8323
 Email: hurd.c@rhodesstate.edu
 Office: SCI 260N

This Pre-Gaming Design certificate is for students interested in ultimately pursuing a degree in computer game design. The curriculum consists of introductory courses typically required by colleges that offer associate degrees in computer game design. For students planning to pursue a degree, college-level math and English courses are advisable. For students transferring after completion, consult with the four-year institution for transfer guidelines.

Program Learning Outcomes

Upon completion, the student will be able to:

- Create and edit digital graphic layouts, digital images, and websites.
- Apply video production, compression, and editing skills.
- Apply the following programming languages: Visual Basic, JavaScript, and Visual C#.
- Build iOS applications for the iPhone & iPad.

Digital Marketing and Media (p. 57)

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
CPT 1050	Technology Basics for IT Pro	3
CPT 1120	Introduction to VB Programming	3
CPT 1580	Introduction to Graphic Design and Layout	3
CPT 1850	Webpage Layout and Design	3
CPT 2130	JavaScript Programming	3
CPT 2320	C# Programming	3
CPT 2500	iOS Mobile Applications Development	3
CPT 2650	Creating and Editing Digital Images	3
CPT 2670	Graphics Software and Applications	3
CPT 2700	Digital Video Editing	3
Total Hours		30

Pre-Veterinary Technology/Nursing (Partnership with Colby Community College)

Ann Best, MHS, **Assistant Dean, Health Sciences and Public Service**
 Phone: (419) 995-8080
 Email: best.a@rhodesstate.edu
 Office: CK 224D

Rhodes State College has partnered with Colby Community College to offer the prerequisite courses required for admission into their Veterinary Nursing Program. Students are required to take general education courses at Rhodes State College, work with a community veterinary hospital for observation and internship, and take online veterinary nursing courses through Colby Community College. After graduation, students are required to pass the Veterinary Technician National Examination and register with the Ohio Veterinary Medical Licensing Board to practice as a veterinary technician/nurse.

A veterinary technician/nurse is involved in many different aspects of veterinary medicine and performs many of the duties vital to animal care. Employment opportunities are growing faster than average, according to the U.S. Department of Labor, and include work in veterinary hospitals, humane societies, zoos, colleges and universities, pharmaceutical

companies, pet food companies, research laboratories, feed yards, and dairies.

Pre-requisites:

Students can start any semester and work with Rhodes State College for the first year to complete all pre-requisites and application to the Colby Distance Learning Veterinary Nursing Program.

- 20 hours of general education prerequisite courses taken through Rhodes State College*
- 4 hours of veterinary nursing courses taken online through Colby Community College*
- Minimum of 30 hours of observation/work experience at a community veterinary hospital verified with appropriate documentation using DLVNP Veterinary Observation Work Experience Form

**Prerequisite courses must be completed with a "C" or better to be eligible to apply to the program. Admission to the program is a selective process.*

Technical Standards

See here (p. 26) for details.

First Year		
First Semester		Hours
SDE 1010	First Year Experience	1
BHS 1390	Medical Terminology	2
BIO 1210	Biology I	4
COM 1110	English Composition	3
PSY 1010	General Psychology	3
or ECN 1410	or Macro Economics	
or ECN 1430	or Micro Economics	
Term Hours		13
Second Semester		
CHM 1110	Introductory General Chemistry	4
COM 2110	Public Speaking	3
Term Hours		7
Total Hours		20

Additional Requirements:

Complete steps 1-4 and 6 in the application procedures for the Colby Community College Distance Learning Veterinary Nursing program

First Year First Semester

- VN 115 Introduction to Veterinary Nursing (Colby Distance Learning-1 credit hour)
- Veterinary Hospital Observation/Work Experience: 30 hours minimum - download, print, complete observation and form then fax to 785-460-4666

First Year Second Semester

- AG 149 Principles of Animal Science (Colby Distance Learning -3 credit hours)

Complete the remaining sections of the application procedures

****all courses must be successfully completed with a grade of "C" or better for application to the Colby Community College Distance Learning Veterinary Nursing program.**

Because students enrolled in the Pre-Veterinary Tech/Nursing Program will be pursuing their degree from Colby Community College there is a Consortium Agreement form that must be completed for Financial Aid purposes. Please contact the Program Chair to complete this form each semester enrolled at Rhodes.

Admission Requirements:

Students complete prerequisite requirements through Rhodes State College, on-line veterinary nursing courses through Colby Community College, and live observation/work experience through a community veterinary hospital of their choosing. Upon successful completion of prerequisite courses with a "C" or better and submission of the Veterinary Observation/Work Experience Form a student is eligible to apply to the Colby Community College Distance Learning Veterinary Nursing program.

The program requires selective admission. Once admitted the students complete traditional classroom course work online while obtaining hands-on experience in veterinary hospitals of their choosing. Students are not required to meet at scheduled times each week for class nor attend campus visits. However, there is an on-campus weekend mentorship known as a "fly-in" once during the fall semester for the microbiology, large animal and laboratory animal/exotic pet courses if a student does not have access to these species in their community.

The program requires 60 credit hours of program specific coursework on a full-time or part-time basis.

Full-time program curriculum

Part-time program curriculum

Accreditation

Rhodes State College and Colby Community College are each accredited by the Higher Learning Commission.
Higher Learning Commission
230 South LaSalle Street
Chicago, IL 60604

The Veterinary Nursing Program at Colby Community College is accredited by the American Veterinary Medical Association (AVMA).
American Veterinary Medical Association
1931 North Meacham Road, Suite 100
Schaumburg, IL 60173-4360

Process Operations Certificate

David Haus, PhD, **Dean**
Phone: (419) 995-8422
Email: haus.d@rhodesstate.edu
Office: JJC 117

The WCOMC also offers a Process Operations Intermediate Pathway certificate through Rhodes State College and Apollo Career Center. The Apollo Chemical Operator program, a 12-week, 184-hour class, is a prerequisite before taking the FMS 2460 Process Tech Instrumentation and FMS 2470 Process Technology Equipment classes at Rhodes State College, unless the student has a minimum of one year professional experience in process operations. Persons may take the other courses in this certificate at Rhodes State College before

completing the Apollo program. Apollo's process operator class is offered on-demand in response to local industry. This certificate may be applied toward an Associate of Technical Studies (ATS) degree in process operations.

Program Learning Outcomes

Upon completion, the student will be able to:

- Prepare, measure, and feed raw material and processing agents into plant machinery.
- Set controls and operate machinery.
- Take samples for testing, test products and record process data.
- Maintain and troubleshoot equipment to make sure of correct operation, and be aware of any abnormal operating conditions.

Technical Standards

See here (p. 24) for details.

Process Operations Certificate

The WCOMC also offers a Process Operations Intermediate Pathway certificate through Rhodes State College and Apollo Career Center. The Apollo Chemical Operator program, a 12-week, 184-hour class, is a prerequisite before taking the FMS 2460 Process Tech Instrumentation and FMS 2470 Process Technology Equipment classes at Rhodes State College, unless the student has a minimum of one year professional experience in process operations. Persons may take the other courses in this certificate at Rhodes State College before completing the Apollo program. Apollo's process operator class is offered on-demand in response to local industry. This certificate may be applied toward an Associate of Technical Studies (ATS) degree in process operations.

Code	Title	Hours
CHM 1110	Introductory General Chemistry	4
ENV 1000	Introduction to EHS Technology	3
EET 1330	Digital Circuits	4
FMS 2460	Process Tech Instrumentation ¹	3
FMS 2470	Process Technology Equipment ¹	3
IMT 1911	Technical Math I	3
OET 1100	Operations Management	3
Total Hours		23

 Portfolio Course

¹ Apollo Chemical Operator Class is a pre-requisite unless student has minimum one year professional experience in process operations. The Apollo class is a 184-hour evening class offered on-demand by local industry.

Production Associate Certificate

Erik Robey, BS, PE/PS, **Chair**
Phone: (419) 995-8071
Email: robey.e@rhodesstate.edu
Office: JJC 132

Students completing the Production Associate certificate are prepared to fill production associate positions in a manufacturing facility. These positions usually require a moderate level of interaction with the manufacturing equipment and require someone who understands safety,

manufacturing processes, blueprint reading, preventive maintenance, and has basic math skills.

Program Learning Outcomes

Upon completion, the student will be able to:

- Describe how to keep equipment in good working order.
- Demonstrate an understanding of drafting and blueprint reading.
- Recognize the essential equations and formulas required to solve algebra and geometry problems.
- Recognize safety at a basic level in a general industry setting.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
SDE 1010	First Year Experience	1
AMT 1020	Preventive Maintenance	2
AMT 1040	Blueprint Reading and Schematics	2
IMT 1911	Technical Math I	3
MET 1010	Blueprint Reading and Sketching	3
CET 1910	OSHA 10-hr General Safety	1
IMT 1020	Manufacturing Concepts	2
Term Hours		14
Total Hours		14

Programmable Controller Certificate

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu
 Office: JJC 132

Programmable Logic Controllers (PLCs) are the computers used in industry to control manufacturing equipment. Students completing the Programmable Controllers Certificate are able to install, maintain, and program PLCs. This skill is very valuable and highly sought after by area manufacturing facilities.

Electronic Engineering Technology Major (p. 60)

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully troubleshoot and provide correct, effective solutions for programming and maintaining PLCs.
- Apply their growing set of skills to creatively solve technical problems.
- Design, program, and operate equipment safely
- Analyze the functions of manufacturing technology.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
EET 1110	Circuit Analysis I	3
EET 1330	Digital Circuits	4
FMS 2110	Basic Robotics and Mechatronics	3

IMT 1911	Technical Math I	3
EET 2911	Programmable Logic Controllers	3
MET 2310	Fluid Power	3
Total Hours		19

Rhodes State College's Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Programmable Logic Controllers Certificate

David Haus, PhD, **Dean**
 Phone: (419) 995-8422
 Email: haus.d@rhodesstate.edu
 Office: JJC 117

Programmable Logic Controllers (PLCs) are the computers used in industry to control manufacturing equipment. Students completing the Programmable Logic Controllers Certificate are able to work with a variety of PLC applications in advanced manufacturing. Students learn how to install, program, and repair PLCs, and work with the equipment those PLCs control. Students will also learn how to perform preventative maintenance.

Electronic Engineering Technology Major (p. 60)

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully troubleshoot and provide correct, effective solutions for programming and maintaining PLCs.
- Apply their growing set of skills to creatively solve technical problems.
- Design, program, and operate equipment safely
- Analyze the functions of manufacturing technology.

Technical Standards

See here (p. 24) for details.

Programmable Logic Controllers (PLC)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3
EET 1330	Digital Circuits	4
EET 2030	Motor Controls	3
AMT 1020	Preventive Maintenance	2
AMT 1070	Basic Electricity and Electronics	3
IMT 1911	Technical Math I	3
AMT 1040	Blueprint Reading and Schematics	2
or MET 1000	Engineering Graphics with AutoCAD	
EET 1110	Circuit Analysis I	3
EET 2911	Programmable Logic Controllers	3
EET 2920	Advanced Programmable Controllers	3
EET 2530		1
Total Hours		30

Project Management Certificate

Jean A. Wisuri, MA, Chair
 Phone: (419) 995-8870
 Email: wisuri.j@rhodesstate.edu
 Office: SCI 151A

The Project Management certificate is designed to prepare students to sit for the Certified Associate in Program Management (CAPM®), a Project Management Institute (PMI) recognized certification. The certificate covers the following topics: 1) the five project management process groups, 2) applications that can be used by Project Managers, 3) identifying key concepts and tailoring consideration for project scope management, 3) role of the Project Manager, 4) solving simple network diagrams problems, and 5) perform basic scheduling calculations.

Project Management Highlights

- The Project Management certificate is designed to prepare students to sit for the Certified Associate in Program Management (CAPM®) certification exam, an internationally recognized certification
- Students will develop and implement a project plan
- Students apply the principles of project management in a project manager role either at an organization or within the coursework
- Financial aid eligible for those who qualify
- Completed in one term
- 100% Online

Program Learning Outcomes

Upon completion, the student will be able to:

- Utilize project management tools, systems, and software to plan, organize, and manage projects.
- Develop and implement a project plan.
- Apply the principles of project management in a project manager role at an organization.

Career Opportunities

Project Management with CAPM® Certification include

- Assistant Project Manager
- Business Analyst Consultants
- PMO Operational Support Analyst
- Assistant IT Technical Project Manager
- Project Coordinator

Technical Standards

See here (p. 187) for details.

First Year

First Semester

		Hours
PGM 2004	Project Management Fundamentals 1	4
PGM 2005	Project Management Fundamentals 2	4
Term Hours		8

Second Semester

PGM 2006	Project Management Applications	4
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PGM 2007	Project Lifecycle	4
Term Hours		8
Total Hours		16

Professional Licensure Information

CAPM® is an entry-level certification for professionals interested in project management, offered by the Project Management Institute (PMI), USA.

As per PMI, "The CAPM certification offers recognition to practitioners who are interested in or are just starting a career in project management, as well as project team members who wish to demonstrate their project management knowledge."

Radiographic Imaging (Radiography)

Robert (Andy) Shappell, MEd, Coordinator

Phone: (419) 995-8257

Email: shappell.a@rhodesstate.edu

Office: TL 102G

Radiographers are certified professionals that produce images through the use of x-rays. These images are an essential diagnostic tool that has played an important role in medicine for over a hundred years. The science of radiographic imaging is technology-driven with the use of computerized equipment common to every patient exam. Radiographers (X-ray technologists) work closely with other health care professionals in meeting the needs of patients with a compassionate approach.

The Radiographic Imaging Program provides students with the technical skills and knowledge to safely use radiation to produce diagnostic images. Courses in the curriculum focus on patient care, radiographic procedures, the science and technology behind the imaging process, radiobiology, and other general education courses. A diverse clinical education experience in a variety of clinical settings and with a range of patient populations supplements the campus lectures and labs with a strong emphasis on hands-on participation by all students.

A minimum of six semesters is required to successfully complete the Associate in Applied Science degree in Radiographic Imaging. Graduates are eligible to take the certifying examination in radiography by the American Registry of Radiologic Technologists (ARRT). Once ARRT certified, graduates are eligible to apply for a state license that is required to practice most states. Graduate radiographers have ample career opportunities that may include computed tomography, mammography, vascular interventional procedures, equipment sales, and with additional degree work, imaging education, and healthcare administration.

The Radiographic Imaging program is a partner in the Northwest Ohio Allied Health Consortium.

Mission Statement

The Radiographic Imaging Program prepares competent, professional radiographers.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate clinical competence.
 - Position patients accurately.
 - Select diagnostic exposure factors.
 - Practice appropriate radiation safety.

2. Demonstrate effective communication skills.
 - 2.1 Demonstrate effective verbal communication skills.
 - 2.2 Demonstrate effective written communication skills.
3. Utilize critical thinking.
 - 3.1 Adapt routine procedures to accommodate patient condition.
 - 3.2 Demonstrate proficiency in radiographic patient analysis.
4. Demonstrate professionalism.
 - 4.1 Act professionally.
 - 4.2 Demonstrate cultural awareness.

Notice to Prospective or Current Radiographic Imaging Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, thereby preventing you from completing the program. A criminal record may also prevent you from obtaining a license or certification in your chosen healthcare profession.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Criminal Background Checks and Drug Screening

To meet the expanding requirements of our clinical affiliates, both a criminal background check and a drug screen will be mandatory prior to clinical experiences for most students within the Division of Health Sciences and Public Service. Some program exceptions may apply.

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. Students with certain felony, misdemeanor, or drug-related convictions will be ineligible for admission into clinical experiences. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession or to obtain employment post-graduation. Students admitted to a program containing off-campus clinical/practicum experiences will be required to submit to drug screening. Positive drug screenings may result in dismissal from all clinical courses. Any student who refuses/fails to cooperate, or complete any required drug screening will be considered "positive" and dismissed from the clinical component of their program. All students requiring drug screening may be subject to random drug screens and for cause during the program.

Recommended High School Coursework

Students are encouraged to complete college prep classes in high school. Although not required, the courses provide a better understanding of college-level work. Recommended college prep courses include:

English: 4 units

Math: 4 units

Natural Science: 3 units

Social Science: 3 units

Health Insurance

The Division of Health Sciences and Public Services is committed to protecting students, faculty, and patients from infectious diseases during clinical practice and taking every reasonable precaution to provide a safe educational and work environment. All new students entering the health-related programs will be informed of the risks of blood-borne and other infectious diseases. Students with a high risk of infectious diseases should be aware of their own health status and risk of exposure to other students, employees, or patients involved in the clinical environment. All students are required to provide their own health insurance coverage for the duration of their program and be able to provide proof of insurance if requested.

Radiation Monitoring

For educational and training purposes, students under the age of 18 are held to the same radiation exposure limits as members of the general public (1mSv/year). This limit is 1/50 that of the occupational exposure limit which is 50mSv/year (National Council on Radiation Protection and Measurements). The occupational radiation exposure of radiologic personnel engaged in general x-ray activity are typically considerably lower exposures than this limit. All students are monitored while in areas of possible radiation exposure.

Radiographic Imaging (Radiography) Associate of Applied Science Degree Structured Course Sequence (6 Semester Plan)

First Year		
Summer		
SDE 1010	First Year Experience	1
MTH 1370	College Algebra	4
BIO 1110	Anatomy and Physiology I	4
RAD 1410	Introduction to Radiography	2
Term Hours		11
Fall		
BIO 1120	Anatomy and Physiology II	4
RAD 1210	Principles of Imaging I	3
RAD 1310	Radiographic Procedures I	3
SOC 1010	Sociology	3
Term Hours		13
Spring		
COM 1110	English Composition	3
RAD 1510	Clinical Education I - Radiography	3
RAD 1220	Principles of Imaging II	3
RAD 1320	Radiographic Procedures II	3
Term Hours		12
Second Year		
Summer		
BHS 1160	Medical Law-Ethics Healthcare	2
RAD 1520	Clinical Education II - Radiography	4
Term Hours		6
Fall		
RAD 2510	Clinical Education III - Radiography	3
BHS 1390	Medical Terminology	2
RAD 2210	Principles of Imaging III	3
RAD 2310	Radiographic Procedures III	3
Term Hours		11
Spring		
COM 2213	Verbal Judo	3
RAD 2520	Clinical Education IV - Radiography	3
RAD 2220	Radiation Biology	3
RAD 2320	Radiographic Patient Analysis	2
RAD 2490 	Selected Topics in Radiography	1
Term Hours		12
Total Hours		65

NOTE: A minimum of 14 credit hours of clinical courses is required for graduation.

Code	Title	Hours
RAD 1510	Clinical Education I - Radiography	3
RAD 1520	Clinical Education II - Radiography	4
RAD 2510	Clinical Education III - Radiography	3
RAD 2520	Clinical Education IV - Radiography	3

RAD 2590	Clinical Education Seminar - Radiography	1-4
Total Hours		14-17

Must successfully complete RAD 1510 Clinical Education I - Radiography and RAD 2520 Clinical Education IV - Radiography. Radiographic Imaging students are admitted once per year in the Summer Semester. A grade of "C" or better is required for all BHS, BIO and RAD courses.

 Capstone course

Prerequisites:

Students should check course prerequisites before registering.

All students who apply for acceptance into the Radiographic Imaging program have their names placed on a qualified list **after** they meet the program qualifications listed below.

Please contact Advising for the information packet. Students seeking admission are encouraged to review the qualification requirements early due to the amount of time required to complete the process.

The application deadline is the second Friday in February for the application year.

In addition to the general admission requirements for all students, the following specific requirements must be completed before being added to qualified list:

- Attend a mandatory program briefing.
- Complete 16 hours of observation in a clinical setting with a Registered Technologist in Radiography using the Observation Form in the information packet.
- Achieve an overall college GPA and program-related GPA of 2.75 or higher. (Program-related GPA is defined as the average GPA of program specific coursework excluding SDE 1010). For high school senior applicants without college level course work, high school grades through the first nine weeks of the senior year will be used to calculate the GPA.
- Complete and score a minimum of 60 on the Test of Essential Academic Skills (ATI TEAS) assessment exam.
- Complete all developmental prerequisites if applicable
- Submit the Radiographic Imaging application sent by Advising prior to the stated deadline.

The Radiographic Imaging program admits one time per year for Summer Semester.

The Radiographic Imaging Program is accredited by the:

Joint Review Committee on Education in Radiologic Technology

20 North Wacker Drive, Suite 2850

Chicago, IL 60606-3182

(312) 704-5300

e-mail: mail@jrcert.org

The program has held this accreditation status since inception in 1976.

Real Estate License Certificate

Cara Hurd, MACC, **Chair**

Phone: (419) 995-8323

Email: rex.c@rhodesstate.edu

Office: SCI 260N

One of the most complex and important financial events is the purchase or sale of a home or investment property. As a result, people usually seek the help of real estate brokers and sales agents when buying or selling real estate. The Real Estate Certificate at Rhodes State is the first step toward this exciting and fulfilling career field. The Real Estate Certificate is comprised of the course work required by the State of Ohio that students will need prior to sitting for the Ohio Real Estate Salesperson Licensure Examination. Students will obtain an education in classes that emphasize knowledge regarding the general theory of real estate, real estate laws, real estate finance, and real estate appraisal that prospective real estate professionals must be familiar with.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate a working knowledge of Ohio laws related to real estate sales.
- Demonstrate understanding of real estate negotiation complexities and legalities of both a seller and a buyer.
- Apply appraisal techniques to residential real estate.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
RST 1020	Real Estate Practice & Appraisal	4
RST 1120	Real Estate Law & Finance	4
Total Hours		8

Red Hat Systems Administrator Certificate

Jesse Wallace, MS, **Chair**
 Phone: (419) 995-8356
 Email: wallace.j@rhodesstate.edu
 Office: JJC 131

The Red Hat System Administrator certificate will provide the student with the knowledge needed to pass the RHCSA (Red Hat Certified System Administrator Exam) – EX200

Network Security Major (p. 83)

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop sound logic and programming skills that can be applied to multiple languages.
- Create business solutions using the latest programming languages.
- Design and develop mobile applications.
- Solve logical problems using selections, loops, polymorphism, or data structures using various programming languages.
- Evaluate software problems, plans, and solutions for correctness and appropriateness.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
CPT 1620	Linux Administration I	3
Term Hours		3
Second Semester		
CPT 1715	Cisco II - CCNA	3
Term Hours		3
Total Hours		6

Respiratory Care

Pamela Halfhill, MS, **Chair**
 Phone: (419) 995-8366
 Email: halfhill.p@rhodesstate.edu
 Office: TL 102E

Respiratory therapists are health care practitioners who are highly-skilled individuals who think critically while treating patients with breathing difficulties due to respiratory, cardiovascular, and other problems. Respiratory therapists work with premature newborns to the elderly and they have diverse career opportunities from education, management, therapy, and sales.

This award winning program's multicompetent education and over 700 hours of clinical experience, will provide you with the knowledge, skills, professionalism and hands-on experience that will help you begin your career in the respiratory therapy field. Hands-on practice in our state-of-the-art respiratory lab includes high fidelity simulation, mechanical ventilation, and patient assessment using current equipment and practices. Rhodes State Respiratory graduates are employed as respiratory therapists in hospitals, clinics, cardiovascular technology, rehabilitation facilities, air and ground transport, pulmonary diagnostics, skilled nursing homes, and sleep study laboratories.

Professional Credential and Licensure Information

Credentialing:

- Certified Respiratory Therapists (CRTs)**
 Once a student has completed either a two-year associate's degree or a four-year bachelor's degree, they are eligible to take the national Therapist Multiple Choice exam.
- Registered Respiratory Therapists (RRTs)**
 Once the respiratory therapist has successfully passed the Therapist Multiple Choice exam, he/she is eligible to take the national Clinical Simulation exam. Upon passing the Clinical Simulation exam, the therapist is awarded the RRT credential.
- For more information about the credentialing process: <https://www.nbrc.org/>

Licensure:

- All states (except Alaska) require licensure for respiratory therapists practicing in the United States. For more information on each state's requirements: <https://www.aarc.org/advocacy/state-society-resources/state-licensure-information/>
- Note: Respiratory Care Professionals in Ohio are required to have the RRT credential as a minimum requirement for state licensure.

Mission Statement and Goals

The Respiratory Care Program prepares students to become competent, professional, advanced-level respiratory therapists.

The goal of the Respiratory Care program is to prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate understanding of theoretical concepts including the ability to collect and evaluate patient data; and recommend procedures to obtain additional data.
- Initiate, conduct and independently modify prescribed therapeutic procedures and recommend modifications based on patient response.
- Display and maintain expected levels of professionalism in their appearance, interaction with others, and general conduct while performing their assigned duties.

Notice to Prospective or Current Respiratory Care Students

You are at risk if you have been convicted of a prior felony and/or some misdemeanors. You may not be able to participate in clinical education experiences at some hospitals or other clinical sites, therefore, preventing you from completing the program. A criminal record may also prevent you from obtaining a license or certificate in your chosen healthcare profession.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

"C" grade policy

- A minimum "C" (2.0) grade policy is required for graduation.
- A grade of "C" or higher must be achieved in all courses carrying the specific program prefix such as DHY, EMS, MAT, NSG, OTA, PNS, PTA, RAD, RES and SRG.
- All programs and certificates require a grade of "C" (2.0) or better in required science courses and in required basic/related health science (BHS) courses as well as in selected general education and basic/related science courses (see program requirements).

All of the following required coursework needs to have been completed within five years of matriculation into a Health Sciences program or certificate.

Code	Title	Hours
BIO 1000	Basic Human Structure and Function	3
BIO 1110	Anatomy and Physiology I (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4

BIO 1120	Anatomy and Physiology II (The age requirement may be waived by the Program Chair or Coordinator if the applicant is currently working in a healthcare field.)	4
BIO 1400	Microbiology	4
BHS 1390	Medical Terminology	2
BHS 2110	Growth and Development: Lifespan	2
CHM 1120	Introductory Organic and Biochemistry	4
DTN 1220	Principles of Nutrition	2
NSG 1721	Pharmacology for Nursing	2

Respiratory Care

Associate of Applied Science Degree

Structured Course Sequence (6 Semester Plan)

Pre-requisite Semester		
SDE 1010	First Year Experience	1
BIO 1110	Anatomy and Physiology I	4
CHM 1120	Introductory Organic and Biochemistry	4
BHS 1000	Introduction to Patient Care	2
BHS 1390	Medical Terminology	2
Term Hours		13
First Year		
Fall		
BIO 1120	Anatomy and Physiology II	4
RES 1090	Respiratory Care Pharmacology	2
RES 1110	Cardiopulmonary Anatomy and Physiology	4
RES 1010	Respiratory Care Procedures I	3
SOC 1010	Sociology	3
Term Hours		16
Spring		
RES 1120	Pulmonary Diagnostics	3
RES 1410	Clinical Experience I	1
RES 1020	Respiratory Care Procedures II	3
COM 1110	English Composition	3
MTH 1151	Quantitative Reasoning	3
Term Hours		13
Summer		
RES 2230	Respiratory Disease	2
RES 1420	Clinical Experience II	2
RES 2100	Respiratory Procedures III	3
Term Hours		7
Second Year		
Fall		
RES 2410	Advanced Clinical Experience I	3
BHS 2100	Advanced Cardiac Life Support	1
BHS 2200	Pediatric Advanced Life Support	1
RES 2200	Respiratory Procedures IV	3
BHS 2300	Neonatal Resuscitation	1
Term Hours		9
Spring		
RES 2510	 Respiratory Care Capstone	1
RES 2430	Advanced Clinical Experience II	4
BHS 1560	Smoking Cessation Education	1
RES 2500	Respiratory Care Seminar	1
Term Hours		7
Total Hours		65

 Capstone Course

Prerequisites: Students should check course prerequisites before registering.

The Respiratory Care Program is a limited enrollment program. The program admits thirty- nine qualified students each fall semester. If more than thirty- nine are qualified, students will be ranked by date of qualification. Remaining students will be placed on wait list for the next program admission.

Qualification requires the following:

1. Completion of all pre-requisite courses with the following required grades:

- BHS-1000 (Introduction to Patient Care) *: B- or better
- BHS-1390 (Medical Terminology): C or better
- BIO- 1110 (Anatomy and Physiology I): C or better
- CHM 1120 (Introduction to Organic and Biochemistry): C or better
- SDE-1010 (First Year Experience): C or better

NOTE: BHS-1390 and BIO-1110 must be successfully completed within five years and BHS-1000 within two years of program entry. This may be waived by the Program Chair if the applicant is currently working in a healthcare field.

2. Complete 16 hours of observation with a respiratory care practitioner in a hospital of the applicant's choice. Appointments with the hospital are made by the applicant. Observation forms are available from the Program Chair. In the event hospitals are not allowing in person observation, the Respiratory Program Chairperson will assign comparable assignments.

3. Complete an interview with the Respiratory Care Program chairperson or director of clinical education.

Prior to enrollment in the first clinical course, the student must meet these requirements:

- a. Provide the results of a physical examination including laboratory tests and completion of required immunizations and/or vaccinations before actual clinical course work can be started. The Respiratory Care program also has technical standards for which all students must be capable. These standards specify skills necessary to participate in learning activities and professional practice.
- b. Complete an American Heart Association, BLS, Health Care Provider, CPR course prior to clinical course work. Must be maintained through to graduation.
- c. Meet the expanding requirements of our clinical affiliates, students will be required to submit to drug screening prior to enrollment in the first clinical course (RES 1410 Clinical Experience I). Positive drug screens may result in dismissal from all clinical courses and consequently from the program. In addition to screening, all students in clinical courses are subject to random and for cause drug screens for the duration of the Respiratory Care program.
- d. Complete mandatory criminal Ohio BCI and National FBI background checks. Anyone with a prior felony and/ or some misdemeanors are at risk of being dismissed from the program. A positive criminal record may also prevent an individual from obtaining a license to practice Respiratory Care following graduation. Please refer to the Criminal Background Checks and Drug Screening paragraph in the Division of Health Sciences section of the current college catalog for details.
- e. Be 18 years old.

The Respiratory Care program accepts students once a year in Fall Semester

Rhodes State College Respiratory Care Program number 200324 is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com),

CoARC
264 Precision Blvd
Telford, TN 37690 USA
Telephone: 817-283-2835

Programmatic Outcomes Data are available here.

CoARC accredits respiratory therapy education programs in the United States. To achieve this end, it utilizes an 'outcomes based' process. Programmatic outcomes are performance indicators that reflect the extent to which the educational goals of the program are achieved and by which program effectiveness is documented.

The program has been accredited since its inception in 1980.

In 2018, 2019 and 2020 Rhodes State College Respiratory Care Program received The Distinguished RRT Credentialing Success Award. This award is presented as part of the CoARC's continued efforts to value the RRT credential as a standard of professional achievement. From a program effectiveness perspective, the CoARC views the RRT credential as a measure of a program's success in inspiring its graduates to achieve their highest educational and professional aspirations.

Cardiographic Technician (p. 48)

The Cardiographic Technician certificate prepares students to use a variety of instruments and methods to perform diagnostic procedures such as Holter monitoring, stress testing, and electrocardiography. This type of work takes technicians into many different places and situations, from a relatively calm doctor's office to a chaotic emergency room. The variety of workplace environments provides flexibility, challenges, and satisfaction. The certificate courses cover cardiac anatomy and physiology, medical terminology, ECG interpretation, and advanced cardiac diagnostics. Upon completion of this certificate, the student will be eligible to take the Certified Cardiographic Technician (CCT) examination. The CCT examination is for professionals working in the areas of ECG, Holter monitoring, and stress testing.

Cardiographic Technician Certificate

First Year

First Semester		Hours
BHS 1390	Medical Terminology	2
BIO 1000	Basic Human Structure and Function	3
BHS 1530	12 Lead ECG Interpretation	1
BHS 1540	Advanced Cardiac Diagnostics	3
Term Hours		9
Total Hours		9

Sleep Technologist Certificate (p. 111)

Rhodes State College offers the opportunity for a certificate in Sleep Technology for the enrolled Respiratory Care student or licensed Registered Respiratory Therapist wanting to be employed in a

sleep center. After successful completion of all courses, the student will be eligible to take the following examinations for the certificate desired:

- Board of Registered Polysomnographic Technologists (BRPT) for the RPGST
- National Board of Respiratory Care (NBRC) for the RRT SDS

First Year

First Semester		Hours
RES 2610	Polysomnography Clinical I	1
RES 2710	Polysomnography Technology I	3
Term Hours		4

Second Semester

RES 2620	Polysomnography Clinical II	1
RES 2720	Polysomnography Technology II	3
Term Hours		4
Total Hours		8

Robotic Welding Certificate

J. Erik Robey, BS, PE/PS, **Chair**
Phone: (419) 995-8071
Email: robey.e@rhodesstate.edu
Office: JJC 132

The Robotic Welding Certificate provides students with training to become highly skilled welding technicians. Students completing the Robotic Welding Certificate will be prepared to become certified by the American Welding Society (AWS). Upon completion of the certificate, the students may register with an AWS Accredited Test Facility to become certified. Coursework includes Shielded Metal Arc Welding, Gas Tungsten Arc Welding, and Gas Metal Arc Welding as well as Industrial Mechatronics and Robotics.

Manufacturing Engineering Technology (p. 75)

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate understanding of robots and welding.
- Demonstrate the ability to design, program, and execute robots safely.
- Demonstrate troubleshooting of manufacturing technology.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
AMT 1091	Safety	2
AMT 1092	Rigging	1
MET 1000	Engineering Graphics with AutoCAD	3
WLD 1000	Weld Joint Design and Preparation (1st 8wks)	3
WLD 1100	Shielded Metal Arc Welding (2nd 8wks)	3
WLD 1400	Welding Metallurgy (2nd 8wks)	3
Term Hours		15

Second Semester

IMT 1911	Technical Math I	3
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FMS 2130	Industrial Mechatronics and Robotics	3
WLD 1200	Gas Tungsten Arc Welding (1st 8wks)	3
WLD 1300	Gas Metal Arc Welding (2nd 8wks)	3
WLD 2300	Shielded Metal Arc Welding AWS	2
or WLD 2400	Certification	
or WLD 2500	or Gas Tungsten Arc Welding AWS	
	Certification	
	or Gas Metal Arc Welding AWS	
	Certification	
Term Hours		14
Total Hours		29

Robotics Certificate

David Haus, PhD, **Dean**
 Phone: (419) 995-8422
 Email: haus.d@rhodesstate.edu
 Office: JJC 117

The Robotics Certificate prepares students to operate, maintain, and troubleshoot industrial robots. Students will use a variety of robot types to prepare for different industrial robotics applications, and they will also complete their Fanuc robot certification—a highly desired third-party credential.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop programs to control industrial robots for a variety of applications.
- Recognize the application of problem-solving techniques.
- Describe and apply safety rules while working on robots.
- Analyze the technical specifications of manufacturing systems, modules and components.
- Perform as part of a team to complete a complex automated systems project.

Technical Standards

See here (p. 24) for details.

Robotics

Code	Title	Hours
AMT 1020	Preventive Maintenance	2
IMT 1911	Technical Math I	3
CPT 1250	Computer Applications in the Workplace	3
AMT 1040	Blueprint Reading and Schematics	2
or MET 1000	Engineering Graphics with AutoCAD	
AMT 1070	Basic Electricity and Electronics	3
EET 1110	Circuit Analysis I	3
FMS 2110	Basic Robotics and Mechatronics	3
EET 1330	Digital Circuits	4
FMS 2130	Industrial Mechatronics and Robotics	3
AMT 2050	Robot Maintenance	3
AMT 2970 	Troubleshooting Capstone	3
Total Hours		32

Semiconductors Certificate

David Haus, PhD, **Dean**
 Phone: (419) 995-8422
 Email: haus.d@rhodesstate.edu
 Office: JJC 117

The Semiconductors Certificate prepares student with the knowledge and skills for a career in the growing semiconductor manufacturing industry. Students will have an excellent general preparation for any manufacturing setting with classes in circuits, pneumatics, and hydraulics. Students will then take specialized classes on the fundamentals of semiconductors and vacuum and gases. The certificate also includes classes in communication and statistics: key skills that are highly desired by manufacturers. Classes are taught using a hands-on problem-solving and exercises that simulate manufacturing conditions. The certificate is an excellent preparation for anyone interested in manufacturing, semiconductor manufacturing or their suppliers.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate technical and professional writing; verbal and non-verbal communication, listening and documenting, group participation, reading, drafting and researching skills; computer literacy; ISO introduction.
- Demonstrate fundamental electrical and mechanical system principles, utilizing test equipment for diagnostics and maintenance.
- Demonstrate knowledge of schematics, their characteristics, and common symbols used for electrical, fluid, hydraulic, and pneumatic.
- Introduction to semiconductor fabrication (defects, contamination, process flow, tools, operations); safety (working with chemicals/gases, electrical safety, LOTO); Lean manufacturing; hand tools; cleanroom gowning. Introduction of hand tools commonly associated with preventive and corrective maintenance activities in semiconductor factories. Students get hands on with common hand tools to learn the safe and proper use.
- Introduction to pneumatic systems in the context of a semiconductor fabrication/control/actuation. Introduction to hydraulic systems and hands on. Introduction to the chemistry and physics of vacuum, how it measures, and how it is achieved in an industrial setting. Introduction to gases, lab safety, hands on acid/base test; gas phase reaction

Technical Standards

See here (p. 24) for details.

Semiconductors

First Year

First Semester		Hours
COM 1110	English Composition	3
EET 1110	Circuit Analysis I	3
MTH 1260	Statistics	3
SMC 1000	Semiconductors 101	3
SMC 1200	Introduction to Manufacturing	3

Term Hours **15**

Second Semester

EET 1120	Circuit Analysis II	3
EET 2030	Motor Controls	3
MET 1020	Material Science	3
MET 2310	Fluid Power	3
SMC 1100	Vacuum and Gases	3
Term Hours		15
Total Hours		30

Sleep Technologist Certificate

Pamela Halfhill, MS, **Chair**
 Phone: (419) 995-8366
 Email: halfhill.p@rhodesstate.edu
 Office: TL 102E

Respiratory Care Major (p. 106)

Rhodes State College offers the opportunity for a certificate in Sleep Technology for the enrolled Respiratory Care student or licensed Registered Respiratory Therapist wanting to be employed in a sleep center. After successful completion of all courses, the student will be eligible to take the following examinations for the certificate desired:

- Board of Registered Polysomnographic Technologists (BRPT) for the RPGST
- National Board of Respiratory Care (NBRC) for the RRT SDS

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate understanding of theoretical concepts including the ability to collect and evaluate patient data; and recommend procedures to obtain additional data.
- Initiate, conduct and independently modify prescribed therapeutic procedures and recommend modifications based on patient response.
- Display and maintain expected levels of professionalism in their appearance, interaction with others, and general conduct while performing their assigned duties.

Technical Standards

See here (p. 26) for details.

First Year		
First Semester		Hours
RES 2610	Polysomnography Clinical I	1
RES 2710	Polysomnography Technology I	3
Term Hours		4
Second Semester		
RES 2620	Polysomnography Clinical II	1
RES 2720	Polysomnography Technology II	3
Term Hours		4
Total Hours		8

Sterile Processing Technician Certificate

Aubree Rhoad BS, **Coordinator**

Phone: (567) 242-5930
 Email: rhoad.a@rhodesstate.edu
 Office: TL 102F

The Sterile Processing Technician certificate is designed to recognize entry-level and existing technicians who have demonstrated the experience, knowledge, and skills necessary to provide competent services as a central service/sterile processing technician. Upon successful completion of certificate, the student will be eligible to apply for and take the Certified Registered Central Service Technician (CRCST) exam. CRCSTs are integral members of the healthcare team who are responsible for decontaminating, inspecting, assembling, disassembling, packaging, and sterilizing reusable surgical instruments or devices in a healthcare facility that are essential for patient safety.

Program Learning Outcomes

Upon completion, the student will be able to:

- Apply the principles of cleaning, decontamination and disinfection to instruments, and reusable and disposable items.
- Assemble contents for packaging using appropriate packing and labeling methods.
- Competently operate and monitor sterilization equipment.
- Apply the principles of inventory management to monitor and track supplies including the process for rotating inventory and proper storage requirements.
- Analyze the roles and responsibilities of the certified registered central service technician in relation to decision-making and accountability.
- Understand the organizational reporting structures, safety issues, government regulatory bodies and standards for the central service are of healthcare institutions.

Technical Standards

See here (p. 26) for details.

First Year		
First Semester		Hours
BHS 1390	Medical Terminology	2
BIO 1000	Basic Human Structure and Function	3
STP 1000	Sterile Processing I	3
Term Hours		8
Second Semester		
STP 1200	Sterile Processing II	2
STP 1207	Directed Practice For Sterile Processing	6
Term Hours		8
Total Hours		16

Supply Chain Management Certificate

Cara Hurd, MACC, **Chair**
 Phone: (419) 995-8323
 Email: hurd.c@rhodesstate.edu
 Office: SCI 260N

The Supply Chain Management certificate is designed to provide students with the knowledge and skills needed for an entry-level position in the high-demand fields of supply chain and logistics. The curriculum

focuses on technology, purchasing, negotiation, supply chain, logistics, and safety skillsets. This certificate helps students build the technical skills that businesses are looking for while growing their confidence and supply chain knowledge. Students meet regularly online with faculty who have extensive and current real-world experience in business and supply chain to further build a foundation for a fulfilling career.

The Supply Chain Management certificate is offered in a 100% online format, and every course in the Supply Chain Management certificate can be applied to the associate degree in Business Administration at Rhodes State College for students who wish to further their education in business. Faculty have extensive real-world experience in the fields of business and supply chain.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of principles of Supply Chain Management.
- Learn techniques used for decision making in Supply Chain and Logistics Management roles.
- Utilize software platforms commonly used in the Supply Chain Profession.

Technical Standards

See here (p. 24) for details.

First Semester		Hours
AOT 2640	Spreadsheet Software and Applications	3
MGT 1010	Principles of Management	3
MGT 2440 or ENV 1300	Training, Development and Safety or OSHA Regulations and Safety	3
SCM 1100	Supply Chain Management Principles	3
SCM 1200	Logistics and Transportation Management	3
SCM 1300	Purchasing and Negotiation	3
Term Hours		18
Total Hours		18

Surgical Technology

Aubree Rhoad, BS, **Coordinator**
 Phone: (567) 242-5930
 Email: rhoad.a@rhodesstate.edu
 Office: TL 102F

The Surgical Technology program at Rhodes State College prepares students for a career as a member of a surgical team in four semesters. A surgical technologist is an allied health professional who assists the surgeon, registered nurse, and anesthesiologist as a member of the surgical team. To ensure proper surgical case management, the surgical technologist prepares and passes all sterile instruments during the surgical procedure while maintaining the sterile field and anticipating the needs of the surgeon. The surgical technologist helps to meet the needs of patients in the operating rooms of hospitals, ambulatory surgery centers, physician offices, diagnostic facilities, and other agencies where surgery is performed. Learn more about this career at www.ast.org.

Program Learning Outcomes

Upon completion, the student will be able to:

- Assist in surgical procedures/cases safely by utilizing appropriate knowledge of anatomy, pathophysiology, pharmacology, medical terminology, and the application of surgical aseptic technique, sterility, and decontamination.
- Practice within the legal, ethical, and professional scope of the surgical technologist by performing all skills and duties safely during the preoperative, intraoperative, and postoperative phases of patient care.
- Meet the educational requirements necessary for the national certifying exam administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).
- Develop the entry level employment skill for the various roles of the surgical technologist.

Technical Standards

See here (p. 26) for details.

Tech Prep Partner

See here (p. 14) for details.

Surgical Technology Associate of Applied Science

First Year

First Semester		Hours
SDE 1010	First Year Experience	1
BIO 1110	Anatomy and Physiology I	4
COM 1110	English Composition	3
BHS 1390	Medical Terminology	2
SRG 1000	Theory and Fundamentals	7
Term Hours		17
Second Semester		
MTH 1260	Statistics	3
BIO 1120	Anatomy and Physiology II	4
SRG 1100	Pharmacology for Surgical Technology	1
SRG 1500	Surgical Procedures I	4
SRG 1510	Directed Practice for Surgical Procedures I	3
SOC 1010	Sociology	3
Term Hours		18

Second Year

First Semester		
BIO 1400	Microbiology	4
BHS 1160	Medical Law-Ethics Healthcare	2
SRG 2100	Surgical Procedures II	4
SRG 2110	Directed Practice for Surgical Procedures II	3
Term Hours		13
Second Semester		
SRG 2200	Surgical Technology Professional Trends	3
SRG 2500	Surgical Procedures III	4
SRG 2510	Directed Practice for Surgical Procedures III	3
SRG 2600	 Surgical Technology Capstone	1
COM 2213	Verbal Judo	3
Term Hours		14
Total Hours		62

Capstone

Prospective students are required to:

- Be 18 years of age
- Attend a mandatory program briefing to learn detailed program requirements and career opportunities.
- Complete 16 hours of observation arranged by the student
- Have and maintain a 2.0 GPA
- Complete the American Heart Association Basic Life Support (CPR) prior to the first spring semester of the program.

Minimum acceptable mental and physical qualifications of a Surgical Technology student include the following abilities:

- Work in a standing position for long periods of time and do frequent walking.
- Lift and transfer patients up to six inches (6") from a stooped position, then push or pull the weight up to three feet (3').
- Lift and transfer patient from a stooped to an upright position to accomplish bed-to-chair and chair-to-bed transfers.
- Physically apply up to ten pounds (10#) of pressure to bleeding sites, or in performing CPR.
- Respond and react immediately to verbal instructions/requests and to auditory signals from monitoring equipment; perform auditory auscultation without impediment; discriminate directed sounds in a noise cluttered environment.
- Physically perform up to a twelve-hour shift clinical laboratory experience.
- Perform close and distance visual activities involving objects, persons, and paperwork, as well as discriminate depth and color perception.
- Discriminate between sharp/dull and hot/cold when using hands.
 - Perform fine and gross motor skills with both hands with dexterity, agility and steadiness of movement.
 - Communicate effectively, both orally and in writing, using appropriate grammar, vocabulary, and work usage.

Tax Preparer Certificate

Cara Hurd, MACC, **Chair**
 Phone: (419) 995-8323
 Email: rex.c@rhodesstate.edu
 Office: SCI 260N

The Tax Preparer certificate provides students with the knowledge and skills needed for an entry-level tax-related position. The tax preparer certificate curriculum focuses on a technical accounting skillset including: understanding accounting principles, preparing financial statements, running QuickBooks, understanding tax laws, and preparing tax returns.

Accounting Major (p. 35)

Program Learning Outcomes

Upon completion, the student will be able to:

- Interpret, analyze, and present reliable and relevant information to financial statement users based upon generally accepted accounting principles both manually and electronically.

- Demonstrate an understanding of Federal Tax Laws and their application to both individuals and business entities.
- Utilize software programs commonly used in the accounting profession.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
ACC 1010	Corporate Accounting Principles	4
ACC 1050	Accounting Software (QuickBooks)	2
ACC 2250	Principles of Federal Income Tax	2
ACC 2290	Intermediate Income Tax	2
Total Hours		10

Team Leadership Certificate

Cara Hurd, MACC, **Chair**
 Phone: (419) 995-8323
 Email: hurd.c@rhodesstate.edu
 Office: SCI 260N

The Team Leadership certificate provides students with the knowledge and skills needed to effectively manage teams. The Team Leadership certificate curriculum focuses on management, leadership, communication, and technology skills.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the four key managerial functions: 1) Planning, 2) Organizing, 3) Leading and 4) Controlling.
- Apply team leadership skills needed in an entry-level supervisory position.
- Apply tactical communication skills while maintaining an attitude of professionalism.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
COM 2213	Verbal Judo	3
CPT 1250	Computer Applications in the Workplace	3
MGT 1010	Principles of Management	3
MGT 1250	Team Building	3
MGT 2010	Organizational Behavior	3
SOC 1010	Sociology	3
Total Hours		18

Tool and Die Certificate

J. Erik Robey, BS, PE/PS, **Chair**
 Phone: (419) 995-8071
 Email: robey.e@rhodesstate.edu
 Office: JJC 132

The Tool and Die certificate is designed to prepare students for employment as a Tool and Die Maker or Machinist. The program provides the students with the related technical knowledge necessary to supplement on-the-job training. Experience gained from the program

will be in the area of drafting and design, manufacturing processes, and tooling elements. Jobs obtained from this certificate will be as a tool and die machinist or tool designer.

Manufacturing Engineering Technology (p. 75)

Program Learning Outcomes

Upon completion, the student will be able to:

- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

First Year

First Semester		Hours
AMT 1091	Safety	2
FMS 2210	CAM/CNC Machining I	3
MET 1000	Engineering Graphics with AutoCAD	3
MET 1010	Blueprint Reading and Sketching	3
MET 2310	Fluid Power	3
Term Hours		14

Second Semester

AMT 1100	Welding and Fabrication	3
FMS 2220	CAM/CNC Machining II	3
IMT 1190	Tool and Die Technology	2
IMT 1195	Tool and Die Troubleshooting	2
MET 1020	Material Science	3
MTH 1210	Mathematics I	3
Term Hours		16
Total Hours		30

Troubleshooting Certificate

Jesse Wallace, **Chair**

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 131

The Troubleshooting certificate builds technical knowledge and critical thinking skills by giving students the skills needed to troubleshoot and repair electronic devices. These skills are highly sought after by employers that include manufacturing facilities and electronic equipment suppliers.

Electronic Engineering Technology Major (p. 60)

Program Learning Outcomes

Upon completion, the student will be able to:

- Write programs to operate sophisticated machinery.
- Diagnose problems and provide correct, effective solutions.
- Apply their growing set of skills to creatively solve technical problems.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
Math Elective		
Minimum 6 Credits		
MTH 1210	Mathematics I	3
MTH 1370	College Algebra	4
MTH 1430	Trigonometry	3
IMT 1911	Technical Math I	3
IMT 1921	Technical Math II	3
Electrical Elective		
Minimum 24 Credits		
CPT 1120	Introduction to VB Programming	3
CPT 2320	C# Programming	3
EET 1110	Circuit Analysis I	3
EET 1120	Circuit Analysis II	3
EET 1130	Electronics	4
EET 1330	Digital Circuits	4
EET 2030	Motor Controls	3
EET 2200	Panel Wiring and Arc Flash Safety	3
EET 2310	Microcontroller Fundamentals	4
EET 2900	Electric Codes and Application	2
EET 2911	Programmable Logic Controllers	3
ENV 1300	OSHA Regulations and Safety	3
FMS 2110	Basic Robotics and Mechatronics	3
FMS 2130	Industrial Mechatronics and Robotics	3
IMT 2170	Industrial Motor Drives	2
IMT 2260	Industrial Electronic Controls	3
Total Hours		30

Rhodes State College's Electronic Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET.

Video & Graphic Specialist Certificate

Cara Hurd, **MACC, Chair**

Phone: (419) 995-8323

Email: hurd.c@rhodesstate.edu

Office: SCI 260N

The Video Graphic Specialist certificate provides students with the knowledge and skills needed for an entry-level video/media position. The certificate curriculum focuses on a broad variety of technology skill sets including graphic design, photo-editing, video editing, website design, website editing, and animation. This certificate flows seamlessly into the Associate of Applied Business Degree in Digital Marketing and Media.

Program Learning Outcomes

Upon completion, the student will be able to:

- Create and edit digital graphic layouts, digital images, and websites.
- Apply video production, compression, and editing skills.
- Produce visually innovative motion graphics and animation.
- Apply software for spreadsheets, word processing, presentation, and databases.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
CPT 1050	Technology Basics for IT Pro	3
CPT 1250	Computer Applications in the Workplace	3
CPT 1580	Introduction to Graphic Design and Layout	3
CPT 2650	Creating and Editing Digital Images	3
CPT 2670	Graphics Software and Applications	3
CPT 2700	Digital Video Editing	3
CPT 2750	HTML and CSS	3
CPT 2760	Animation	3
CPT 2770	Animation II	3
CPT 1850	Webpage Layout and Design	3
Total Hours		30

Web Developer Certificate

Jesse Wallace, MS, **Chair**

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 131

The Web Developer certificate is designed to teach students how to develop a website for the internet or an intranet including web design, web content development and web server. With this certificate, students will be equipped with the skill of creating presentations of context that can be delivered to an end-user through the World Wide Web or other web-enabled software.

Web/Computer Programming Major (p. 115)

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop sound logic and programming skills that can be applied to multiple languages
- Create business solutions using the latest programming languages
- Design and develop mobile applications
- Solve logical problems using selections, loops, polymorphism, or data structures using various programming languages.
- Evaluate software problems, plans, and solutions for correctness and appropriateness

Technical Standards

See here (p. 24) for details.

First Year		
First Semester		Hours
CPT 1110	Introduction to Programming Logic and Design	3
CPT 1850	Webpage Layout and Design	3
CPT 2650	Creating and Editing Digital Images	3
Term Hours		9
Second Semester		
CPT 2750	HTML and CSS	3
CPT 1820	ASP.NET Programming	3

CPT 2350	Database Programming	3
Term Hours		9
Total Hours		18

Web Programming/Computer Programming

Jesse Wallace, MS, **Chair**

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 131

The **Web Programming / Computer Programming Major** prepares the student to work as a web programmer, computer programmer, programmer/analyst, or systems analyst. Graduates of this major can apply their course work toward a four-year degree and a career as a software engineer. Students learn the entire spectrum of information systems analysis and design through completed programming and implementation. Students will utilize the Visual Studio to learn a variety of languages including, but not limited to, Visual Basic, C#, and ASP.NET. Students will also gain exposure to Python, HTML5, CSS, and JavaScript.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop sound logic and programming skills that can be applied to multiple languages.
- Create business solutions using the latest programming languages.
- Design and develop mobile applications.
- Solve logical problems using selections, loops, polymorphism, or data structures using various programming languages.
- Evaluate software problems, plans, and solutions for correctness and appropriateness.

Technical Standards

See here (p. 24) for details.

Tech Prep Partner

See here (p. 14) for details.

Web Programming/Computer Programming Major

Associate of Applied Science Degree Structured Course Sequence (4 Semester Plan)

First Year		
First Semester		Hours
COM 1110	English Composition	3
CPT 1050	Technology Basics for IT Pro	3
CPT 1110	Introduction to Programming Logic and Design	3
CPT 1120	Introduction to VB Programming	3
CPT 1410	Microsoft I	3
SDE 1010	First Year Experience	1
Term Hours		16
Second Semester		

COM 1140	Technical Writing	3
HST 1620	American History Since 1877	3
SOC 1010	Sociology	3
MTH 1151 or MTH 1260	Quantitative Reasoning or Statistics	3
CPT 2750	HTML and CSS	3

Term Hours	15
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Second Year**First Semester**

CPT 1820	ASP.NET Programming	3
CPT 2130	JavaScript Programming	3
CPT 2350	Database Programming	3
ACC 1010	Corporate Accounting Principles	4
AIM 1000	Introduction to Artificial Intelligence	3

Term Hours	16
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Second Semester

CPT 2210	Systems Analysis and Design	3
CPT 2400 	Special Topics in IT	3
CPT 2320	C# Programming	3
CPT 2450	Introduction to Java Programming	3
CPT 2500	iOS Mobile Applications Development	3
CPT 2991	Field Experience	1

Term Hours	16
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Total Hours	63
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- d. Solve logical problems using selections, loops, polymorphism, or data structures using various programming languages.
- e. Evaluate software problems, plans, and solutions for correctness and appropriateness.

Technical Standards

See here (p. 24) for details.

Code	Title	Hours
CPT 1050	Technology Basics for IT Pro	3
CPT 1110	Introduction to Programming Logic and Design	3
CPT 1120	Introduction to VB Programming	3
CPT 1820	ASP.NET Programming	3
CPT 2130	JavaScript Programming	3
AIM 1000	Introduction to Artificial Intelligence	3
CPT 2210	Systems Analysis and Design	3
CPT 2350	Database Programming	3
CPT 2400 	Special Topics in IT	3
CPT 2500	iOS Mobile Applications Development	3
CPT 2320	C# Programming	3

Total Hours	33
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 The ePortfolio requirement has been phased out and the ePortfolio indicators are being removed from the site.

 Capstone

 Capstone course

See here (p. 29) for Capstone information.

Prerequisites:

Students should check course prerequisites before registering.

Web Programming/Computer Programming Certificate

Jesse Wallace, MS, **Chair**

Phone: (419) 995-8356

Email: wallace.j@rhodesstate.edu

Office: JJC 131

The Web Programming/Computer Programming certificate is designed to teach students how to develop a website for the internet or intranet including web design, web content development, web server, and network security configuration. With this certificate, students will be equipped with the skill of creating presentations of context that can be delivered to an end-user through the World Wide Web or other web-enabled software, such as microblogging clients and RSS readers.

Web/Computer Programming Major (p. 115)

Program Learning Outcomes

Upon completion, the student will be able to:

- a. Develop sound logic and programming skills that can be applied to multiple languages.
- b. Create business solutions using the latest programming languages.
- c. Design and develop mobile applications.

COURSE DESCRIPTIONS

Accounting (ACC)

ACC 1010 – Corporate Accounting Principles

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Introduces students to fundamental accounting principles for corporations. The students will learn the analysis of business transactions (external and internal) and their effect on the accounting equation; the processing and flow of data from the recording of source documents to the closing of the books (accounting cycle); accounting for assets; cash, receivables, plant and intangible assets; inventories. In addition it covers both short-term and long-term liabilities (bonds); as well as the corporate structure including the nature, type and issuance of stock transactions.

Transfer: TAG.

ACC 1020 – Managerial Accounting Principles

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Introduces students to fundamental managerial accounting principles. The students will learn the basics to internal accounting processes along with how to determine the cost of a product, study cost behavior and analysis, appropriate profit reporting, budgeting, performance evaluation, differential analysis and capital investment analysis. This is designated as a portfolio course.

Transfer: TAG

Prerequisites: ACC 1010.

ACC 1050 – Accounting Software (QuickBooks)

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Applies basic accounting principles to an integrated accounting software package. The package currently used is QuickBooks.

ACC 1121 – Payroll Accounting

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Studies the various laws that relate to payroll including FLSA, FICA, Unemployment Compensation and federal, state and local withholding tax. Students will learn to calculate wages and withholding as well as complete the appropriate federal and state forms. In addition, they will complete the necessary employer records and apply payroll accounting concepts to microcomputer application.

Corequisites: ACC 1010.

ACC 2010 – Intermediate Accounting I

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Focuses on financial reporting theory and application at the intermediate level as related to balance sheet valuation and income determination. Accounting applications for cash, temporary investments, receivables and inventory are also examined.

Prerequisites: ACC 1010.

ACC 2020 – Intermediate Accounting II

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Follows ACC 2010 featuring financial reporting applications for noncurrent operating assets; long-term investments; current, contingent and long-term liabilities; corporate equity; earnings per share presentation; leases; pensions and cash flows.

Prerequisites: ACC 2010.

ACC 2111 – Cost Accounting

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Covers the concepts, quantitative analysis and detailed accounting procedures employed by a firm to determine material, labor and overhead cost elements. Included is the utilization of job order, process and blended cost systems. In addition, it includes the basic principles of budgeting for managerial use in planning for capital acquisition, development of standard costs, operating budgets and responsibility accounting. This is designated as a portfolio course.

Prerequisites: ACC 1020.

ACC 2250 – Principles of Federal Income Tax

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Introduces the theory and practice of individual income taxes and provides a comprehensive application of the federal income tax code as it pertains to the determination of taxable income and computation of tax liability for individuals. It covers problems involving laws and regulations, preparation of individual income taxes, methods of tax planning and tax minimization. Included is a discussion of the impact of income taxes upon society and an individual's tax decisions.

ACC 2290 – Intermediate Income Tax

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Provides a more detailed analysis of the comprehensive application of the federal income tax code as it pertains to the determination of taxable income and computation of tax liability for individuals, corporations and partnerships. Tax returns are prepared by hand and also by utilizing a tax software package. In addition, online tax research is completed.

Prerequisites: ACC 2250.

ACC 2300 – Auditing

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Provides a study of the planning, evidence gathering, internal control review, sampling, and application of procedures used to audit assets, liabilities, equity, and related income statement accounts of a profit-oriented enterprise. This course includes an evaluation of the audit profession including professional standards, ethics, and liability of CPAs. The reporting requirements for compilation and review services and a thorough study of the types of audit opinions will also be included.

Prerequisites: ACC 1010, ACC 1020, ACC 2010, COM 1110.

ACC 2401 – Applications in Accounting

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Requires the students to integrate the knowledge gained, and skills developed, in prior course study. Course requirements include research, interpretation and application of both internal and external accounting policies.

Prerequisites: ACC 1010, ACC 1020, ACC 2010

Corequisites: ACC 2020.

ACC 2991 – Accounting Practicum

Credit Hours: 2.00 Total Contact Hours: 14.00 Lecture Hours: 14.00

Requires the student to participate in a guided work experience in which the student will work for a minimum of 210 hours in an accounting/finance position. Exact duties will be agreed upon by the Faculty Member/Chair, Work Experience Supervisor, and the Student. Student will be required to present a portfolio which summarizes their time spent in the work experience. Simultaneous enrollment in ACC 2992, Accounting Seminar, is required. This course is graded S/U.

Prerequisites: ACC 1010, ACC 1020 and approval of an Accounting Faculty Member.

Corequisites: ACC 2992.

ACC 2992 – Accounting Seminar**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Brings practicum accounting students together with their instructor to discuss achievements, progress, and challenges occurring during their practicum work experiences. Simultaneous enrollment in ACC 2991, Accounting Practicum, is required.

Prerequisites: ACC 1010, ACC 1020 and approval of an Accounting Faculty Member

Corequisites: ACC 2991.

Administrative Office Tech (AOT)

AOT 2640 – Spreadsheet Software and Applications**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the student to Microsoft Excel, an electronic spreadsheets program. Students will plan, create, and maintain electronic spreadsheets and apply them to common business and accounting functions.

Concepts covered will include basic to advanced formulas and functions, creating customized charts, and managing Table data. Classwork will contribute to a portfolio.

Advanced Manufacturing Tech (AMT)

AMT 1020 – Preventive Maintenance**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces how routine work is done to keep equipment in good working order and to optimize its efficiency and accuracy. Addresses regular routine cleaning, lubricating, testing, checking for wear and tear and eventually replacing components to avoid breakdown. Introduces students to the various types and styles of predictive and preventive maintenance components, principles and practices used in industrial applications.

AMT 1040 – Blueprint Reading and Schematics**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces the fundamental information in drafting necessary to retrieve, read, manipulate and understand a mechanical part print. Instructs students to recognize, identify, describe and relate the components used in schematics, along with their symbols and connectors, to describe electrical, electronics, pneumatics, hydraulics and piping circuits, as well as welding and joining symbols interpretation.

AMT 1070 – Basic Electricity and Electronics**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the various elements of basic electricity including the identification of electrical symbols as well as interpretation of schematics, cross referencing prints, tracing circuits, interpreting sequential function charts, line drawings and time charts. Introduces the student to electrical measurement instruments, including digital and analog multimeters, clamp-on ammeters, megohmmeters, and the oscilloscope. Concentrates on control logic components and circuit function. Introduces the student to solid state devices and applications.

AMT 1080 – Mechanical Drive Systems**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces safety, maintenance techniques and procedures used to maintain industrial equipment, including industrial couplings, chains, sprockets, belts, bearings, shafts, brakes, clutches, gears and cams. Addresses the principles of power transmission, calculations of speed and force and how they affect a power transmission system.

AMT 1091 – Safety**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Introduces OSHA and the OSHA regulations that apply to the auto manufacturing industry. Provides the knowledge and skills necessary to help sustain life and minimize the consequences of injury or sudden illness to meet the various training needs of those in workplace, school or community settings.

AMT 1092 – Rigging**Credit Hour: 1.00 Total Contact Hour: 1.50 Lecture Hour: 0.50 Lab Hour: 1.00**

Introduces safety rules and issues in the use of overhead cranes, hoists, rigging equipment, attachment components, calculating sling angle stresses, and safe lifting and turning loads.

AMT 1100 – Welding and Fabrication**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces the power sources used in shielded metal arc welding (SMAW) and gas metal arc welding (GMAW), along with equipment and filler metals used to produce a welded joint. Welding principles will be introduced along with the metallurgy of steel and welding. Introduces shielded metal arc welding safety and shielded metal arc welding processes including flat, horizontal, vertical, and overhead welding techniques. Provides knowledge of theory, safety practices, equipment and techniques required for gas metal arc welding including different transfer methods and position welding. Introduces oxy-fuel welding and cutting, including safety, setup and maintenance of oxy-fuel welding and cutting equipment. Techniques taught in this course include cutting, brazing, and welding.

AMT 1180 – Tool and Gage Design**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Emphasizes design fixtures (drilling, milling, boring, welding) and gauges (plug, ring, feeler, indicators, relation). The design assignments feature loading, locating and clamping considerations.

AMT 1200 – Machine Tool Operations**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces machining operations, procedures and machines used by multi-skilled industrial maintenance technicians. Introduces the safe and correct operation of lathes, milling machines, drill presses, metal saws and hand and power tools. Students will work with various measuring and layout tools found in industrial environments.

AMT 2010 – Electrohydraulics and Pneumatics**Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Provides an explanation of the fundamental concepts of fluid power and electro-fluid power systems. Covers the principles of fluid power, calculations of physical properties of fluids and their ability to do work. Introduces the various fluid power components, symbols, circuits. Introduces troubleshooting of fluid power components and systems with an emphasis on safety. Addresses fluids, filters, reservoirs, piping, pumps, actuators, accumulators, control valves, and combination circuits.

AMT 2030 – Programmable Logic Controllers

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the Programmable Logic Controllers (PLC) and elements needed for an automated industrial control system. Introduces memory and project organization within a PLC and provides instruction in basic numbering systems, computer and PLC terminology. Introduces PLC control functions, program structures, language standards, wiring and troubleshooting methods, as well as, real world communications. Requires the student to program a PLC which may include a combination of ladder logic, structured text, sequential function chart and/or function block languages. Includes various protocols of industrial communications used between PLC controlled machines, PLC to PLC, PLC to computer and computer to computer.

AMT 2050 – Robot Maintenance

Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00

Introduces robotics in regard to industrial robotic safety standards, applications, types of classes for industrial robots, basic system components, robotic motion concepts, key programming techniques, definitions and the common terms associated with computer integrated manufacturing (CIM) as it relates to robotic cells. Instructs students on the mastering concepts of preventive maintenance techniques required for a robot and their backup systems in addition to recovery procedures needed to interpret robot error codes and perform a safe recovery start up procedure on robotics equipment, as well as integrating robotic applications in a PLC-controlled, automated system.

AMT 2060 – Controls and Instrumentation

Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00

Covers the diversity of control devices including: theory of operation, applications in automation control and troubleshooting and repair. Introduces identification, installation, replacement, and troubleshooting of automation controller circuit boards and modules. This course also introduces the installation, maintenance and troubleshooting of common input devices. Methods of motor controls including on-off, proportional, integral, and derivative including PID loop tuning and quality are discussed. Automation output devices including AC, DC, and servo motors, variable speed drivers, relays, motor starters and sizing of components for various applications is also covered.

AMT 2550 – Fundamentals of Plumbing and Pipefitting

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Provides discussion of the specifications, applications and maintenance of pipes, fittings and valves; simple pipe calculations and template development; tools used in piping; proper valve installations and maintenance and consideration of safe working pressures for pipes and valves.

AMT 2970 – Troubleshooting Capstone

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 1.00 Lab Hours: 3.00

Provides students with the skills and knowledge to be proficient in diagnosing and repairing advanced integrated technology. Students will combine the skills acquired throughout their studies to diagnose and troubleshoot the Integrated Technology Trainer. The course is designed to simulate real world environment and support teamwork concepts necessary to be successful in industry. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Agriculture (AGR)

AGR 1000 – Introduction to Agriculture

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces the student to the various disciplines in the field of agriculture. Areas of focus will be Leadership, Biology, Soils, Foods, Plants, Animals, Natural Resources and Mechanics.

AGR 1100 – Principles of Agricultural Business Management

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces the basic concepts and methods of business management in an agricultural business enterprise through a comparison of evolving management approaches, and through an examination of motivation, ethics, leadership, communication and decision-making processes within the management functions of planning, organizing, leasing and controlling. Past and present agricultural business situations are examined through events currently reported in the news media for the purpose of promoting the application of management principles, theories and techniques.

AGR 1200 – Sustainable Agriculture

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Provides comprehensive coverage to the theory and practice of transforming the field of agriculture into a more environmentally sound operation. Studies include a focus on plants, animals, soils, water, energy and efficiencies as they relate to today's modern agriculture operations.

AGR 1300 – Principles of Agricultural Marketing and Sales

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces the fundamental principles, policies, structure and strategy of agricultural marketing and international trade. Development of a marketing plan, customer sales and service techniques. Digital marketing strategies related to branding and communication. Implications of world trade and political aspects of world food production.

AGR 1401 – Introduction to Soils for Agronomic Production

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the basic concepts and method of laboratory and traditional activities to determine soil characteristics including chemical, physical and biological properties as related to agronomic production. Investigates conservation practices that improve sustainability and environmental and engineering properties of soil in production systems. Explores irrigation and drainage practices to enhance production.

Corequisites: CHM 1110.

AGR 1402 – Principles of Crop Management

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces the basic cropping systems used in agronomic crops including input selection, tillage, planting, harvesting and storing of production. Crop growth and development will be emphasized along with managing production risk and using data to make decisions. Prescription data decision making will be emphasized.

AGR 1403 – Principles of Nutrient Management

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces basics of plant nutrition and soil fertility including soil pH and Nitrogen and Carbon cycles as they relate to crop production. Practice and recommend soil testing processes, liming and soil amendments, fertilizing, manure management and other nutrient sources and additives. Analysis of fertilizer calculations and soil and tissue testing will be emphasized.

Prerequisites: AGR 1000

Corequisites: CHM 1110.

AGR 1404 – Introduction to Integrated Pest Management**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the concept and tools of integrated pest management. Develops proficiency in pest identification, control methods and environmental protection through economic pest control techniques and processes. Precision data interpretation will be emphasized. The commercial applicators licensing requirements will be covered.

AGR 1500 – Precision Agriculture Equipment**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Includes an exploration of various precision hardware available in the agriculture industry. Basic concepts of electricity, electronics, hydraulics, pneumatics, and controllers as related to precision agriculture equipment will be covered. Demonstrations, along with technical manuals will be utilized to install, troubleshoot and operated display modules, sensors and control components in precision agriculture equipment. This equipment is related to, but not limited to, fertilizer and chemical applications, planting, irrigation, harvesting, and yield monitoring. Hand-held crop scouting and soil sampling hardware will be discussed.

Prerequisites: AGR 1000.**AGR 1501 – Prescription Mapping in Agriculture****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers the use of precision farming software that is embedded in precision agriculture equipment and the data inputs and outputs that are needed in each to create the desired prescription/application map. Use includes but is not limited to initial setup, management of data and production list creation, data cards, processing field data, creating reports and creating prescription/application maps. Once maps are created, students will interpret the information contained in the maps to recommend an action plan for the mapped field.

Prerequisites: AGR 1000.**AGR 1515 – Introduction to GPS in Agriculture****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Advances a foundational understanding of global positioning system (GPS) theory and use. Evaluates different applications of GPS by collecting and analyzing data for decision-making and troubleshooting in agriculture. Studies of historical and current events related to GPS will illustrate GPS principles, applications and uses in action.

Prerequisites: AGR 1000.**AGR 1540 – Introduction to GIS in Agriculture****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the basic skills, concepts and principles of Geographic Information Systems, geography and using current map generating software. Geographic concepts include world coordinate systems, projections, thematic maps, vector, and raster data layers. Map design includes outputs, geodatabases, spatial and attributed data (digitizing, geocoding, spatial data processing), and analysis in current GIS software. Other topics in map elements and production using collected data will be explored with current and historical case studies. Information will be covered in lecture, computer lab tutorials, and activities based on agriculture uses of geospatial data and mapping.

Prerequisites: AGR 1000.**AGR 1600 – Introduction to Artificial Intelligence in Agriculture****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Explores the use of Robotics/AI in agriculture. Students will have the opportunity to examine AI components of current agriculture and other equipment. Limitations and challenges of AI in agriculture will be reviewed and discussed. Students will set up and program basic commands of given AI enabled equipment. Included is basic trouble shooting of programming and equipment. Emphasis will be on the current state of northwest Ohio agriculture and the next steps in Robotics/AI for agriculture.

Prerequisites: AGR 1500, AMT 1070, AMT 2030, MET 2310**Corequisites:** AMT 2050, FMS 2110.**AGR 2970 – Agriculture Technology Capstone** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Prepares the student to transition into agriculture technology employment. The student will demonstrate comprehensive proficiency by integrating technical knowledge with core skills and abilities. Students will combine the skills acquired in agriculture certificates and apply them to a project arranged with a course advisor. The student will simulate and support teamwork concepts necessary to be successful in agriculture technician related employment on and off farms. The course will include an exit evaluation/presentation of critical thinking and writing, and/or speaking.

Corequisites: AGR 2991.**AGR 2991 – Field Experience****Credit Hour: 1.00 Total Contact Hour: 7.00 Lecture Hour: 7.00**

Enables work activity, which relates to an individual student's occupational objectives. The experience is coordinated by a faculty member of the college who assists the student in planning the experience, visits the site of the experience for a conference with the student and his/her supervisor during the semester and assigns the course grade to the student after appropriate consultation with the employer/supervisor and evaluation of related instruction. The course is graded S/U.

Corequisites: AGR 1000.

American Sign Language (ASL)

ASL 1010 – American Sign Language I**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Provides an introduction to the basic skills in production and comprehension of American Sign Language (ASL), including fingerspelling and numbers. Introduces conversational ability, culturally appropriate behaviors and exposes students to ASL grammar.

Transfer: TAG.**ASL 1020 – American Sign Language II****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Develops receptive and expressive ability in American Sign Language (ASL) and allows recognition and demonstration of increasingly more sophisticated grammatical features of ASL. Increases fluency and accuracy in fingerspelling and numbers.

Transfer: TAG.**Prerequisites:** ASL 1010.**ASL 2010 – American Sign Language III****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Develops receptive and expressive ability in American Sign Language (ASL) and allows recognition and demonstration of increasingly more sophisticated grammatical features of ASL.

Prerequisites: ASL 1020 or HUM-1602 "C" or better.

ASL 2020 – American Sign Language IV**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Develops receptive and expressive ability in American Sign Language (ASL) and allows recognition and demonstration of increasingly more sophisticated grammatical features of ASL.

Prerequisites: ASL 2010 or HUM-1603 "C" or better.

Anthropology (ANT)

ANT 2411 – Cultural Anthropology**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines the fundamental principles and concepts, research methods, and anthropological theories for understanding human cultural diversity and cultural change in a global context. Cultural anthropology is the sub-field of anthropology that studies the influence of culture on human behavior. It encompasses many subjects including law, politics, and power; economies, social class and inequality; race and racism, gender, sexuality, health and illness, kinship, family, and marriage; the global economy; and religion. Students will explore these topics from a holistic, comparative, and global perspective using the anthropological frameworks of political, social, economic, and religious systems.

Transfer: TAG

Prerequisites: COM 1110 with a "C" or better.

Artificial Intelligence and Machine Learning (AIM)

AIM 1000 – Introduction to Artificial Intelligence**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces basic concepts and applications of artificial intelligence (AI), including AI project cycles. Focus on issues surrounding AI including ethics, bias, culture, regulations, and professional expectations.

AIM 1100 – Introduction to Machine Learning**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces machine learning concepts and Python applications, including data acquisition, supervised and unsupervised learning, and data modeling.

Prerequisites: AIM 1000, CPT 2350

Corequisites: MTH 1260.

AIM 2200 – Natural Language Processing**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the fundamental concepts in Natural Language Processing (NLP) and text processing. Focus on knowledge and skills necessary to create a language recognition application.

Prerequisites: AIM 1100

Corequisites: AIM 2220, AIM 2970.

AIM 2220 – Artificial Intelligence for Computer Vision**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Understands and applies the basic techniques to process images using OpenCV and Python libraries. Focuses on knowledge & skills necessary to apply AI in CV for common tasks like Image Classification and Object Detection.

Prerequisites: AIM 1100

Corequisites: AIM 2200, AIM 2970.

AIM 2970 – AIM Capstone **Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Focuses on how a social issue is explored, brought through the Artificial Intelligence (AI) Project cycle, and delivered as a solution using the different domains of AI, including computer vision and natural language processing.

Prerequisites: AIM 1000, AIM 1100, COM 1110

Corequisites: AIM 2200, AIM 2220.

AIM 2991 – AIM Field Experience**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Enables work activity which relates to an individual student's occupational objectives. With permission of a faculty advisor, the field experience replaces elective or required courses in a student's associate degree program. The experience is coordinated by a faculty member of the college who assist the student in planning the experience, visits the site of the experience for a conference with the student and his/her supervisor at least once during the semester and assigns the course grade to the student after appropriate consultation with the employer/supervisor.

Prerequisites: AIM 1000 and faculty advisor approval.

Associate Tech Studies (ATS)

ATS 1000 – ATS Degree Plan Seminar in Allied Health**Credit Hours: 0.50 Total Contact Hours: 0.50 Lecture Hours: 0.50**

Provides the student with the opportunity to develop all of his/her experiences and resources into a coherent plan to meet educational needs not otherwise supported by normal college programs. The "Plan of Study" will be developed through consultation and interaction with an instructor consisting of meeting 7.5 hours per semester. This course is graded S/U.

Prerequisites: Application to ATS program.

ATS 1010 – ATS Degree Plan Seminar in Business/Public Service**Credit Hour: 1.00 Total Contact Hour: 15.00 Lecture Hour: 1.00**

Provides the student with the opportunity to develop all of his/her experiences and resources into a coherent plan to meet educational needs not otherwise supported by normal college programs. The "Plan of Study" will be developed through consultation and interaction with an instructor consisting of meeting 15 hours per semester. This course is graded S/U.

Offered: Fall, Spring, Summer

Prerequisites: Application to ATS Program.

ATS 1020 – ATS Degree Planning Seminar in Information Technology/Engineering Technology**Credit Hours: 0.50 Total Contact Hours: 0.50 Lecture Hours: 0.50**

Provides the student with the opportunity to develop all of his/her experiences and resources into a coherent plan to meet educational needs not otherwise supported by normal college programs. The "Plan of Study" will be developed through consultation and interaction with an instructor consisting of meeting 7.5 hours per semester. This course is graded S/U.

Prerequisites: Application to ATS program.

ATS 1030 – Degree Planning Seminar in Nursing**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides the student with the opportunity to develop all of his/her experiences and resources into a coherent plan to meet educational needs not otherwise supported by normal college programs. The "Plan of Study" will be developed through consultation and interaction with an instructor consisting of meeting 15 hours per term. This course is graded S/U.

Offered: Fall, Spring, Summer**Prerequisites:** Application to the ATS Program.

Aviation (AVI)

AVI 1000 – Unmanned Aerial Systems**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces Unmanned Aerial Systems (UAS). Includes basic explanation of the technology, applications with precision agriculture emphasis, the Federal Aviation Administration (FAA) regulatory framework, data collection, and privacy issues. Instruction will cover only the book content needed to sit for the drone certification exam.

Prerequisites: AGR 1000.**AVI 1200 – Unmanned Aerial Systems Basic Operation****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to the use of drone technology, including basic set up, operation, sensor addition, and safety in agriculture settings. Sensor selection and use are demonstrated. Troubleshooting drone agricultural mapping errors is also reviewed.

Prerequisites: AGR 1000, AVI 1000.

Basic Business (BUS)

BUS 2100 – Business Law**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the student to the legal aspects of common business transactions, contract law, tort law, commercial paper, business organizations, agency law, negotiable instruments, secured and unsecured transactions, bankruptcy, personal property and real property law.

Transfer: TAG.**BUS 2991 – Internship (Practicum)****Credit Hour: 1.00 Total Contact Hour: 7.00 Lecture Hour: 7.00**

Requires the student to participate in an internship work experience in which the student will work for a minimum of 105 hours in a business position related to their field of study. Exact duties will be agreed upon by the Faculty Member/Chair, Work Experience Supervisor and the Student.

Corequisites: BUS 2992.**BUS 2992 – Internship (Seminar)****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Brings internship students together with their instructor to discuss achievements, progress, and challenges occurring during their internship work experiences.

Corequisites: BUS 2991.

Basic Health Sciences (BHS)

BHS 1000 – Introduction to Patient Care**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides an overview of the roles, requirements and features of selected healthcare professions. Introduction to basic responsibilities for patient care including professionalism, communication and legal/ethical considerations will be made with facilitation for student performance during lab sessions. Content related to the preparation for patient care will be examined including the utilization of appropriate medical terminology and abbreviations, charting and documentation in the clinical setting. Laboratory sessions will focus on competency in patient positioning, bed mobility, transfers, basic gait and transport techniques, selection and fitting of mobility aids and wheelchairs, basic ADL and home safety, infection control procedures and aseptic techniques, sterilization and disinfection of equipment, and basic bedside assessment of the patient including vital signs, heart and lung sounds, communication skills and age-appropriate considerations. Specific therapeutic interventions for the Occupational Therapy Assistant, Physical Therapist Assistant and Respiratory Care provider will be introduced.

Corequisites: BIO 1110.**BHS 1100 – Patient Care Technician I****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Demonstrates knowledge of infection control fundamentals, laboratory safety, collection/processing of laboratory specimens, assisting with patient exam and treatment, the medical record and safety practices in the medical environment. Hands-on course work that consists of related classroom instruction and practical hands-on projects and experiences.

BHS 1120 – Patient Care Technician II**Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Demonstrates knowledge and skills of a patient care technician to include vital signs, basic patient care skills (inpatient and outpatient) and basic pharmacology. Demonstration of overall professionalism and career readiness. Hands-on course work that consists of related classroom instruction and practical hands-on projects and experiences.

Prerequisites: BHS 1100.**BHS 1140 – State Tested Nurse Aide Training****Credit Hours: 5.00 Total Contact Hours: 6.36 Lecture Hours: 4.00 Lab Hours: 1.28 Clinical/Other Hours: 1.08**

Uses the Ohio Department of Health Standards and Guidelines as the curriculum, the requirements for Ohio's Nurse Aide and Competency Evaluation Program, as established by Chapter 3701-18 of the Administrative Code of the State of Ohio, are presented. Students who successfully complete the course receive a certificate and are eligible to take the state test for nurse aides. 'C' grade policy applies.

BHS 1160 – Medical Law-Ethics Healthcare**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Introduces the principles of law, ethics, etiquette, and bioethics as they apply to the healthcare worker. The medical record as a legal document is reviewed. Issues of treatment consent, patient confidentiality, and technology's impact on healthcare delivery is addressed. Discussion of governmental regulations, legal statutes, and their impact on healthcare delivery.

BHS 1310 – CPR

Credit Hours: 0.50 Total Contact Hours: 0.66 Lecture Hours: 0.33 Lab Hours: 0.33

Meets the didactic and practical skills applications required by the American Heart Association for the Health Care Provider CPR certification. The American Heart Association strongly promotes knowledge and proficiency in BLS, ACLS, and PALS and have developed instructional materials for this purpose. Use of these materials in an educational course does not represent course sponsorship by the American Heart Association. Any fees charged for such a course, except for a portion of fees needed for AHA course materials, do not represent income to the Association. This course is graded S/U.

BHS 1315 – CPR Renewal

Credit Hours: 0.50 Total Contact Hours: 0.52 Lecture Hours: 0.26 Lab Hours: 0.26

Demonstrates the American Heart Association's requirements for a certification in Health Care Provider CPR. The American Heart Association strongly promotes knowledge and proficiency in BLS, ACLS, and PALS and has developed instructional materials for this purpose. Use of these materials in an educational course does not represent course sponsorship by the American Heart Association. Any fees charged for such a course, except for a portion of fees needed for AHA course materials, do not represent income to the Association. This course is graded S/U.

Prerequisites: BHS 1310.

BHS 1320 – CPR and First Aid

Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 1.00 Lab Hour: 1.00

Demonstrates the didactic and practical skills applications required by the American Heart Association (AHA) for the Health Care Provider CPR certification and the Heartsaver First Aid certification. The BLS for Healthcare Providers course is designed to provide a wide variety of certified or non-certified, licensed or non-licensed, healthcare professionals with the skills to keep people alive until they can be brought to a hospital or be treated with more advanced lifesaving measures. The course covers: First Aid Basics, Medical Emergencies, Injury Emergencies, and Environmental Emergencies. The AHA strongly promotes knowledge and proficiency in BLS, ACLS, and PALS and has developed instructional materials for this purpose. Use of these materials in an educational course does not represent course sponsorship by the AHA. Any fees charged for such a course, except for a portion of fees needed for AHA course materials, do not represent income to the Association. This course is graded S/U.

BHS 1330 – Foundations in Pharmacology

Credit Hour: 1.00 Total Contact Hour: 3.00 Lecture Hour: 1.00 Lab Hour: 1.00 Clinical/Other Hour: 1.00

Focuses on the general principles of pharmacology and selected drug classifications related to the cardiac, circulatory, respiratory, endocrine, neurological, and musculoskeletal systems.

Prerequisites: BIO 1110 and currently enrolled into an Allied Health Program.

BHS 1380 – Introduction to Medical Terminology

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Introduces the student to the components of the language of medicine. Medical terms are identified using the basic elements of prefixes, suffixes, combining forms, root words, plural formations, and abbreviations. Correct spelling and pronunciation are reviewed in depth. Creation and division of medical terms is stressed. Class may be offered as a fast-break class.

BHS 1390 – Medical Terminology

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Discusses an understanding of foundational medical terminology used in communication with the health care team. Terminology pertaining to the treatment of disease, including standard abbreviations, anatomic, diagnostic, symptomatic, eponymic, laboratory, pathologic, radiology, anesthetic, operative, and drug items will be covered in this course.

Transfer: TAG.

BHS 1530 – 12 Lead ECG Interpretation

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Provides instruction in the procedure used to accomplish the recording of a 12-lead EKG and the interpretation of the resulting diagnostic data. The student will develop a familiarity with EKG equipment and be able to discuss lead placement, bipolar, unipolar, and pericardial leads. Additionally, the ability to recognize recording errors and artifacts will be stressed. A systematic approach to interpreting the results of the 12-lead recording based on proper evaluation of the standard hexaxial system is described.

BHS 1540 – Advanced Cardiac Diagnostics

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Provides instruction in advanced EKG procedures: 12, 15 & 18 Lead electrocardiography; cardiac stress testing; diagnostic holter monitoring, pacemaker analysis and metabolic testing. Successful completion of this course along with the prerequisite course will prepare the student to sit for a nationally recognized credential - Certified Cardiographic Technologist (CCT).

BHS 1560 – Smoking Cessation Education

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Using a structured model, this course will help you build an effective patient education presentation. This model will lead you through five important steps: concept; planning; organization; presentation; and evaluation. Special emphasis is placed on a particular topic that crosses all disciplines in healthcare education: smoking cessation. This course is geared toward healthcare professionals, but the concepts are valid in any career path.

BHS 1570 – First Responder

Credit Hours: 2.00 Total Contact Hours: 2.67 Lecture Hours: 1.34 Lab Hours: 1.33

Learns how to treat a sick or injured person prior to advanced EMS personnel reach the scene. Topics include airway management, patient assessment, cardiac management, illness and injury management, children and childbirth. Successful completion of all written and practical examinations enables the student to challenge the National Registry of Emergency Medical Technicians, First Responder Exam. Certification in the State of Ohio requires successful completion of the National Registry of Emergency Medical Technicians, First Responder Exam.

BHS 1711 – Pathophysiology for Healthcare

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Explores the basis of human diseases and disorders. Emphasis is placed on the effects of basic pathophysiology processes which occur in various organ systems with common degenerative, neoplastic, metabolic, immunologic, and infectious diseases/disorders. "C" grade policy applies for nursing majors.

Corequisites: BIO 1120.

BHS 1750 – Introduction to Pharmacy Technician**Credit Hours: 6.00 Total Contact Hours: 8.00 Lecture Hours: 4.00 Lab Hours: 4.00**

Prepares the student to acquire the knowledge and skills necessary to competently practice in a variety of specialized healthcare facilities as a pharmacy technician. The topics covered include law and rule, basic pharmacology, medication preparation, distribution, dosage calculations, medication order interpretation, and maintenance of patient records at the direction of licensed pharmacist. Successful completion of this course allows the student to take the Pharmacy Technicians Certification Board (PTCB) examination.

BHS 1845 – Phlebotomy Principles and Practice**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides didactic and classroom skills instruction in the practice of phlebotomy and general laboratory procedures. The student will be required to demonstrate competency in the performance of designated procedures through skills check-offs. This course is a part of the Structured Phlebotomy Program together with BHS 1850. Students must be 18 years old or older and be a high school graduate or hold equivalent certificate.

Corequisites: BHS 1850.**BHS 1850 – Phlebotomy Clinical****Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides the opportunity for practical application and skills development for concepts learned in BHS-1840 Phlebotomy Principles & Practice. Students will complete clock hours of clinical training and orientation in an accredited laboratory with a minimum performance of 100 successful unaided blood collections including venipunctures and skin punctures. Student must be at least 18 years old and be a high school graduate or hold equivalent certification.

Corequisites: BHS 1845.**BHS 2100 – Advanced Cardiac Life Support****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides instruction in the core knowledge and skills needed to complete the course of study for the Adult Cardiac Life Support (ACLS) credential as established by the American Heart Association. "C" grade policy applies.

Prerequisites: Current AHA BLS for Healthcare Providers card.**BHS 2110 – Growth and Development: Lifespan****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides the student with an understanding of the physical, psychological, and social development and needs, as well as the developmental tasks of the child through school age, adolescent, young adult, middle aged and elderly. This course provides the foundation for understanding the well individual across the lifespan. "C" grade policy applies.

BHS 2120 – Introduction to Nursing**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces students to the field of nursing. Students will learn about the History of Nursing, Scope of Practice/Law & Rule, Medical Ethics, Professionalism, Nursing Process, Health/Wellness, Communication, Time-Management and Prioritization, Evidence-Based Practice, and Clinical Judgment/Reasoning. Introductory skills of Vital signs, Intro to calculations, infection control, patient safety, Health Assessment, Sterile concepts, Medical Terminology, and Electronic Documentation. Students who successfully complete this course will be prepared to enter the first semester clinical course for the nursing programs. 'C' grade policy applies.

BHS 2200 – Pediatric Advanced Life Support**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides instruction in the core knowledge and skills needed to complete the course of study for the Pediatric Advanced Life Support (PALS) credential as established by the American Heart Association. "C" grade policy applies.

Prerequisites: Current AHA BLS for Healthcare Providers card.**BHS 2300 – Neonatal Resuscitation****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides instruction in the core knowledge and skills needed to complete the course of study for Neonatal Resuscitation as described by the American Academy of Pediatrics and the American Heart Association. "C" grade policy applies.

Prerequisites: American Heart Association Basic Life Support Healthcare Professional.**BHS 2500 – Health and Wellness Capstone****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Taken during the semester of scheduled graduation for Health and Wellness majors. A capstone project will be required which is relevant to the student's area of specialization and which integrates a holistic approach to health and wellness. This course is graded S/U.

Prerequisites: COM 1110, Completion of core courses in area of specialization.**BHS 2600 – Health Science Technology Capstone** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides an opportunity for the prospective graduate to demonstrate achievement of the program's learning outcomes as well as the college's general education and core skills and abilities. A capstone project will be completed in the student's area of specialization. The course will include an examination of the student's growth in diversity, critical thinking, and writing. Other elements of the course include an e-portfolio writing assignment and the completion of selected Collegiate Assessment of Academic Proficiency tests. The capstone course concludes with a role-transition experience that includes resume development, effective interview skills, and career laddering.

Prerequisites: COM 1110, Completion of core courses in area of specialization.**BHS 2700 – Special Topics in Allied Health****Credit Hours: 0.00 Total Contact Hours: 0.00**

Serves as a vehicle for specialized college study in specific healthcare content not otherwise covered by regular curriculum. This course is individually tailored for each student need for career pathway development and may be taught using individualized learning contracts or may be taught in traditional method for specific cohorts in specialized training experiences.

Biology (BIO)

BIO 0900 – Introductory Anatomy and Physiology**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Emphasizes basic understanding of biology and chemistry topics as it applies to human anatomy and physiology. This course is for any student who feels they need to improve or refresh their foundational knowledge in these areas. This is a credit course and will be counted in student's grade point average; however, it will not count towards graduation requirements or as an elective substitute. The 'C' grade policy applies for a student in a health program.

BIO 1000 – Basic Human Structure and Function**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a basic understanding of the terms and concepts related to normal structure and function of the human body. The anatomy and physiology of each body system is studied and the basis for pathophysiologic changes with common health problems is integrated. This course does not have a laboratory component. The 'C' grade policy applies for a student in a health program.

Transfer: TM**Prerequisites:** BIO 0900 with a 'C' or better, or any college level biology or chemistry course, or placement.**BIO 1090 – Concepts in Biology****Credit Hours: 4.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces molecular and cellular concepts, metabolism, energy, genetics, and basic comparative physiology. "C" grade policy applies for a student in a health program. All students enrolled in BIO 1090 must also sign up for a section of BIO 1090 lab.

Transfer: TM**Prerequisites:** CHM 0960, or any college level course in biology or chemistry, or placement**Corequisites:** BIO-1090L.**BIO 1110 – Anatomy and Physiology I****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Studies the structure and function of the human body as an integral whole. The course begins with a brief study of inorganic chemistry, organic chemistry, and histology, then examines the following body systems: integumentary, skeletal, muscular and nervous. Laboratories include dissections, physiology experiments, and model demonstrations. 'C' grade policy applies for a student in a health program.

Transfer: TM**Prerequisites:** BIO 0900 with a 'C' or better, or placement.**BIO 1110H – Anatomy and Physiology I (Honors Component)****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** BIO 1110.**BIO 1120 – Anatomy and Physiology II****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Builds upon BIO 1110 by continuing the examination of human anatomy and physiology with the following body systems: endocrine, cardiovascular, lymphatic/ immune, respiratory, urinary, digestive, and reproductive. Includes additional topics of fluid and electrolyte balance, and metabolism. Laboratories include dissections, physiology experiments, and model demonstrations. 'C' grade policy applies for students in a health program.

Transfer: TM**Prerequisites:** BIO 1110 with a 'C' or better.**BIO 1120H – Anatomy and Physiology II (Honors Component)****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** BIO 1120.**BIO 1210 – Biology I****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Studies the chemical and cellular basis of life. The course will investigate a variety of topics within the fields of Biochemistry and Cell Biology such as the properties of water, macromolecules, cellular structure, cellular respiration, and the cell cycle. Laboratories will include microscopy, dissections, manipulation of variables, and working with models.

Transfer: TAG, TM**Prerequisites:** CHM 0960 with a 'C' or better, any college level course in biology or chemistry, or placement.**BIO 1220 – Biology II****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Studies the evolutionary, ecological, and organismal aspects of life. The course will investigate a variety of topics within the fields of Evolutionary Biology, Ecology, Botany, and Zoology such as the theory of evolution and its evidence, evolutionary processes, energy transfer within an ecosystem, and the reproductive cycles of plants and animals. Laboratories will include microscopy, dissections, manipulation of variables, and working with models.

Transfer: TAG, TM**Prerequisites:** CHM 0960 with a 'C' or better, any college level course in biology or chemistry, or placement.**BIO 1310 – Environmental Science I****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces current human-caused environmental problems such as air, water and soil pollution, wastes, chemicals and energy resources. Provides an introduction to science, the scientific method, basic biological and ecological concepts and applies these to current environmental issues. Students will investigate how different ecosystems function and respond to changes in various biological, chemical, and geological processes. Both historical and recent examples will be examined to illustrate how human activities impact natural systems and vice versa.

BIO 1320 – Environmental Science II

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00
 Introduces human caused environmental problems such as climate change, environmental health and toxicology, and threats to biodiversity. The course introduces environmental ethics, sustainable agriculture, conservation biology, and sustainable development. Both historical and recent examples are examined to illustrate the value of ecosystem services, soil conservation, habitat protection, risk management, and sustainability. Students will investigate sustainable solutions applicable to current human-caused environmental issues.

BIO 1400 – Microbiology

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Provides an overview of microbiology to Health and General Education students. Topics of study include: morphology, growth, reproduction, control of and diseases caused by bacteria, viruses, fungi, and protozoa. Laboratories emphasize bacterial and microbiological techniques. 'C' Grade Policy applies for a student in a health program.

Transfer: TM

Prerequisites: BIO 1000 or BIO 1120 or BIO 1210.

BIO 1990 – Biology Independent Study

Credit Hours: 0.00 Total Contact Hours: 0.00
 Enables Independent Study in the Biological Sciences.

BIO 2121 – Introduction to Human Genetics

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Introduces genetics fundamentals, focusing on human genetics. Students will learn genetics history, terminology and analysis; including pedigrees, karyotypes, DNA profiling, and recombinant DNA techniques. Laboratories apply genetic analysis techniques. Designed as an elective for Associate of Science and Associate of Arts degrees.

Transfer: TM.

Prerequisites: (BIO 1110 and BIO 1120) or BIO 1210.

BIO 2820 – Associate of Science Capstone

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00
 Integrates reading from an instructor-chosen, science-related text with additional readings from other sources. The capstone project requires an oral presentation and related paper focusing upon a specific ethical issue, presenting the student's viewpoint while reasonably discussing opposing views. Should be taken during the term of scheduled graduation.

Prerequisites: COM 1110.

Corequisites: COM 2400.

Chemistry (CHM)

CHM 0960 – Introductory Science

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00
 Provides an introduction to basic principles in biology and chemistry necessary for entry level science courses. This course is for any student that needs to improve or refresh their foundational knowledge in these areas. This is a credit course and will be counted in student's grade point average; however, it will not count towards graduation requirements or as an elective substitute. The 'C' grade policy applies for a student in a health program.

CHM 1010 – General Chemistry I

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Introduces the fundamental principles of chemistry, including measurement and calculation; chemical stoichiometry; the properties of gases; atomic and molecular structure; bonding; thermochemistry; and periodic properties.

Prerequisites: MTH 1370.

CHM 1110 – Introductory General Chemistry

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Provides a foundation in basic principles of general chemistry. Topics include methods of measurement, temperature and heat, atomic structure, nuclear chemistry, bonding, nomenclature, gas laws, chemical reactions, stoichiometry, solutions, acid-base chemistry and chemical equilibrium.

Transfer: TM

Prerequisites: IMT 1911 or MTH 0953 (with a grade of 'C' or better).

CHM 1120 – Introductory Organic and Biochemistry

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Introduces the fundamentals of organic chemistry and biochemistry, including laboratory applications. The structures and properties of organic compounds classified by functional group, carbohydrates, lipids, amino acids, proteins, and nucleic acids are presented. Students will develop a basic knowledge of organic nomenclature and reaction classes. Relationships between structure, properties, and functionality of compounds are discussed with emphasis on their application in health sciences. This course presumes a foundational knowledge of inorganic chemistry. The 'C' grade policy applies for a degree in a health program.

Transfer: TM

Prerequisites: CHM 0960 with a 'C' or better, or CHM 1010, or CHM 1110, or placement.

CHM 1210 – General Chemistry II

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Designed to provide a foundation in the basic principles of general chemistry. Topics include intermolecular forces, colligative properties, Chemical kinetics, equilibria, acid-base properties, thermodynamics and electrochemistry.

Prerequisites: CHM 1010.

CHM 1310 – Organic Chemistry I

Credit Hours: 5.00 Total Contact Hours: 7.00 Lecture Hours: 3.00 Lab Hours: 4.00

Introduces topics of organic chemistry including the study of alkanes, stereochemistry, alkyl halides, organometallic compounds, alkenes, alkynes, aromatic hydrocarbons and spectroscopic methods of organic analysis.

Prerequisites: CHM 1210.

CHM 1320 – Organic Chemistry II

Credit Hours: 5.00 Total Contact Hours: 7.00 Lecture Hours: 3.00 Lab Hours: 4.00

Introduces topics of organic chemistry including the study of alcohols, ethers, epoxides, aldehydes, ketones, carboxylic acids, derivatives of carboxylic acids, enolates, carbanions, amines, polycyclic and heterocyclic aromatic compounds, pericyclic reactions, and polymers.

Prerequisites: CHM 1310.

Civil Engineering Technology (CET)

CET 1100 – Construction Documents

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces students to contract documents as they pertain to construction projects. This course will offer the basic understanding and the fundamentals of contract documents and their various delivery methods, special provisions, general conditions, bidding and award of contracts, bonding and insurance, and change orders.

CET 1110 – Construction Methods

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces construction methods and operational sequences used in construction of residential, commercial, and industrial projects. This course will discuss the role of the Construction Manager and their importance on a construction site. This course will also have an emphasis on codes, permits, inspections, and take-offs for construction projects.

CET 1130 – Construction Drawings

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces construction plan reading and applying plan reading from working drawings through final construction. This course will discuss drawing organization with emphasis on coordination and understanding the relationship of drawings with the construction documents as they pertain to modern building construction.

CET 1220 – Construction Materials

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Covers soil types as well as the determination of strength and load bearing capacities. Methods for and reasons to determine optimum soil moisture contents will be covered. Techniques for field and laboratory identification of soils and for soil compaction and tests of liquid and plastic limit will be taught. The types and kinds of aggregate materials to include slag, gravel, and limestone will be studied. Crush counts as it relates to strength will also be covered. Types of gradation and density as it relates to compaction of stone will be taught. The quality of aggregate materials.

CET 1230 – Quantity Survey

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the "take off" procedure required in order to determine the amount of materials described in a set of construction drawings. This course will develop the background knowledge for the process of estimating and bidding a construction project from a set of construction drawings and specifications.

Prerequisites: CET 1130.

CET 1450 – Concrete Technology I

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Provides an introductory understanding of base materials such as stone, gravel, sand, water, types of cement, and ASTM type additives A through F. In addition, air entrainment agents as well as Pozzlanic type additives such as nylon, polypropylene, and still will also be covered. Construction quality of building: (a) foundations, (b) walls, (c) frames, and (d) floors will be covered. In addition, construction of bridge foundations, sub- and superstructures, and architecturally designed concrete slabs and concrete pavements will be addressed. Joint construction, vibration considerations of concrete, texture and smoothness, placement of reinforcements, drainage considerations (edge drains), and segregation of the mix will also be covered. Balancing material production with trucking and placement will be taught. Types of equipment plant to finished work will be included as well as the effects of climatic conditions on construction.

Prerequisites: CET 1220.

CET 1910 – OSHA 10-hr General Safety

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Provides entry level general awareness for recognizing and preventing hazards in a general industry setting. Upon successful completion of this course, participants will receive an OSHA 10-hr General Industry completion card.

CET 1921 – ACI Strength Testing Technician

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Demonstrates concrete strength certification procedures including the knowledge and the ability to perform, record and report the strength results as well as the capping of concrete cylinders, unbounded capping, compressive strength and flexural strength of concrete test specimens.

CET 1990 – Independent Study in CET

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Incorporates in-depth work on a special topic within the field of Civil Engineering Technology which the student was not able to pursue in the desired degree of depth in the regular course offerings. During the first week of the semester, the student is required to describe the proposed course of study in writing that he/she wishes to pursue. Such proposal must be submitted to the division dean for approval and student assignment to a Civil Engineering Technology faculty member for overseeing the project.

CET 2110 – Planning and Scheduling

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the working knowledge of planning and scheduling of construction projects. This course will discuss scheduling procedures and techniques, cost and quality control, and the use of project information and decision making. This course will also address the fundamental skills needed to develop, analyze and manage construction projects. The different construction planning and scheduling software will be introduced.

Prerequisites: CET 1110

Corequisites: CET 1230.

CET 2200 – Structural Design**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers the concepts of structural design as it applies to wood and steel structures such as residential and light commercial structures. Topics that will be covered include: fundamental concepts of stress analysis, analysis of coplanar statically determinate and indeterminate trusses; bending deformation; analysis of statically indeterminate coplanar frames; load analysis and fundamentals of structural connections. The use of LRFD steel manual will also be explored to select structural beams.

Prerequisites: PHY 1120, MTH 1370.**CET 2210 – Pavement Analysis****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces AASHTO equations as they relate to pavement design as well as how to compute axle loads as it relates to design and pavement thickness. The Ohio Department of Transportation, Portland Cement Association, and the Asphalt Institute's design criteria will also be taught. Life cycle cost concepts and computerized design aids will be introduced. Materials, environment, subgrade strength, and traffic will be covered as basic concepts to design of rigid and flexible pavements.

Prerequisites: MTH 1210, CET 1220.**CET 2220 – Surveying Fundamentals****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Learn the techniques and procedures utilized to locate, measure, and check the construction components for both new and existing buildings. Development of hands-on skills using the tools and equipment in simulated construction application exercises. Utilization of contract documents as sources of information for layout of projects as well as the documentation of techniques used to record field activities.

CET 2230 – Construction Cost and Analysis**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers the determination of time, labor, and materials needed to complete a job. Determination of indirect costs and their relationship to direct costs will be covered as well as assignment of distributions of overhead. Also covered will be the determination of equipment depreciation. Unique bidding parameters such as A and B bidding, Incentive/Disincentive, and Warranties will be included as well as life cycle cost comparisons for designers and value engineering for design changes.

Prerequisites: CET 2210, MTH 1210.**CET 2450 – Concrete Technology II****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Covers specifications from ACI and ASTM for mix design and field testing of concrete. Specifically, the course will cover testing of fresh concrete, concrete materials, compiling and evaluating test results, and assessing product performance. Proper procedures for making and curing specimens will be covered in addition to field testing of fresh concrete to determine temperature, slump, yield and air content. Emphasis will be placed on batch adjustments and the knowledge needed to become ACI Certified as a Field Testing Technician - Grade I.

CET 2970 – Civil Engineering Technology Capstone **Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Allows students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities. This course is designed to combine all of the material presented thus far and relate it to a real life engineering design and construction experience. The students will be presented a design and construction task and be required to complete the project on a scheduled time-line. Relevant content will be a collection of topics including aggregate material & soils data, concrete mix designs, material and additives, concrete field and lab testing, topography surveying, pavement analysis & design (rigid & flexible), computer drafting and estimating. Each project will have a final oral presentation showing the students communication skills including the use of PowerPoint in the presentation. By design, this is a capstone course so no new material will be presented in this class. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Prerequisites: CET 1220, CET 1450, CET 2210, COM 1110.**CET 2991 – Field Experience****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Enables work activity which relates to an individual student's occupational objectives. With permission of a faculty advisor, the field experience replaces elective or required courses in a student's associate degree program. The experience is coordinated by a faculty member of the college who assists the student in planning the experience, visits the site of the experience for a conference with the student and his/her supervisor at least once during the semester and assigns the course grade to the student after appropriate consultation with the employer/supervisor. This course is graded S/U.

Communications (COM)

COM 0950 – College Reading**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Improves critical thinking, reading comprehension, and vocabulary skills to develop students' abilities to successfully comprehend and retain information from texts. Incorporated in the course are note-taking, test-taking, library skills, time management, memorization and concentration skills which can shorten the time used for study, yet increase the productivity of the time spent interacting with texts.

COM 0980 – Developmental Writing**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to writing at all levels (sentence, paragraph and essay) and to research methods and reinforces reading comprehension skills. This is a credit course and will be counted in a student's grade point average; however, it will not count toward graduation requirements or as an elective substitute.

COM 0990 – Integrated Reading and Writing**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to critical reading and academic writing skills necessary to creating effective college level readers and writers. This course is offered in a co-requisite model with COM 1110.

Corequisites: COM 1110.

COM 1110 – English Composition**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides practice in sound organization and effective expression of ideas in original expository and argumentative compositions as well as the research paper. Extensive discussion of rhetorical modes and editing techniques.

Transfer: TM**Prerequisites:** COM 0990 or placement.**COM 1110H – English Composition (Honors Component)****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** COM 1110.**COM 1140 – Technical Writing****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Applies the principles of good writing in industrial and academic reporting, with emphasis on the techniques of presenting information graphically as well as in clear, concise, written form.

Transfer: TM.**Prerequisites:** COM 1110.**COM 1160 – Business Communications****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Applies the principles of good writing to on-the-job and personal business letters, formal business reports and other types of business correspondence. Areas covered include proper letter format and strategies of reader oriented letter writing (e.g. effective employment applications, orders, inquiries, adjustments, refusals, memos) as well as research, oral presentations and assessment of career goals.

Transfer: TAG, TM.**Prerequisites:** COM 1110.**COM 1170 – Police Communications****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides training in the development of occupational writing skills with emphasis on police reports, letters, and memos. Effective oral communication will be studied and practiced via formal presentations and interviews.

Prerequisites: COM 1110.**COM 1200 – Writing in the Sciences****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a working knowledge of the typical writing tasks encountered in the scientific workplace. This course is an interdisciplinary course which builds upon the writing skills acquired in COM 1110 and the science skills acquired in the physical sciences (Biology, Chemistry, Physics) and social sciences (Sociology, Psychology). The course will cover principles and purposes critical to the scientific writing process, including such features as the collaborative nature of scientific writing; the importance of precision, clarity, and objectivity in scientific writing; and the role of ethics in scientific writing.

Transfer: TM.**Prerequisites:** COM 1110.**COM 1801 – Creative Writing: Fiction****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Offers an introduction to the art and craft of writing short fiction. Students read and analyze published fiction. Students write scenes; write a short story; and discuss the writing of classmates.

Prerequisites: COM 1110.**COM 1980 – Research and Writing****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Enables the student to work one-on-one with an instructor in learning persuasive, argumentative and research strategies; use of the library; and organization, development and documentation of the research paper. This course is intended for a transfer student who has taken an English composition course that did not cover writing a persuasive paper, an argumentative paper and a research paper. A student who has completed COM 1110 may not take COM 1980.

COM 1990 – Independent Study in COM**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Involves students on a one-to-one basis with an instructor on a term paper entailing reading, writing and discussion. The subject matter, to be set by the instructor, will relate to humanities or social sciences rather than to the student's technological field of study. A six to ten page paper will be assigned for each credit. Limit of 1 hour per semester; only 1 hour counts toward graduation.

COM 2110 – Public Speaking**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Covers the analysis, formation, organization, development, and delivery of ideas and attitudes within contemporary issues by means of audience analysis and dialogue. Various rhetorical modes and group projects are also included.

Transfer: TAG, TM.**COM 2110H – Public Speaking (Honors Component)****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirement. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The students and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** COM 2110.

COM 2213 – Verbal Judo**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Applies the area of redirecting behavior with words, i.e., tactical communication, while maintaining an attitude of professionalism. Extensive discussion and practice of rhetorical modes, listening techniques, and tactical theory are included.

Transfer: TM.**Prerequisites:** COM 1110.**COM 2400 – Composition and Literature****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Builds on the writing foundational skills introduced in COM 1110 and emphasizes critical thinking and communication skills to promote skilled academic writing. Using literature as the course content, students focus upon essay writing in multiple genres. This course aims to develop the student's ability to communicate ideas about literature effectively by using the principles of the writing process.

Transfer: TM.**Prerequisites:** COM 1110.**COM 2400H – Composition and Literature (Honors Component)****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** COM 2400.**COM 2820 – AA Capstone Course** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Focuses on global diversity issues. This course combines two texts, one fiction and one non-fiction; of those texts one may be historical in nature while the other must be contemporary. A paper and a multiple intelligence project serve as the capstone project. To complete this project, which presents students' understanding of global diversity issues, students synthesize the textual information, combine that information with outside research and present the project to the class. They then write a reflection/expansion paper about their multiple intelligences project.

COM 3110 – Advanced Composition**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Refines and improves writing and critical thinking skills. Expanding upon the topics encountered in English Composition (COM 1110), this course involves a wider range of rhetorical modes in exposition and persuasion, including responses to literature and film as well as the synthesis of primary and secondary research as it relates to social and historical issues. The course requires active communication with individuals of the local community in order to stress the value of writing as a social act.

Prerequisites: COM 1110 ("C" grade policy applies).

Corrections (COR)

COR 1160 – Correctional Tactics**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 1.00 Lab Hours: 3.00**

Prepares correctional students in firearm and self-defense tactics. Students will be trained on a handgun and a shotgun following the ODRC specifications. Students will also be trained in unarmed self-defense tactics and upon course completion must be able to demonstrate the following: rolling break fall, back fall, come along, fight break up, basic block, outside wrist turn, arm bar take down, inside wrist turn, throw away technique, defense against grabs, strikes and kicks. (This course involves physical activity and students must have a physical or doctor's permission to complete the course.) This course is graded S/U.

Prerequisites: Must be a second year correction student and have submitted a criminal background check.**COR 2150 – Corrections Capstone** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Allows students to demonstrate their proficiency by integrating technical knowledge and core skills and abilities. Each student will be given a correctional file and must complete the appropriate interviews, assessments case plans and referrals for their particular client. This course will include an e-portfolio self-growth/awareness writing assignment and an exit evaluation of critical thinking and writing.

Prerequisites: COR 2570.**COR 2230 – Probation and Parole****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines problems facing the probation officer and the parolee and theories concerning parole for the criminal. Students will also learn to write a presentence investigation and parole violation.

COR 2500 – Practicum**Credit Hours: 0.00 Total Contact Hours: 15.00 Lecture Hours: 1.00 Lab Hours: 14.00**

Provides on the job training under the direction of local criminal justice officials. It is given on an individual basis with evaluations completed by the supervising faculty member. A total of 210 student practicum hours are required. This course is graded S/U.

Prerequisites: COR 2600.**COR 2570 – Case Management and Counseling****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Studies various approaches to correctional assessment, counseling and problem solving skill techniques. Students will study these approaches and then apply them in lab settings with practical applications. Skills will be gained in Risk and Need Assessments, AIM's, Client Management Classification Instruments as well as case planning and teaching problem solving skills to correctional clients.

Prerequisites: COM 1110, COR 2230.**COR 2600 – Correctional Supervision****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Explores the history of the correctional system and then builds on current correctional facility operations. Students will learn the fundamentals of day to day prison and jail operations including practical applications of pat downs, cell searches, cell extractions, and transports. Emergency operations will also be discussed. The course will conclude with supervisory education focusing on line and middle management levels to prepare the student for promotional opportunities in the work force.

COR 2720 – Special Needs Clients**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Discusses two components, the first half pertaining to the plight of crime victims. A brief history of crime victims will be discussed and then a focus on victims of violent crime including sexual assault, child abuse, spousal abuse, bullying, murder, and robbery. Special emphasis will be on how data is collected. The second component will focus on special offenders including sex offenders and other offenders with high recidivism rates. This course will include an e-portfolio assignment.

Information Technology (CPT)

CPT 0980 – Developmental Computer Skills**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces students to beginning computer terms and concepts. Students will learn how to operate a microcomputer and to use the computers in the campus microcomputer labs. Topics covered include: mouse operation, practice with keyboarding, elementary Windows operating system techniques, use of a flash drive, file management techniques, elementary word processing (Microsoft Word), and elementary electronic spreadsheets (Microsoft Excel). Students will also learn to use the Internet and email.

CPT 1040 – Introductory Computer Applications**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 1.00 Lab Hour: 1.00**

Introduces students to general computer terms and concepts. In addition, students will learn how to operate a microcomputer and to use the computers in the campus microcomputer labs. The students will learn about the Windows operating system and how to use a word processor (Microsoft Word) and an electronic spreadsheet (Microsoft Excel). Some keyboard experience is recommended. Self-paced and proficiency exam(s) available.

CPT 1050 – Technology Basics for IT Pro**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the use of the microcomputer in a professional environment with a focus on the innovative use of this technology. Students will use decision making tools to assist them in their work or personal environment. The course focuses on technology; history of technology; components of the PC; the Internet; application software including spreadsheet, word processing, and Web technologies. Students will see a variety of IT professions and discuss the daily activities of each. Proficiency exams are available.

CPT 1060 – Intermediate Computer Applications**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces students in health majors to become proficient doing the following tasks: research using the internet and search engines, intermediate and advanced features in Windows, advanced topics using Microsoft PowerPoint and advanced topics in Microsoft Word.

CPT 1110 – Introduction to Programming Logic and Design**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces computers, systems, and the management of information in a business environment. Provides a comprehensive overview of the principles of programming and teaches the beginning programmer how to develop logical thinking, structured procedural and program logic, and good programming style. Focuses on concepts such as procedural logic, programming concepts and enforces good style and logical thinking. Programming Logic and Design provides the beginning programmer with a guide to developing structured program logic. The course assumes no programming experience and does not focus on any one particular programming language. It introduces programming concepts and enforces good style and logical thinking. This class teaches flowcharting and writing algorithms or pseudo code. Students will learn Python in this course.

CPT 1120 – Introduction to VB Programming**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces programming concepts using the Microsoft Visual Basic .Net programming language. The concepts will involve planning and using algorithms; and programming with object-oriented design. There will be applications created using variables and constants, the selection structure, the repetition structure, controls, and handling events. Students should have knowledge of basic computer skills, including file/folder management concepts.

CPT 1210 – Introduction to Digital and Emerging Technologies**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to current digital and emerging technology concepts. Students will learn terminology, software, and hardware related to the digital media. This will also include emerging technologies as they become available. The course will include assignments that will require research on current and new concepts in the digital media field. There will be opportunity to interact with various tools and software.

CPT 1250 – Computer Applications in the Workplace**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to essential concepts in computer terminology, hardware components, operating systems and software issues. The student will have hands-on introduction to word processing, spreadsheet, presentation and database software using the Windows operating environment. Students will be required to prepare letters, reports and other documents and will be required to import data between the word processing and spreadsheet software applications. Proficiency exam options available. Some keyboard experience is recommended before taking this class.

Prerequisites: Keyboarding experience recommended.**CPT 1300 – C++ Programming****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides an introduction to the C++ programming language. Students will create, document, run and debug programs using problem analysis and data validation techniques. Key topics include variables, classes, objects, selection, iteration, strings, arrays, pointers and functions.

CPT 1410 – Microsoft I**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to installing and configuring a Microsoft Windows Server 2012 Network. This course focuses on the initial implementation and configuration of core services, such as Networking, Storage, Active Directory Domain Services (AD DS), Group Policy, File and Print Services, and Hyper-V. Different server roles are looked at including DNS servers, DHCP servers and Active Directory Domain Controllers. This course will help the student prepare for the following Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 exam: 70-410. The material the student will use in this course will include Microsoft Official Academic Course textbooks and CDs.

CPT 1415 – Microsoft II**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Describes multiple topics including implementing, managing, maintaining and troubleshooting a Microsoft Windows Server 2012 environment. This course focuses on the administration tasks necessary to maintain a Windows Server 2012 infrastructure such as configuring and troubleshooting name resolution, user and group management with Active Directory Domain Services (AD DS) and Group Policy, implementing Remote Access solutions such as Direct Access, VPNs and Web Application Proxy, implementing Network Policies and Network Access Protection, Data Security, deployment and maintenance of server images, as well as, update management and monitoring of Windows Server 2012 environments. This course will help the student prepare for the following Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 exam: 70-411. The materials the student will use in this course will include Microsoft Official Academic Course textbooks and CDs.

CPT 1420 – Microsoft III**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Learn advanced configuration and service tasks necessary to deploy, manage and maintain a Windows Server 2012 infrastructure. Topics include advanced networking services, Active Directory Domain Services (AD DS), Active Directory Rights Management Services (AD RMS), Active Directory Federation Services (AD FS), Network Load Balancing, Failover Clustering, business continuity and disaster recovery services, as well as, access and information provisioning and protection technologies such as Dynamic Access Control (DAC), and Web Application Proxy integration with AD FS and Workplace Join. This course will help the student prepare for the Microsoft Certified Solutions Associate (MCSA): Windows Server 2012 70-412 exam. The materials the student will use in this course will include Microsoft Official Academic Course textbooks and CDs.

CPT 1440 – Internet Usage and Web Page Program**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 1.00 Lab Hour: 1.00**

Utilizes the Internet to access popular email services, upload and download files, use bulletin boards, new services, and other applications found on the Internet. Social Media services will also be discussed and used. Students will also develop a web page. Some experience with computers is recommended before taking this course.

CPT 1470 – Introduction to Database Programming**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Enables students to create, maintain, and manipulate relational databases. They use Oracle SQL Plus to operate in a relational database environment. SQL will be covered. This course is required for IT majors with the digital media option.

Corequisites: CPT 1050.**CPT 1580 – Introduction to Graphic Design and Layout****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to design and layout concepts that make an effective presentation. Topics of instruction will include layout, type design, color usage, scaling photographs and artwork, design of various documents, and integration with written work. An introduction to the use of desktop publishing software will also be included. Classwork will contribute to a required student portfolio.

CPT 1605 – IT Essentials**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Prepares students for CompTIA A+ Certification exams. This class is designed for students who want to pursue careers in IT and gain working knowledge of how computers work, how to assemble computers, and how to troubleshoot hardware and software problems. This class is also designed to give the student basic IT and Operating Systems knowledge and introduction into industry terminology and concepts.

CPT 1615 – OS Introduction**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Discusses operating systems, which are not limited to, Microsoft and Linux. Hands-on-labs and in class material will be presented in a format that will help the student prepare for computer-based questions they might experience on this exam. This course provides exposure to Linux command line utilities, KDE, GNOME, Xserver and basic shell scripting. This class is also designed to give student comparisons between many of the different operating systems utilized in industry. OS Introduction helps a student to prepare for the CompTIA Linux+ Certification exams.

Corequisites: CPT 1050.**CPT 1620 – Linux Administration I****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Develop proficiency in performing maintenance tasks on the command line, installing and configuring a computer running Linux, and configuring basic networking, using virtual machines running Linux. This course will cover system architecture, Linux installation and package management, GNU and UNIX commands, devices, Linux file systems, and file system hierarchy standards.

CPT 1625 – Linux Administration II**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Exposes students to advanced topics in Linux server administration and provides students with the knowledge to setup, configure, and maintain a Linux workstation/server for use in industry as well as personal use. This course will cover basic and advanced scripting techniques to automate administrative tasks. Topics covered include scripting and data management, interfaces and desktops, administrative tasks, essential system services, networking fundamentals, and security. This class will also cover different distributions for Linux including, but not limited to, CentOS and Ubuntu. This course class will assist in preparation for the LPIC-1 Certification Exam.

Prerequisites: CPT 1620.**CPT 1705 – Cisco I - CCNA****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the architecture, structure, functions, components, and models of the internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing, the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Labs use a "model internet" to allow students to analyze real data without affecting production networks. At the end of the course, students build simple LAN topologies by applying basic principles of cabling, performing basic configurations of network devices such as routers and switches, and implementing IP addressing schemes.

CPT 1715 – Cisco II - CCNA**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students learn to configure and troubleshoot routers and switches and resolve common issues with virtual LANs and inter-VLAN routing in both IPv4 and IPv6 networks.

Corequisites: CPT 1705.**CPT 1820 – ASP.NET Programming****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces web programming technologies. ASP.NET is a server-side programming environment that you can use to create and run dynamic interactive web server applications. The student will use HTML and Visual Basic and databases to create data driven and interactive web sites.

Prerequisites: CPT 1120.**CPT 1850 – Webpage Layout and Design****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces student to the software Dreamweaver. This course is intended to expose the student to the concepts of developing and displaying web pages using hypertext markup language (HTML) editors for visually designing and managing websites and pages in a professional environment. The course will introduce the student to the features of Dreamweaver with a series of explanations, examples, exercises and projects that develop the skills needed to develop attractive and effective web pages and create, organize and manage websites. Students will learn to use tables, layers, frames, style sheets, behaviors and forms.

CPT 1940 – Introduction to Cybersecurity**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Explores the broad topic of Cybersecurity in a way that matters to the student. Each student will learn how to protect personal data and privacy online and in social media, and why more and more IT jobs require Cybersecurity awareness and understanding.

CPT 1945 – Introduction to the Internet of Things**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Examines the evolution of the Internet and how the interconnection of people, processes, data, and things is transforming every industry. This course provides an overview of key concepts and challenges related to digital transformation.

CPT 1950 – Security Awareness**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides a basic survey of the importance of IT security awareness and data confidentiality. This security awareness-training course walks users through every aspect of Information Security in a very broad, easy to understand way and explains to them the value of securing data, both for themselves and the organization. The class will introduce legislation, local, state and federal privacy policies and liability of individuals and institutions related to data confidentiality and integrity. The course will introduce risk management, security policies, and common threats and countermeasures. The course will also present best practices in access control and password policies. This course will prepare a student to take the CompTIA Security+ Certification exam.

CPT 1955 – Firewall Essentials**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Exposes students to various firewall devices. The course will enable a student to install, configure, and manage essential features of various firewalls. This course will also teach students how to build reliable firewall security measures including, but not limited to, access lists, VPNs, and least privilege concepts.

CPT 1965 – Application of Network and Computer Security**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Allows students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities. Students learn to provide modular, scalable security, using firewalls, access management, host security, and encryption as the foundation for security. Students will utilize case studies to implement access management including AAA, TACAS+, Kerberos, and physical card devices or token cards. Students will develop auditing procedures that combine host and network security practices.

Prerequisites: CPT-1930, CPT-1720.**CPT 1970 – Cybersecurity Applications****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Secures organizational data and network infrastructure against a digital threat. Students will act as a network administrator to utilize and manage security technologies. Students will complete a project that will require applying the knowledge learned in the Cybersecurity Fundamentals program.

Corequisites: CPT 1940.

CPT 1990 – Independent Study in CPT**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the student with an opportunity for in-depth work on a special topic within the field of Information Technology which the student was not able to pursue in the desired degree of depth in the regular course offerings. During the first week of the semester, the student is required to describe the proposed course of study in writing that he/she wishes to pursue. Such proposal must be submitted to the division dean for approval and student assignment to an Information Technology area faculty member for overseeing the project. This course of independent study may be substituted for an Information Technology technical course if it is applicable. Not more than five (5) credit hours will count towards graduation.

CPT 2000 – Emerging Technology**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to current emerging technology concepts. Students will learn terminology relating to current trends and work with various tools that are new and "trendy". The course will include assignments that will require research on new concepts in the digital media field. There will be opportunity to interact with various tools and software. This is a hands-on course. Classwork will contribute to a student portfolio.

CPT 2020 – Network Administration**Credit Hours: 6.00 Total Contact Hours: 8.00 Lecture Hours: 4.00 Lab Hours: 4.00**

Prepares for the CompTIA Network+ N10-007 certification exam with the CompTIA Network+ N10-007 course and lab. Lab simulates real-world, hardware, software and command line interface environments and can be mapped to any text-book, course and training. The course and lab completely cover the N10-007 exam objectives and include topics such as network policies; network components; Ethernet technology; routing IP packets; IPv4 and IPv6 addresses, and more. The course is segmented into parts, each part corresponding to the domain areas of the Network+ N10-007 exam.

CPT 2070 – Educational Technology**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Encompasses effectively identifying, location, evaluating, designing, preparing and efficiently using educational technology as an instructional resource in the classroom as related to principles of learning and teaching. Required course for all preservice teachers. Candidates will develop increased classroom communication abilities through lectures, discussions, modeling, laboratory experiences and completion of a comprehensive project.

CPT 2110 – Introduction to Programming - COBOL**Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Introduces students to basic programming terms, concepts, and documentation techniques. By the end of the course students will be able to design, write, compile, test and debug basic computer programs. Programming is done using the structured Common Business Oriented Language (COBOL). Topics covered include formatting/printing, computing, decision making, iteration, multi-level control break processing, and data validation. This course covers both batch and interactive processing. Microsoft Windows experience is recommended.

Corequisites: CPT 1050.**CPT 2120 – Advanced COBOL Programming****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Introduces students to advanced programming terms and concepts. By the end of the course students will be able to design, write, compile, test, and debug advanced COBOL programs. Topics covered include arrays and tables, sequential and indexed file processing, sorting, and screen design. This course also incorporates the elements of systems design through completed programming and documentation. Each student will design and implement a complete information system. The system will include multiple programs, make use of sequential and indexed files and use batch and interactive processing.

Prerequisites: CPT 1110.**CPT 2130 – JavaScript Programming****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Acquires the fundamentals of JavaScript programming to enhance the user experience and responsiveness of web sites. Students will create simple JavaScript code that will work well across multiple browser platforms. It will ready students to learn many of the pre-written jQuery libraries that will allow them to create professional web sites.

CPT 2210 – Systems Analysis and Design**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Presents an introduction to the fundamental concepts of business systems analysis and design. Topics covered include an introduction to information systems, systems planning, systems analysis, systems design, systems implementation, systems operation, systems support, and security. The course presents a practical approach using a blend of traditional development with current technologies. It uses "real world" case studies that promote critical thinking and student participation.

Prerequisites: At least one programming course.**CPT 2320 – C# Programming****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers more advanced programming concepts using the Visual C# programming language. Students will create Windows applications using methods, classes, structures, arrays, writing to and reading from files and error trapping.

Prerequisites: CPT 1120.**CPT 2350 – Database Programming****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Designed to obtain an understanding of relational database management concepts, theories, and procedures. They will design and create a relational database. The student will also normalize a database and design a relational database schema. They will use Oracle to access and manipulate data in a relational database environment. They will receive extensive instruction on how to perform queries using Oracle SQL. At the end of the semester, the student should be able to use Oracle SQL in the SQL Plus Environment to perform advanced queries on a relational database.

Corequisites: CPT 1050.**CPT 2400 – Special Topics in IT** **Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers advanced topics using sub and function procedures, multi-tier database access and using classes to build object-oriented programs. This course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing skills.

CPT 2450 – Introduction to Java Programming

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces Java software development using data types, programming structures, files, classes, objects and arrays. Projects created will use problem analysis to design, code and test Java programs. Students will learn appropriate tools to aid in Java program coding and development.

Prerequisites: CPT 2320.

CPT 2500 – iOS Mobile Applications Development

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the concepts of building iOS applications for the iPhone, iPad, and iPod. This course will also cover using the Apple Macintosh's development program Xcode 4.

CPT 2540 – Computer and Network Security

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

CPT 2545 – Scripting for Cybersecurity Professionals

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces the student to a variety of scripting languages. These scripting languages are an integral part of modern Penetration Testing tools. The course starts with an introduction to Windows PowerShell and Linux Shell scripting. This course will also cover Ruby, PHP, and Python scripting, concluding with a brief overview of Debugging and Disassembly.

CPT 2550 – Cryptography and Encryption

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Covers the usage of cryptographic protocols for computer and network applications. With the advent of electronic commerce, online transactions, consumer computing and authentication, cryptography is playing an important role in securing the privacy and authenticity of electronically stored and transmitted information. Assuring the quality, validity and privacy of information is one of the key applications of Cryptography. This course covers all aspects of cryptographic applications, using the basic concepts of encryption, PKI, hashing and signatures.

CPT 2555 – Network Forensics

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Provides a comprehensive understanding of network forensic analysis principles. Within the context of forensics security, network infrastructures, topologies, and protocols are introduced. Students understand the relationship between network forensic analysis and network security technologies. Students will learn to identify network security incidents and potential sources of digital evidence and demonstrate the ability to perform basic network data acquisition and analysis using computer based applications and utilities. Students will also identify potential applications for the integration of network forensic technologies and demonstrate the ability to accurately document network forensic processes and analysis.

CPT 2560 – Server and Infrastructure Integration

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Identify, gather, analyze, and write requirements based on user needs and design, construct, integrate, and implement an information system as a solution to a business problem. Students will apply key systems integration architecture, methodologies, and technologies using industry best practices. User needs and user centered design will be applied in the selection, creation, evaluation, and administration of the resulting system. Computing applications hosted on dynamically-scaled virtual resources available as services are considered. Collaborative and non-collaborative "cloud-resident" applications are analyzed with respect to cost, device/location independence, scalability, reliability, security, and sustainability. Commercial and local cloud architectures are examined. A group-based integration of course topics will result in a project employing various cloud computing technologies.

Prerequisites: CPT 1420, CPT 1625.

CPT 2650 – Creating and Editing Digital Images

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces students to creating and/or editing digital images. Students will learn to create bitmap images using a variety of software tools, and will capture digital images using a digital camera and a scanner, and transfer those images to a computer for editing. Students will learn both the design and productions perspective, including creating and managing layer masks, creating color effects and improving images with adjustments layers, working with text and combining text and imagery, and using filters and layer styles to create eye-popping special effects. This is a hands on course. Classwork will contribute to a student portfolio.

CPT 2670 – Graphics Software and Applications

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces students to creating and/or editing digital graphics. Students will learn to create vector graphics using a variety of software tools to create simple graphics, icons, and text to complex and multilayered illustrations. Through a thorough exploration of vector graphics students are able to apply their knowledge to all of the software tools, features and special effects, allowing them to create fun and interesting artwork. This is a hands on course. Classwork will contribute to a student portfolio.

CPT 2700 – Digital Video Editing

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces students to video production, compression, and editing concepts. Students will record video, capture the video to a computer, build a video presentation using a combination of video, sound, graphics, titles, and effects. This is a hands-on course. Classwork will contribute to a student portfolio.

CPT 2705 – Cisco III - CCNA

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students learn to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

Prerequisites: CPT 1705.

CPT 2715 – Cisco IV - CCNA**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network.

Prerequisites: CPT 1705.**CPT 2740 – Cisco V - CCNP****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides students with an opportunity to learn how to create an efficient and expandable enterprise network. Students will also learn how to install, configure, monitor, and troubleshoot network infrastructure equipment. Topics include configuration of EIGRP, OSPF, IS-IS, and BGP routing protocols, and how to manipulate and optimize routing updates between these protocols. Other topics include multicast routing, IPv6, and DHCP configuration.

Prerequisites: CPT 2715.**CPT 2741 – Cisco VI - CCNP****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the deployment of state-of-the-art campus LANs. The primary focus is on the selection and implementation of the appropriate Cisco IOS services to build reliable, scalable, multilayer-switched LANs. Focus areas of the course include VLANs, Spanning Tree Protocol, wireless client access, minimizing service loss, and minimizing data theft in a campus network. This hands-on, lab-oriented course stresses the design, implementation, operation, and troubleshooting of multilayer switched networks.

Prerequisites: CPT 2715.**CPT 2750 – HTML and CSS****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets), two of the core technologies for building web pages. HTML provides the structure of the page, CSS the (visual and aural) layout, for a variety of devices. HTML5 features are designed to make it easy to include and handle multimedia and graphical content on the web without having to resort to proprietary plugins and APIs. Along with graphics and scripting, HTML and CSS are the basis for building web pages and web applications. This is a hands on course. Classwork will contribute to a student portfolio.

CPT 2760 – Animation**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to produce visually innovative motion graphics and effects for film, video, DVD, and the web. Students will also learn how to composite and animate in 2D or 3D space using multiple cameras and lights. Integration of this product will be used in conjunction with other software packages. Students will create rich internet content and applications by using powerful video, multimedia and application development features. Upon completion of this course, students will be well versed in creating animations for a variety of uses. Class work will contribute to a student portfolio.

CPT 2770 – Animation II**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to create rich internet content and applications by using powerful video, multimedia, and application development features. Upon completion of this course students will be well versed in creating animation for a variety of uses. Classwork will contribute to student portfolio.

CPT 2900 – Advanced Digital Media Studies Capstone **Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Allows students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities. The skills learned in previous digital media courses will be combined and used to produce an advanced multimedia project of the student's digital media skills. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Prerequisites: COM 1110, CPT 1850, CPT 2650, CPT 2670, CPT 2700**Corequisites:** CPT 2750, CPT 2760, CPT 2770.**CPT 2930 – Ethical Hacking I****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Acquaints students with the world of offensive information security. This penetration testing training introduces the latest hacking tools and techniques in the field and simulates a full penetration test, from start to finish, by injecting the student into a diverse and vulnerable network. This class does express the legal and ethical aspects of utilizing these tools in industry.

Prerequisites: CPT 1620, CPT 1410.**CPT 2935 – Ethical Hacking II****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Acquaints students with the world of offensive information security. Students will not only apply knowledge of security concepts, tools, and procedures to react to security incidents, it ensures that they can anticipate security risks and guarding against them. This class will also cover investigative techniques and post mortem analysis of attacks on a network.

Prerequisites: CPT 1620, CPT 1410.**CPT 2940 – Virtualization I****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to the installation, configuration, and management of the VMware ESXi server infrastructure. The materials the student will use in this course will include VMware Official Academic Course textbooks. This is the first of two VMware course offered.

CPT 2945 – Virtualization II**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Explores the advanced features of installation, configuration, and management of the VMware ESXi server infrastructure using vSphere, VMware ESXi, VMware vCenter. The materials the student will use in this course will include VMware Official Academic Course textbooks. This is the second of two VMware courses offered.

Prerequisites: CPT 2940.

CPT 2950 – VoIP I

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Applies the core principles of voice and data technology as they integrate the IP Telephony architecture. Topics included in this course will be modifying the LAN, MAN, and WAN to accommodate IP Telephony and translating the various layers in the OSI model. Quality of Service (QoS) will be described, as well as cabling issues for IP Telephony in the enterprise. Asterisk and other open source IP Telephony services will be covered in this course.

Prerequisites: CPT 1620, CPT 1410.

CPT 2955 – VoIP II

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces students to the building and configuration of CISCO IP Telephony infrastructure. Call Manager Express will be utilized, each of these voice exchange systems will be configured, and time will be spent determining when to best utilize each system in different situations.

Prerequisites: CPT 1620, CPT 1410.

CPT 2960 – CCNA Security

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Develops the skills needed to succeed in IT-related degree programs and prepare for the CCNA Security certification. It provides a theoretically rich, hands-on introduction to network security, in a logical sequence driven by technologies. The goals of CCNA Security are as follows: provide an in-depth, theoretical understanding of network security; provide an experience- oriented course that employs industry-relevant instructional approaches to prepare students for associate-level jobs in the industry; enable students to have significant hands-on interaction with IT equipment to prepare them for certification exams and career opportunities. Upon completion of the CCNA Security course, students will be able to perform the following tasks: describe the security threats facing modern network infrastructures; secure network device access; implement the Cisco IOS IPS feature set; implement site-to-site IPSec VPNs; administer effective security policies.

Prerequisites: CPT 2715.

CPT 2965 – Applications of Network Security

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Focuses on interoperability of real world server integration combining services across various platforms. Topics will include, but not limited to, integration of Windows, Linux, and Novell systems, file sharing, domain services, directory services, database services, VPNs, web services, print services, VoIP services, and server clustering. With these services being implemented security will also be stressed. Services will need to be available as well as secure. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Prerequisites: CPT 2715, CPT 2935.

CPT 2991 – Field Experience

Credit Hours: 0.00 Total Contact Hours: 0.00

Enables work activity which relates to an individual student's occupational objectives. With permission of a faculty advisor, the field experience replaces elective or required courses in a student's associate degree program. The experience is coordinated by a faculty member of the college who assists the student in planning the experience, visits the site of the experience for a conference with the student and his/her supervisor at least once during the semester and assigns the course grade to the student after appropriate consultation with the employer/supervisor.

Prerequisites: Completion of first semester and faculty advisor approval. This course is graded S/U.

Culinary Arts (CUL)**CUL 1010 – Introduction to Culinary Arts**

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Introduces the Culinary Arts student to fundamental techniques and procedures used in the food service industry. Culinary theory, key terms, commercial equipment, and American Culinary Federation (ACF) and National Restaurant Association (NRA) standards are covered.

CUL 1011 – Food Service Sanitation/Safety

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Discusses causes and prevention of food-borne illness and food service accidents. Course stresses food service workers' responsibilities in food safety management and protecting public health by knowing and employing proper methods for food handling, equipment and facilities cleaning and sanitation, and performing the Heimlich maneuver and CPR (both taught within this course). A national exam is part of the course. Students must pass the national exam to pass this course.

CUL 1012 – Nutrition and Menu Planning

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Develops knowledge of preparation of food in accordance with sound nutrition principles and dietary guidelines. The basic fundamentals of nutrition will be studied. Principles and practices of planning, writing and evaluating menus for commercial or institutional food services. Recipe costing and menu pricing are discussed.

CUL 1020 – Food Preparation I

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Presents a systematic study of the application of culinary techniques and principles of food preparations essential to all laboratory cooking classes. Emphasis is on palatability, variety, digestibility and nutrient retention in food preparation. An introduction to the American Culinary Federation (ACF) and National Restaurant Association (NRA) and their importance in the food preparation/service industry is included.

Prerequisites: CUL 1011.

CUL 1021 – Meats, Fish and Poultry

Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00

Studies all aspects of meat, fish, and poultry including grading, inspection, storage, butchery, and methods of preparation. Students will learn the different cuts and varieties of meat including red and white meats, fish, and poultry.

Prerequisites: CUL 1020, CUL 1011.

CUL 1022 – Introduction to Baking and Pastry**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Studies the fundamentals, principles, and application of baking and pastry equipment, ingredients, weights and measures, technology, preparation and storage. Includes the production of pastries, classical desserts, breads and rolls.

Prerequisites: CUL 1011.**CUL 2030 – Food and Beverage Cost Controls****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Learn about food and beverage product specifications, supplier selection, packaging, and receiving, organization, storage and cost control functions.

Corequisites: ACC 1010.**CUL 2031 – Food Preparation II****Credit Hours: 4.00 Total Contact Hours: 7.00 Lecture Hours: 1.00 Lab Hours: 6.00**

Experiences in food preparation based on the American Culinary Federation (ACF) competencies in the following areas: basic cooking techniques and preparation of soups, sauces, meat, poultry and seafood entrees, fruits and vegetables, starches and garnishes. Sanitation, recipe reviews and analysis, and knowledge of tools and equipment are included.

Prerequisites: CUL 1020, CUL 1011.**CUL 2032 – Garde Manger****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Studies basic garde-manger (cold-food preparation) principles; functions and duties of the garde-manger department as they relate and integrate with other kitchen operations. Students will learn and demonstrate the skills necessary to prepare and present food and ice carvings, and specialty foods such as terrines, pates, canapes and hors d'oeuvres.

Prerequisites: CUL 1020.**CUL 2033 – Dining Room Service****Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Learn about the stations, jobs, and procedures of dining room service. Special emphasis is placed on dining room salesmanship, table service, guest relations, table setting and personal appearance.

CUL 2040 – Catering Management**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Covers aspects of planning, preparing and serving catering functions. Students practice skills in laboratory settings by planning, preparing food and serving at special theme functions and buffet events.

Prerequisites: CUL 1020, CUL 2031.**CUL 2041 – Culinary Practicum****Credit Hour: 1.00 Total Contact Hour: 14.00 Lecture Hour: 14.00**

Requires the student to participate in a work experience integrated with academic instruction. Students apply their skills sets within the culinary field working a minimum of seven clock hours per week. The practicum is coordinated with a Culinary Arts faculty member and an employer and may be paid or unpaid. The faculty member issues the practicum grade.

Prerequisites: Completion of 30 hours in program and approval of Culinary Arts Faculty Member.**Corequisites:** CUL 2043.**CUL 2042 – Culinary Arts Capstone****Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 1.00 Lab Hours: 3.00**

Prepares culinary students for program completion and final examination by reviewing and practicing the comprehensive set of course content and skills acquired during their culinary studies. Both written and food preparation exams are designed to meet American Culinary Federation (ACF) and National Restaurant Association (NRA) standards.

Prerequisites: CUL 1011, CUL 1012, CUL 1020, CUL 1021, CUL 1022, CUL 2031, CUL 2032, CUL 2033, CUL 2040.**CUL 2043 – Culinary Seminar****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Brings practicum culinary students together with their instructor to discuss achievements, progress, and/or challenges occurring during practicum work experiences.

Prerequisites: Completion of 30 hours in the program required and approval by Culinary Arts Faculty Member.**Corequisites:** CUL 2041.

Dental Assisting (DAS)

DAS 1011 – Dental Assisting Techniques**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 2.00**

Introduces the clinical application of procedures and techniques utilized in dental assisting. Emphasis is placed on infection control, documentation, and medical/dental emergencies.

Prerequisites: Acceptance into the Dental Assisting Program**Corequisites:** DAS 1020, DAS 1201, DAS 1460, DAS 1511, DAS 2141, DHY 1019, SDE 1010.**DAS 1020 – Dental Assisting Clinic****Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 2.00**

Provides an opportunity for the student to apply the techniques used in dental assisting during clinic.

Prerequisites: Acceptance into the Dental Assisting Program**Corequisites:** DAS 1011, DAS 1201, DAS 1460, DAS 1511, DAS 2141, DHY 1019, SDE 1010.**DAS 1201 – Introduction to Dental Terminology and Basic Oral Anatomy****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides an introduction to dental terminology and basic oral anatomy with emphasis on dental nomenclature and dental anatomy.

Prerequisites: Acceptance into the Dental Assisting Program**Corequisites:** DAS 1011, DAS 1020, DAS 1460, DAS 1511, DAS 2141, DHY 1019, SDE 1010.**DAS 1460 – Oral Radiography****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides a study of the concepts of radiobiologic imaging including components of the x-ray machine, x-ray production, and attenuation. Instruction on and practice with exposing, processing, mounting, assessing, interpreting, and duplicating extraoral and intraoral radiographs with emphasis on the parallel technique is incorporated into this course. Principles of radiation safety and protection in conjunction with quality assurance are stressed.

Prerequisites: Acceptance into the Dental Assisting Program**Corequisites:** DAS-1010, DAS-1200, DAS 1511, DAS-2140, BHS 1310, DHY 1019, SDE 1010.

DAS 1511 – Dental Assisting Concepts**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides an introduction to the concepts, duties, and techniques related to dental assisting.

Prerequisites: Acceptance into the Dental Assisting Program**Corequisites:** DAS-1010, DAS-1200, DAS 1460, DAS-2140, BHS 1310, DHY 1019, SDE 1010.**DAS 2141 – Dental Assisting Materials****Credit Hour: 1.00 Total Contact Hour: 1.50 Lecture Hour: 0.50 Lab Hour: 1.00**

Provides an introduction to the composition, chemical and physical properties, and application of dental materials commonly used in the dental office and laboratory as well as essential knowledge for effective communication as part of a dental team.

Prerequisites: Acceptance into the Dental Assisting Program**Corequisites:** DAS 1011, DAS 1020, DAS 1201, DAS 1460, DAS 1511, DHY 1019, SDE 1010.

Dental Hygiene (DHY)

DHY 1010 – Dental Hygiene Preclinic**Credit Hours: 4.00 Total Contact Hours: 12.00 Lecture Hours: 12.00**

Provides clinical application procedures in prevention, recognition, and treatment of oral diseases. Emphasis is placed on infection control, instrumentation, and basic clinical skills. "C" grade policy applies.

Prerequisites: Acceptance into the Dental Hygiene Program.**Corequisites:** BIO 1110, COM 1110, DHY 1511, DHY 1200, DHY 1460.**DHY 1019 – Nitrous Oxide Sedation****Credit Hours: 0.50 Total Contact Hours: 0.50 Lecture Hours: 0.34 Lab Hours: 0.16**

Provides basic principles of nitrous oxide minimal sedation for dental professionals. Emphasis is given to assessing patients and the clinical set up for dental assistant monitoring and/or dental hygienist administration of nitrous oxide in accordance with the Ohio State Dental Board (OSDB) requirements. Must have current CPR for the Healthcare Provider Certified or BHS-1131 as per OSDB. Must have instructor or program chair permission to register. The course satisfies 7.5 hours of continuing education (CE) requirements for Ohio license renewal. This course is graded S/U.

DHY 1030 – Dental Hygiene Clinic I**Credit Hours: 3.00 Total Contact Hours: 9.00 Lecture Hours: 9.00**

Provides an opportunity for the student to develop the ability to assess individual patient needs, plan and provide dental hygiene care and instruction necessary to treat and/or prevent oral diseases. "C" grade policy applies.

Prerequisites: BIO 1110, DHY 1010, DHY 1200, DHY 1460, DHY 1511, COM 1110.**Corequisites:** BHS 1330, BIO 1120, DHY 1301, DHY 1521, DHY 1660.**DHY 1200 – Orofacial Anatomy****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides a study of orofacial anatomy with emphasis on dental nomenclature, head and neck anatomy, and dental anatomy. "C" grade policy applies.

Prerequisites: Acceptance into the Dental Hygiene Program.**Corequisites:** BIO 1110, COM 1110, DHY 1010, DHY 1460, DHY 1511.**DHY 1301 – Oral Histology and Pathology****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a study of the growth, development, and microscopic anatomy of the teeth and surrounding structures as well as a study of the pathological processes of the human body and their manifestations in the oral cavity. Emphasis is placed on recognition and identification of oral lesions and conditions utilizing clinical, radiographic, and histologic media. Interpreting case studies and the development of a case study portfolio enhance students' understanding and applicability of course material. "C" grade policy applies.

Prerequisites: BIO 1110, DHY 1010, DHY 1200, DHY 1460, DHY 1511, COM 1110.**Corequisites:** BHS 1330, BIO 1120, DHY 1030, DHY 1521, DHY 1660.**DHY 1460 – Oral Radiography****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides a study of the concepts of radiobiologic imaging including components of the x-ray machine, x-ray production, and attenuation. Instruction on and practice with exposing, processing, mounting, assessing, interpreting and duplicating extraoral and intraoral radiographs with emphasis on the parallel technique is incorporated into this course. Principles of radiation safety and protection in conjunction with quality assurance are stressed. "C" grade policy applies.

Prerequisites: Acceptance into the Dental Hygiene Program.**Corequisites:** BIO 1110, COM 1110, DHY 1010, DHY 1200, DHY 1511.**DHY 1469 – Oral Radiography for the Dental Team****Credit Hours: 0.50 Total Contact Hours: 0.50 Lecture Hours: 0.50**

Provides a study of oral radiographic principles and interpretation leading to certification of the dental assistant through the Ohio State Dental Board. The clinical requirement must be met at the participant's dental office under the supervision of the employer dentist within 60 days of the completion of this course. Application then must be made to the Ohio State Dental Board. Must have instructor or program chair permission to register. In addition, this course satisfies 7.5 hours of continuing education requirements for license renewal for dental hygienists and dentists. This course is graded S/U.

DHY 1511 – Preventive Concepts I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to the principles and techniques used in the recognition and primary treatment in oral diseases. Additionally, this course assists the student in developing skills to treat a diverse population of individuals including those that are physically and mentally compromised.

Prerequisites: Acceptance into the Dental Hygiene program.**Corequisites:** BIO 1110, COM 1110, DHY 1010, DHY 1200, DHY 1460.**DHY 1521 – Preventive Concepts II****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a continuation of the study of principles and techniques used in the prevention, recognition, and initial treatment of oral diseases. Emphasis is placed on the further development of skills to communicate, plan treatment for, manage, and educate the physically and mentally compromised patients. Additionally, the role of research and its importance to dental hygiene will be introduced. "C" grade policy applies.

Prerequisites: BIO 1110, DHY 1010, DHY 1200, DHY 1460, DHY 1511, COM 1110.**Corequisites:** BHS 1330, BIO 1120, DHY 1030, DHY 1301, DHY 1660.

DHY 1529 – Oral Health Access Supervision**Credit Hours: 0.50 Total Contact Hours: 0.53 Lecture Hours: 0.53**

Prepares dental hygienists to properly and safely practice dental hygiene under the Oral Health Access Supervision Program in accordance with the Ohio State Dental Board requirements. Student must be a graduate dental hygienist or dentist. Must have permission of instructor or program chair to register. This course satisfies 8 hours of continuing education (CE) requirements for Ohio license renewal. This course is graded S/U.

DHY 1660 – Pain Control Management**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides the basic concepts of pain anxiety for the provision of safe and effective dental hygiene treatment. "C" grade policy applies.

Prerequisites: BIO 1110, DHY 1010, DHY 1200, DHY 1460, DHY 1511, COM 1110.

Corequisites: BHS 1330, BIO 1120, DHY 1030, DHY 1301, DHY 1521.

DHY 1669 – Local Anesthesia for Hygienist**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 1.00 Lab Hours: 1.00**

Provides the basic concepts of the administration of local anesthesia for pain control for the licensed dental professional. Within 18 months of the completion of this course, participants must successfully complete a state or regional written examination on local anesthesia approved by the Ohio State Dental Board. Must have RDH or DDS valid license, current CPR for the Healthcare Provider Certified or BHS-1311 as per OSDB and permission of instructor or program chair to register. This course satisfies 15 hours of continuing education (CE) requirements for Ohio license renewal. This course is graded S/U.

DHY 1990 – Independent Study in DHY**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides an opportunity for additional instruction to enhance the success of students earning an Associate Degree in Dental Hygiene. This course is graded S/U.

DHY 2010 – Dental Hygiene Clinic II**Credit Hours: 4.00 Total Contact Hours: 12.00 Lecture Hours: 12.00**

Provides a continuation of DHY 1030 and increases the student's theoretical knowledge and application of techniques used in the treatment and prevention of oral diseases. "C" grade policy applies.

Prerequisites: BHS 1330, BIO 1120, BIO 1400, DTN 1220, DHY 1030, DHY 1301, DHY 1521, DHY 1660, SOC 1010

Corequisites: DHY 2140, DHY 2340, DHY 2510, CHM 1120.

DHY 2020 – Dental Hygiene Clinic III**Credit Hours: 4.00 Total Contact Hours: 12.00 Lecture Hours: 12.00**

Provides a continuation of DHY 2010 and expands upon the student's theoretical knowledge in the application of techniques with emphasis on providing total patient care and preventing oral disease. "C" grade policy applies.

Prerequisites: DHY 2010, DHY 2140, DHY 2340, DHY 2510, CHM 1120

Corequisites: DHY 2540, DHY 2662, DHY 2770, PSY 1010.

DHY 2140 – Dental Materials**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides a study of the composition, chemical and physical properties and application of dental materials commonly used in the dental office and laboratory. This knowledge is essential if the student is to communicate properly with other members of the dental team and to adequately perform thorough patient education and preventative oral health care. "C" grade policy applies.

Prerequisites: BHS 1330, BIO 1120, BIO 1400, DTN 1220, DHY 1030, DHY 1301, DHY 1521, DHY 1660, SOC 1010

Corequisites: DHY 2010, DHY 2340, DHY 2510, CHM 1120.

DHY 2340 – Periodontology**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides a study of clinical assessment of periodontal disease, its etiology, classification, principles of treatment, and prevention of periodontal disease. "C" grade policy applies.

Prerequisites: BHS 1330, BIO 1120, BIO 1400, DTN 1220, DHY 1030, DHY 1301, DHY 1521, DHY 1660, SOC 1010

Corequisites: DHY 2010, DHY 2140, DHY 2510, CHM 1120.

DHY 2510 – Preventive Concept III**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides a study of advanced theory and practice used in the treatment and prevention of oral disease. "C" grade policy applies.

Prerequisites: BHS 1330, BIO 1120, BIO 1400, DTN 1220, DHY 1030, DHY 1301, DHY 1521, DHY 1660, SOC 1010

Corequisites: DHY 2010, DHY 2140, DHY 2340, CHM 1120.

DHY 2540 – Dental Hygiene Capstone Course **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides an opportunity for the prospective graduate to demonstrate achievement of the program's learning outcomes and competencies as well as the college's general education core skills and abilities. A major component of this course will facilitate a team approach to patient care and cultural diversity through an interdisciplinary team case study project. Psychomotor skills will also be demonstrated. Other elements are a final electronic portfolio writing assignment and the completion of selected Collegiate Assessment of Academic Proficiency tests. "C" grade policy applies.

Prerequisites: DHY 2010, DHY 2140, DHY 2340, DHY 2510, CHM 1120

Corequisites: DHY 2020, DHY 2662, DHY 2770, PSY 1010.

DHY 2662 – Current Concepts**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Prepares students to take licensing examinations and to better understand and appreciate the legal and ethical responsibilities of licensure. Current trends and issues impacting the profession of dental hygiene as well as career opportunities in traditional and non-traditional settings are discussed. The advantage of advanced education and necessity for life-long learning are expounded upon. At the end of this course, students will develop, solve, and present an ethical case study for submission to his/her college electronic portfolio. "C" grade policy applies.

Prerequisites: DHY 2010, DHY 2140, DHY 2340, DHY 2510, CHM 1120

Corequisites: DHY 2020, DHY 2540, DHY 2770, PSY 1010.

DHY 2770 – Community Dental Health**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides an introduction to basic principles of public health as they relate to the profession of dental hygiene. Methods of dental biostatistics and epidemiology will be introduced as well as the purposes and functions of public health agencies. Emphasis is given to assessing, planning, implementing, and evaluating community dental health projects. Additionally, the methodology and resources for teaching dental health to groups in various community settings will be introduced. Extramural experiences consist of assessment, planning, implementation, and evaluation of dental education programs as well as participation in scheduled community activities. "C" grade policy applies.

Prerequisites: DHY 2010, DHY 2140, DHY 2340, DHY 2510, CHM 1120**Corequisites:** DHY 2020, DHY 2662, PSY 1010.

Economics (ECN)

ECN 1410 – Macro Economics**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides students who will take only one course in economics a thorough treatment of the essential concepts of practical economics and a solid working vocabulary of economic terms so that the student may develop the ability to apply problem-solving methods to economic matters in his or her daily life.

Transfer: TAG.**ECN 1430 – Micro Economics****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines: theories of consumer behavior, determination of input and output prices and quantities, analysis of international trade and policy, and applications including labor markets and income distribution.

Transfer: TAG.

Education (EDU)

EDU 1000 – Introduction to Education**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the profession of teaching in today's society. More than ever before, teaching is a complex and challenging profession which requires the candidates to develop and use their skills and abilities and to foster a disposition and character of reflections. Candidates will utilize readings, explore themes, participate in field experiences and produce carefully considered reflections in order to broadly explore the purposes of schools in society and what knowledge, dispositions, and performances are required to be an effective teacher today.

Transfer: TAG.**EDU 1040 – Phonics-Foundation of Literacy****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces students to the reading process, including the nature and acquisition of language, current and historical perspectives about reading instruction, the interrelationship among the language arts, and the relation of prior knowledge, meaning, and context to the reading process. Included are the importance of reading aloud; the relationship of the phonemic, morphemic, semantic, and syntactic systems of language to the reading process; techniques to create literate environments and support emergent literacy; phonetic principles; oral and written grammar; and dialects and language patterns. Field hours in an early childhood, middle childhood, or adolescent/young adult classroom will be needed for assignment completion.

EDU 1050 – Introductory Child Development**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Covers human development that embraces academic theory, scientific discoveries, and practical applications. The course presents developmental processes from conception through adolescence in three distinct categories or domains- biosocial, cognitive, and psychosocial. Content will examine how the interplay of nature and nurture affects development across the life span, including developmental variations of typical and atypical developing children. The course will investigate appropriate expectations of the physical, emotional, social and intellectual growth and development of the child and adolescent. Fifteen (15) field hours required in early childhood, middle childhood, or adolescent/young adult classroom.

Transfer: TAG.**EDU 1080 – Classroom Management and Guidance****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Presents classroom management techniques teachers can employ to develop self-control, positive self-concepts, independence and pro-social behaviors in students. Introduction of practical applications of guidance and motivation techniques: problem-solving, prevention of potential problems for group settings, negotiation skills, setting limits, arrangement of the environment, positive affirmations and logical consequences. Guidance and motivation are presented within a framework of child development, developmentally appropriate practices, and constructivist educational philosophy.

EDU 1114 – Integrated Curriculum in Early Childhood Education**Credit Hours: 3.00 Total Contact Hours: 4.50 Lecture Hours: 2.00 Lab Hours: 2.50**

Focuses on the development of the young child and promotes developmentally appropriate practices in early childhood environments and curriculum. The aim of the classroom is to help children acquire the skills and behaviors that will promote their optimal growth. Candidates will learn to navigate between state standards and assessments and developmentally appropriate principles and practices. Constructive approach is emphasized as candidates study topics placed appropriately within curriculum content curriculum areas, such as math, science, music, movement, and creative art experiences.

EDU 1300 – Curriculum, Observation, and Assessment**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides design and delivery techniques for children birth to eight years of age. Curriculum development, lesson planning and instructional methods based on NAEYC guidelines. Emphasis is placed on learning environments representing the philosophies of Piaget, Vygotsky, Montessori, Reggio Emilia, Gardner and others. Skill development in the areas of observation, evaluation and assessment of young children and adolescents. Emphasis is placed on developmentally appropriate practice, project-approach, and integrated instruction for the ECE and primary classroom. Fifteen (15) field hours required in a preschool or early childhood classroom.

EDU 2000 – Psychology of Childhood**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers the developmental, adjustment and psychological problems of the child from birth through adolescence. The relationship of scientific psychological findings to practical methods of guidance and training of children by parents and teachers will be emphasized.

EDU 2010 – Emergent Literacy-Learning**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides information about developmental patterns in early language and literacy learning and research-based ways of teaching reading and writing during the early years (birth through 8 years). Research proves that language and speech are learned through meaningful experiences, not in isolated skill and drill activities. Research shows that language and literacy begins at birth. All children need a print rich language and literacy environment at home, in child care settings, and at school; a wide variety of experience in order to develop the concepts and vocabulary they will need in order to understand what they read; see adults read and write and try to write for themselves in order to understand that print is a way to share information; and to have good books available and enjoy being read to. Topics include basic strategies of teaching reading and writing, literacy to play environments, utilizing technology, collaborative home-school partnerships, cultural and developmental differences (diversity), assessment as an ongoing and indispensable part of reflective teaching and learning, and moral and ethical dimensions of teaching reading in early childhood. Students will explore instructional materials and assessments used in early childhood reading programs and their relationship to the Ohio P-12 Language Arts Standards (content standards). Fifteen (15) hours of field work in a preschool and early childhood classroom.

EDU 2020 – Literature for Children and Adolescents**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Studies literature for children and adolescents, age birth through the primary grades. Curriculum includes criteria for selection and evaluation of literature, different types of literature (genre), literature's portrayal of diversity, outstanding authors and illustrators, the integration of literature into all areas of the curriculum, the techniques of reading and storytelling to promote literary appreciation.

EDU 2030 – Individuals with Exceptionalities**Credit Hours: 3.00 Total Contact Hours: 4.50 Lecture Hours: 2.00 Lab Hours: 2.50**

Provides students with an overview of special education programs with an opportunity to plan and implement activities in educational settings. Topics include: early intervention, practical strategies to integrate children with special needs, legislation and public policy (with a historical perspective of ADA, IDEA, 504 plans etc. and an awareness of the legal rights of children with exceptional learning needs and their families), recognizing risk factors that may impede typical development with an emphasis on the awareness of and respect for the ability differences in students and their families and the effects of those factors on development and learning community agencies/resources and adaptations to the environment.

Transfer: TAG**Prerequisites:** EDU 1000, EDU 1050.**EDU 2040 – Administration and Health Management****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an overview of major administrative principles, legislative mandates, policies and procedures, physical facilities, purchasing, budgeting, recordkeeping, and professional public relations. Includes legal requirements and responsibilities of Ohio licensing procedures. Staff development, support, and management including conflict resolution. Course will also examine the components that contribute to the concept of wellness in children, including a process of moving toward optimal health and vitality. Components within the course include the completion of first-aid training, CPR, child abuse awareness and reporting identification and treatment of communicable diseases for preschools and public school settings. These trainings are an additional cost to the student. Students may produce proof of previous training to be excused from this component of the course.

EDU 2130 – Families, Communities and Schools**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Addresses the significant steps for improving children's education in schools by direct collaboration with families and communities. Curriculum surrounds children and much of their learning comes from the world outside the classroom. Students recognize that all citizens are educators and ideas are presented for developing effective partnerships between schools, families, and communities at large. Instruction introduces education majors to an environment that values diversity and portrays it positively. The course will focus on the belief that educators can deliver an equitable education for all students. Educators have the responsibility to help students contribute to and benefit from our democratic society. The curriculum will introduce the concept that effective instructional strategies should be drawn primarily from the cultures of students in the classroom and the community, not the teacher. This is a portfolio designated course which requires a writing sample submission to the electronic portfolio database. Satisfying this requires is a part of earning a grade for this course. Submitting the paper as instructed will ensure a grade commensurate with the work in the course.

Transfer: TAG.**EDU 2200 – Special Topics in Education****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an in-depth study of a current topic with special emphasis on changing needs in Early Childhood Education.

EDU 2210 – Infant and Toddler Environments**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides a comprehensive framework for planning and implementing a developmentally appropriate program for the care of infants and toddlers. Course includes current brain research in the field of infant and toddler years of development. An overview of best practices for infant and toddler care will be presented as well as curriculum to stimulate growth and learning. Licensing procedures and regulations will be presented for the supervision of this age child. Fifteen (15) field hours required in infant/toddler settings.

EDU 2991 – Practicum **Credit Hours: 2.00 Total Contact Hours: 14.00 Lecture Hours: 14.00**

Enables students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities. This capstone builds upon the experiences from previous course work. Students will demonstrate growth in cognitive, affective, and psychomotor learning. Students will develop and implement an integrated curriculum that supports children's interest, needs, and intellectual integrity with curriculum outcomes. The student becomes responsible for classroom activities, teaching, and demonstrating positive guidance strategies, effective communications and collaborations. This practicum will take place in an approved educational setting of early childhood centers or classrooms, including the campus and YMCA child care centers within the last two semesters of the program. This course is a minimum of fourteen (14) hours per week (for a total of 210 hours during the semester) working under the supervision of a specifically trained teacher/mentor and college supervisor. A lab fee is assessed for this course. The course will include an e-portfolio self-growth/awareness writing assignment, and an exit evaluation of critical thinking and writing.

Prerequisites: MTH 1100, EDU 1114.**Corequisites:** EDU 2992.**EDU 2992 – Practicum Seminar****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Allows students to discuss practicum experiences of their individual school settings and serves as an opportunity for the acquisition of further knowledge. The seminar will focus on self-understanding and reflection, necessary observation and assessment skills and required abilities, teaching strategies, curriculum development, and collaboration in group settings with students, peers, supervisors, and families. Offered concurrently with Practicum capstone experience.

Prerequisites: MTH 1100, EDU 1050, EDU 1114.**Corequisites:** EDU 2991.

Electronic Engineering Technology (EET)

EET 1110 – Circuit Analysis I**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the analysis of networks with resistive loads, the transient response to capacitive and inductive networks and an introduction to instruments. Laboratory activity will include verification of circuit analysis methods by circuit construction and electrical measurement. Lab report writing is emphasized. There is an introduction to MULTISIM, a computer simulated circuit analysis.

Transfer: TAG.**EET 1120 – Circuit Analysis II****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the analysis of networks with a combination of resistive, capacitive, and inductive loads. Topics include methods of analysis, network theorems and power. Laboratory activity will include verification of circuit analysis methods by circuit construction and electrical measurement. Course offers additional work with MULTISIM.

Transfer: TAG.**Prerequisites:** EET 1110.**EET 1130 – Electronics****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Introduces the theory, operation, and practical applications of solid state devices. Topics include diodes, bipolar junction transistors, amplifiers, frequency response, operational amplifiers, oscillators, power supplies, and voltage regulators. Includes hands-on labs.

Transfer: TAG**Prerequisites:** EET 1110.**EET 1250 – Battery Safety****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces battery safety with a focus on those designed for electric vehicles. It covers the safety fundamentals of battery charging, battery charging stations and the related equipment that exist when working with or around industrial batteries. Emphasis will be placed on proper selection and use of personal protective equipment while maintaining OSHA compliance. A focus on the hazards associated with changing and charging batteries will be studied to protect workers while performing the required work duties.

EET 1270 – EV Energy Storage**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Introduces energy storage systems for electric vehicles. It covers the fundamentals of energy conversion including thermodynamics, chemical energy storage in fuels and hydrogen, electrochemical systems for storing energy, battery chemistry in charging and discharging batteries, and the sustainability of advanced energy storage systems. This course will also compare the environmental effects of current fossil-fueled energy systems and conversion processes with more sustainable systems using renewable energy and more efficient conversion processes.

EET 1330 – Digital Circuits**Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Introduces students to computer based number systems, symbolic logic concepts, Boolean Algebra, logic devices, and basic logic circuits. Logic circuits are analyzed using truth tables and timing diagrams. Laboratory work will demonstrate and verify the principles studied in the classroom.

Transfer: TAG.**EET 1990 – Independent Study in EET****Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the student with the opportunity for in-depth work on a special topic within the field of Electronic Engineering Technology, which the student was not able to pursue in-depth during the regular course offerings. During the first week of the semester, the student is required to describe in writing the proposed course of study he/she wishes to pursue. Such proposal must be submitted to the division dean for approval and student assignment to an Electronic Engineering Technology area faculty member for overseeing the project. This course of independent study may be substituted for an Electronic Engineering technical course if it is applicable. No more than five (5) credit hours will count toward graduation.

EET 2030 – Motor Controls**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces motor control devices and the circuits they are designed to be used in. Electronic components used as controlling and sensing devices are reviewed. Magnetic relays, motor starters, timers, forward and reversing starters and other motor control devices are introduced. Different types of motors are also discussed. These may include direct current motors, three-phase and single-phase alternating current motors and stepping motors. Different methods for starting, accelerating, stopping, and reversing motors will be discussed. Laboratory activity will be used to wire up control circuits and analyze important characteristics of these circuits.

Prerequisite: EET 1110.**EET 2200 – Panel Wiring and Arc Flash Safety****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides students with the ability to read industrial electrical prints. Students will learn to wire industrial electrical panels and use soldered and crimped-on connectors. Students will learn to properly layout wires in an industrial panel using the correct size and colors of wires according to applicable codes and standards. Students will also learn to safely open live high voltage electrical panels following the latest Arc Flash safety standards and use the appropriate protective equipment.

EET 2310 – Microcontroller Fundamentals**Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Covers the fundamentals of microcomputers. Since the introduction of the 8-bit microprocessors in 1973, the marketplace for the microprocessor has advanced into all areas of industrial and consumer goods. The microcontroller incorporates a microprocessor and additional I/O and can be customized for specific application. In order to use the microcontroller, users must know how to instruct it, get information into and out of the circuits and communicate with the system in language the machine understands—this means software and programming. Hence, this course will give the student a good knowledge of the basic instructions of a microcontroller (Motorola 68HC12) and use these instructions to control the device and peripheral devices.

Transfer: TAG.**EET 2320 – C# Programming****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers more advanced programming concepts using the Visual C# programming language. Students will create Windows applications using methods, classes, structures, arrays, writing to and reading from files and error trapping.

Prerequisites: CPT 1120.**EET 2600 – Electrical and Electronic Maintenance****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the student to electrical and electronic concepts associated with manufacturing maintenance. First half topics include safety, ladder logic, switches, sensors, measurements, fuses, motors, grounds, three-phase, electro-fluid control, and soldering. Second half topics include safety, relays, VFD installation, PLC programming, and troubleshooting.

EET 2900 – Electric Codes and Application**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 1.00 Lab Hours: 1.00**

Provides combined classroom-laboratory study of the National Electrical Code and its application to wiring installations. Particular attention will be devoted to the electrical principles that dictate the various provisions of the code. The laboratory work will concur with the classroom studies. Actual wiring installations will be examined for adequacy and compliance with the code.

EET 2910 – Programmable Controllers**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the field of programmable logic controllers (PLC). The student will use relay logic and ladder diagrams to control circuits with programmable controllers. The special aspects of the PLC, such as sequencers and timers, will also be utilized.

Prerequisites: EET 1330.**EET 2911 – Programmable Logic Controllers****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the field of programmable logic controllers (PLC). The student will use relay logic and ladder diagrams to control circuits with programmable controllers. The special aspects of the PLC, such as sequencers and timers, will also be utilized.

Transfer: TAG.**EET 2920 – Advanced Programmable Controllers****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides advanced experience in the application of programmable logic controllers (PLC). The students will gain experience in interfacing and networking PLC's to other PLC's and to industrial automation equipment.

EET 2970 – Electronic Engineering Technology Capstone **Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Allows students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities. This course will emphasize the evaluation of the total system requirements in designing systems for specific industrial applications. A laboratory project (or projects) will provide students with an opportunity to develop and solve a typical control problem using the programmable controller, or other industrial circuits. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Prerequisites: COM 1110.**EET 2991 – Field Experience****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Enables work activity which relates to an individual student's occupational objectives. With permission of a faculty advisor, the field experience replaces elective or required courses in a student's associate degree program. The experience is coordinated by a faculty member of the college who assist the student in planning the experience, visits the site of the experience for a conference with the student and his/her supervisor at least once during the semester and assigns the course grade to the student after appropriate consultation with the employer/supervisor.

Prerequisites: Completion of 1st semester and faculty advisor approval. This course is graded S/U.

Emergency Medical Services (EMS)

EMS 1040 – EMS Anatomy and Physiology

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00
Demonstrates knowledge in basic human anatomy and physiology. Designed for students wishing to complete the Paramedic certification.

EMS 1120 – Advanced EMT

Credit Hours: 8.00 Total Contact Hours: 16.00 Lecture Hours: 6.00 Lab Hours: 2.00 Clinical/Other Hours: 8.00

Demonstrates both the cognitive and psychomotor skills required to challenge the NREMT Advanced EMT certification exam. This course meets the state required cognitive and didactic components of the Emergency Medical Technician Advanced curriculum as outlined and approved by the Emergency Medical Services Board in March of 2002. Topics to be covered include the assessment and management of medical and trauma emergencies. Advanced skills such as manual defibrillation, intravenous cannulation, and use of pharmacological agents for pain, respiratory emergencies and diabetic emergencies will be covered. Changes in State and Federal law and regulations may necessitate changes in this course. Students enrolling in this course must be certified as an EMT-Basic in the state of Ohio.

Prerequisites: Current Ohio EMT certification, Completion of EMS admission packet and all paperwork.

EMS 1150 – Volunteer Firefighter

Credit Hours: 2.00 Total Contact Hours: 2.67 Lecture Hours: 1.33 Lab Hours: 1.34

Demonstrates both the cognitive and psychomotor skills required to function as a volunteer firefighter. The basic training class is required by the state of Ohio for all new volunteer firefighters. Topics will include safety, fire behavior, personal protective equipment and much more. Participants are instructed that they cannot perform the duties of a firefighter or participate in live burn evaluations prior to obtaining state certification. Special Notes: All students are required to attend all scheduled classes, pass both a written and practical examination to successfully complete this course. To become certified, students must also pass the Division of EMS Volunteer Fire Exam. This course is offered at Apollo Career Center (Ohio Fire Charter Number 102) through articulated or dual enrollment at Rhodes State College, students must meet admission requirements set forth by Apollo Career Center and the state of Ohio, which include a felony/misdemeanor waiver statement. Students must be at least 18 years old. Interested students should contact the EMS Department Chair for schedule.

EMS 1160 – Level I Transition Firefighter

Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.20 Lab Hours: 2.80

Expands the cognitive and psychomotor skills learned in EMS 1150 to meet the requirement of the Level I Professional Firefighter. Special Notes. Students are required to attend all scheduled classes and pass both a written and practical examination to successfully complete this course. To become certified, students must also pass the Division of EMS Fire Exam. This course is offered at Apollo Career Center (Ohio Fire Charter Number 102) through articulated or dual enrollment at Rhodes State College. Course schedule is determined by Apollo Career Center. "C" grade policy applies.

Prerequisites: EMS 1150.

EMS 1170 – Level I Firefighter

Credit Hours: 5.00 Total Contact Hours: 8.00 Lecture Hours: 4.00 Lab Hours: 4.00

Meets all the NFPA Level I Fire Fighter course objectives. Topics include Fire Department Organization and Safety, Fire Alarm and Communications, Fire Behavior, Overhaul, Personal Protective Equipment/SCBA, Fire Hose, Appliances and Streams, Foam Fire Systems, Fire Control, Fire Cause and Origin, Rescue, Water Supplies, Fire Detection, Alarm, and Suppression Systems, Fire Prevention, Public Fire Education, and Fire Cause Determination, Building Construction, Forcible Entry, Ventilation and Tools, Ropes, Salvage, Fire Extinguishers, Ground Ladders, Emergency Medical Care, HazMat, ICS, Practical Evolutions, and Live Fire Training. Students are required to attend all scheduled classes and pass both a written and practical examination to successfully complete this course. To become certified, students must also pass the Division of E.M.S. Fire Safety Inspector examination. This course is offered through a cooperative agreement with Apollo Career Center Ohio Fire Charter Number 102.

EMS 1180 – Level II Firefighter

Credit Hours: 5.00 Total Contact Hours: 8.00 Lecture Hours: 4.00 Lab Hours: 4.00

Meets all the NFPA Level II Firefighter course objectives. Upon completion of this level the firefighter is certified as a Professional Firefighter II by the State of Ohio. Special Notes: Students are required to attend all scheduled classes and pass both a written and practical examination to successfully complete this course. To become certified, students must also pass the Division of EMS Fire Exam. This course is offered through a cooperative agreement with Apollo Career Center (Ohio Fire Charter Number 102). "C" grade policy applies.

Prerequisites: EMS 1170 or EMS 1150 and EMS 1160.

EMS 1190 – Fire Safety Inspector

Credit Hours: 3.00 Total Contact Hours: 4.80 Lecture Hours: 2.80 Lab Hours: 2.00

Meets the standards for Fire Safety Inspector prescribed in H.B. 590. The student will gain the fundamental knowledge and skills to conduct fire safety inspections. Students will be introduced to various codes needed to develop a working knowledge of the inspection process. As such, each student should be familiar with the codes and standards in effect within the State of Ohio. Topics include the fire inspector's responsibilities and role in code enforcement, general fire prevention practices, competencies, life safety considerations, fire safety requirements related to HazMat; electrical systems; occupancy and fire protection systems. Course content is designed to meet certification requirements as established by the Ohio Department of Public Safety, and NFPA 1031-Fire Inspector Professional Qualifications. Students are required to attend all scheduled classes and pass both a written and practical examination to successfully complete this course. To become certified, students must also pass the Division of E.M.S. Fire Safety Inspector examination. This course is offered through a cooperative agreement with Apollo Career Center.

EMS 1580 – EMT-Basic**Credit Hours: 7.00 Total Contact Hours: 8.00 Lecture Hours: 6.50 Lab Hours: 1.50**

Learn operation of an ambulance, transportation and care of patients, and how to determine the nature and extent of illness or injury. Advanced lifesaving skills, including intubation, automatic external defibrillation. Admission requirements: 18 years of age, current driver's license, high school diploma or GED. Students who successfully complete this course meet the requirements to be eligible to challenge the National Registry of Emergency Medical Technicians, EMT-Basic Exam. Certification in the State of Ohio requires successful completion of the National Registry of Emergency Medical Technicians, EMT-Basic Exam.

EMS 1990 – Independent Study in EMS**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the student the opportunity for in depth work on special topic within the field of Emergency Medical Services which the student was not able to pursue in the desired depth in the regular course offerings. During the first week of the semester the student is required to describe the proposed course of study in writing that he/she wishes to pursue. Such proposal must be submitted to the Department Chairperson for approval and student assignment to an Emergency Medical Services faculty member for oversight of the project. This course of independent study may be substituted for an elective course required for the AAS degree in Emergency Medical Services. This course is graded S/U.

EMS 2210 – Paramedic I**Credit Hours: 13.00 Total Contact Hours: 15.00 Lecture Hours: 11.00 Lab Hours: 4.00**

Integrates comprehensive knowledge of anatomy and physiology, pharmacology into the assessment and management of patients experiencing a medical emergency. Topics include EMS systems pharmacology, airway management, patient assessment, respiratory, obstetrics, gynecological and cardiovascular emergencies. 'C' grade policy applies.

Prerequisites: BHS 1390, BIO 1000 or (BIO 1110 and BIO 1120) or EMS 1040**Corequisites:** EMS 2215.**EMS 2215 – Paramedic Clinical****Credit Hours: 2.50 Total Contact Hours: 13.50 Lecture Hours: 13.50**

Provides interactions with patients in the hospital setting under the direct supervision of a Licensed Health Care Professional or Physician. Introduction to specific psychomotor and cognitive objectives learned in EMS 2210 will be completed in this course. 'C' grade policy applies.

Prerequisites: BHS 1390, BIO 1000 or (BIO 1110 and BIO 1120) or EMS 1040**Corequisites:** EMS 2210.**EMS 2220 – Paramedic II****Credit Hours: 13.00 Total Contact Hours: 16.00 Lecture Hours: 11.00 Lab Hours: 5.00**

Integrates comprehensive knowledge of anatomy and physiology, pharmacology into the assessment and management of patients experiencing an EMS emergency. Topics include Medical Emergencies: Neurologic, EENT, Abdominal/Gastrointestinal, Genitourinary, Renal, Endocrine, Hematologic, Immunologic, Infectious Diseases, Toxicology, Trauma, Environmental emergencies, and EMS Operations. "C" grade policy applies.

Prerequisites: EMS 2210, EMS 2215.**Corequisites:** EMS 2225.**EMS 2225 – Paramedic Field Experience****Credit Hours: 2.50 Total Contact Hours: 13.50 Lecture Hours: 13.50**

Provides interactions with patients in the pre-hospital setting under the direct supervision of a certified Paramedic. Students will participate as a team leader beginning the 11th week of the term. Student will demonstrate competency in their ability to manage a patient in the emergent setting. "C" grade policy applies.

Prerequisites: EMS 2210, EMS 2215.**Corequisites:** EMS 2220.**EMS 2260 – EMS Capstone** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Integrates technical knowledge with core skills and abilities. Students in this course will complete a project that reflects their ability to manage an EMS department. The project will include the development of work schedules, training schedules and grant applications for training and equipment purchase. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Prerequisites: COM 1110.**EMS 2310 – Allied Health Professional to Medic****Credit Hours: 5.00 Total Contact Hours: 7.00 Lecture Hours: 4.00 Lab Hours: 3.00**

Demonstrates proficiency in the psychomotor and cognitive objectives required by the State of Ohio to challenge the NREMT Paramedic Exam. To qualify for admissions the Licensed/Certified must have a current provider card in Advance Cardiac Life Support (ACLS), Pediatric Education for Pre-Hospital Providers (PEPP), Trauma Nursing Care Course (TNCC), Basic Trauma Life Support (BTLS), or Pre-Hospital Trauma Life Support (PHTLS); or Pre-Hospital Trauma Life Support (PHTLS); an Ohio Basic EMT Certification and a Basic Health Care CPR card. Students in this course will meet all of Ohio's requirements to challenge the National Registry Exam at the Paramedic level. "C" grade policy applies.

Corequisites: EMS 2320.**EMS 2320 – Allied Health Professional to Medic Clinical****Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Demonstrates proficiency in the clinical and prehospital setting of the cognitive and psychomotor skills and objectives of EMS 2310. Classes and clinical time spent in preparation to become licensed in the student's field of expertise will be taken into consideration to fulfill the clinical requirements. This course graded S/U.

Corequisites: EMS 2310.

Environmental, Health & Safety (ENV)

ENV 1000 – Introduction to EHS Technology**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Addresses safety, health, and environmental issues in the workplace. Air quality and air emissions, water pollution, soil contamination, waste disposal, federal regulations, pollution prevention plans, OSHA rules and regulations, materials safety data sheets (MSDS), personal protective equipment.

ENV 1210 – Environmental Laws and Regulations**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores the fundamental concepts of the American regulatory system, environmental law and the basics of environmental compliance. Through the use of the Federal Register, the Code of Federal Regulations and independent research students will gain both general education and technical skills necessary to understand/interpret regulations, current events/issues and how they impact environmental compliance. Topics include an introduction to the law/legal system, the environmental laws (i.e. Clean Air Act, Clean Water Act, RCRA, CERCLA/Superfund, SARA, TSCA) & international environmental law.

Corequisites: ENV 1000.**ENV 1300 – OSHA Regulations and Safety****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores the fundamental concepts of the American health and safety system by providing the student understanding of safety regulations and compliance. Through the use of the Federal Register, the Code of Federal Regulations and independent research the student will gain basic understanding of the major laws, issues, and events which helped shape safety & health compliance in various industries and businesses. Emphasis will be placed on US OSHA standards.

ENV 2400 – Properties of HAZMAT**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the fundamentals of chemistry apply to hazardous materials and will cover the risks of mass exposure to such substances. Students will examine the general features of hazardous materials and describe how Federal statutes reduce the risks associated with usage, storage, and transportation of various hazmat. Topics include: risk of exposure, EPA/DOT regulations, chemical behavior or hazardous materials (i.e. hydrocarbons, flammable liquids/solids, oxidizers, corrosives, compressed gases, radioactive materials, explosives, toxic materials, water reactive materials), identification of physical/ chemical properties of substances, the fire triangle, DOT hazard classifications/hazmat table. Responding to incidents involving hazmat & fundamentals of toxicology and toxicological effects.

Corequisites: CHM 1110.**ENV 2500 – OSHA 40-hr Training****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides students with both general education and technical skills necessary to understand the regulatory requirements and procedures outlined in the OSHA's Hazardous Waste Operator & Emergency Response (HAZWOPER) standard (29 CFR 1910.120). The course is structured to be 50% distance learning, 50% hands-on training/classroom instruction. The online assignments are structured to be completed prior to the required 2, eight (8) hour & 1, four (4) hour hands-on sessions. Various topics covered in the course include general structure of the OSHA HAZWOPER standard, proper procedures used in responding to hazardous material incidents, hazardous materials chemistry, toxicology, air monitoring instrumentation, proper use and selection of personal protective equipment (PPE) & hazmat decontamination.

ENV 2970 – AS EHS Capstone Project **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Integrates reading and case studies based on EHS related topics and/or research and other sources. The capstone project will require an oral presentation and related paper which focuses on a specific EHS issue, presenting the student's viewpoint while reasonably discussing opposing views.

Corequisites: ENV 1000, ENV 1210, ENV 2400, ENV 2500.

Esports Management and Coaching (ESP)

ESP 1000 – Esports Foundations**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Explores the history of Esports and its evaluation into today's billion-dollar industry. Students will also look at trends in the Esports industry.

ESP 1050 – Health and Wellness Coaching**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides esports coaches with the fundamentals of health and wellness, emphasizing special considerations for the physical and mental well-being of esports athletes. Topics include physical assessment, nutrition, injury prevention, and social and behavioral habits. Esports coaches will learn how to conduct training on health and wellness practices, assist in implementation of therapies and treatments, support medical staff, and encourage esports athletes to adhere to protocols.

ESP 1100 – Principles of Managing an Esports Program**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the student to an extended array of responsibilities in managing an esports program. Topics include marketing, finance, recruiting, building / facilities management, and business concepts required to manage esports organizations and operations.

ESP 1150 – Fundamentals of Coaching**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the student with key skills needed to be a successful coach. Topics include establishing trust as a coach, focused learning skills, planning and goal setting, and managing progress.

ESP 1200 – Effective Communication for Coaches**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Combines emotional intelligence and interpersonal communication to prepare the student to recognize and engage individuals with diverse communication styles. Topics include empathy, self-awareness, how to monitor one's own and other's emotions, and how people use verbal and non-verbal cues to communicate.

ESP 1900 – Esports Applications: Team Planning & Strategy**Credit Hours: 3.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 3.00**

Collaborate with esports coaches to develop a plan for establishing an esports team.

Financial Services (FIN)

FIN 1250 – Personal Finance**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides students with a basic understanding of personal money management problems, consumer credit, personal insurance planning, securities analysis, Medicare, Social Security benefits, etc.

Food Science Technology (FST)

FST 1000 – Introduction to Food Science**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Applies chemistry, biology, and engineering to hands on experience on the production and evaluation of foods. This includes basic food regulations, sanitation and formulation, as well as an overview of the global trends within food science and technology, the diversity of career opportunities with the industry, planning for a career and opportunities for professional development.

FST 1001 – Introduction to Food Science - Module I**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides students with the basic concepts and manufacturing practices of the food industry. Chemical and biologic properties of food will be explored in consideration of spoilage and deterioration and how those qualities may be needed for digestion and nutritional purposes.

FST 1002 – Introduction to Food Science - Module II**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Familiarizes students with the HACCP (Hazard Analysis Critical Control Point) prerequisites used to prevent food spoilage. This course will also allow a student to identify conditions used to destroy or inactive pathogens in food.

FST 1003 – Introduction to Food Science - Module III**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 2.00**

Familiarizes the student with the safety concerns for each category of food product and the means of controlling it. This course will familiarize the student with a HACCP (Hazard Analysis Critical Control Point) plan.

FST 1100 – Food Processing**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Examines food processing procedures and technologies including preservation and food packaging. Add ingredients used in processing will be addressed including the chemical and physical attributes of food additives.

FST 1101 – Food Processing - Module I**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Develop and study food processing procedures including food preservation and food packaging. Students will develop an understanding of the chemical properties of food and how processing affects them.

FST 1102 – Food Processing - Module II**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Understanding the types of food fermentation is essential to any food industry. In this course, students will research and investigate different types of food fermentation and understand how controlling the growth of micro-organisms is vital in food fermentation.

FST 1103 – Food Processing - Module III**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 2.00**

Developing knowledge of alternative food processing techniques is an important aspect of food processing. In this course, students will look at alternative food processing techniques as well as how these techniques play a role in food packaging.

FST 1200 – Food Quality**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Studies the management system in which food safety is addressed through analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product. Topics include, but are not limited to, HACCP and GMP.

FST 1201 – Food Quality - Module I**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Introduces the students to Food Quality in industry. This course will familiarize the students with some common Food Industry Quality Standards including, but not limited to, GMP (Good Manufacturing Processes) and HACCP (Hazard Analysis Critical Control Point).

FST 1202 – Food Quality - Module II**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Familiarizes students with the 5 principles of HACCP and demonstrates the principles in real world scenarios.

FST 1203 – Food Quality - Module III**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 2.00**

Familiarizes students with the last two principles of HACCP and creates a HACCP plan for a food manufacturing facility.

FST 1300 – Food Plant Operations**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Examines critical aspects of successful food plant operations including facilities, legal regulations, repair and maintenance of facilities and equipment, labor considerations, product handling, transport logistics and food product distribution.

General Allied Health (GAH)

GAH 1700 – Health Adjustments I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces and explores the conceptual framework of health careers and their related principal practices. A number of psychological and theoretical theories will be integrated with group and individual experiences for application purposes. Thus, major areas presented are utilization of self-assessment, critical thinking, personality, multicultural issues, wellness, human behavior and managing diversity.

General Engineering Technology (GET)

GET 1500 – Special Topics in Engineering Technology**Credit Hours: 0.00 Total Contact Hours: 0.00 Lecture Hours: 45.00**

Provides the student with the opportunity for in-depth work on a special topic within some field of engineering technology for which the student is not able to pursue in depth from regular course offerings. The subject matter must be closely related to the student's major course of study in engineering technology. The student is required to approve the course outcomes with the department chair or division dean in similar fashion to independent studies (see descriptions of EET, ENV, FMS, MED, MET, or QET-1990 for details). The course is sometimes used as a credit transfer mechanism for applicable courses or work experiences closely related to a student's major course of study.

Geology (GLG)

GLG 1000 – Physical Geology**Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Introduces students to the field of geology (or geo-science) - the study of the Earth. Course focuses on the composition of the Earth and the geological agents and processes that modify the earth's surface; occurrence, formation, accumulation, and availability of minerals and rocks as earth resources.

Transfer: TAG.

GLG 1004 – Historical Geology

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Provides the student with the necessary tools to interpret and understand the processes leading to the complex history of the Earth and its contained biota. An additional goal is to provide an overview of the major events in Earth's history that have had a profound effect on Earth's physical, chemical, and biologic environment. The course encompasses the causes and effects of mass extinction on the history of life, and the role of plate tectonics on the geologic and biologic evolution of the Earth.

Transfer: TAG

Prerequisites: GLG 1000 with a "C" or better.

GLG 1410 – Geology of U.S. National Parks

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Designed to provide students with an understanding of the basic concepts of geology as well as an introduction to the geology and geologic history of North America. Several U.S. National Parks are used to provide examples of fundamental geologic processes, trace the geologic history of the continent, and increase our appreciation of the national park system.

German (GER)**GER 1011 – Conversational German**

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces students to conversational German language. This course will emphasize the use of basic functional German in listening and speaking situations.

Health Care Technology (HCT)**HCT 2500 – Health Care Technology Capstone**

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Provides an opportunity for the prospective graduate to demonstrate achievement of the program's learning outcomes as well as the college's general education and core skills and abilities. A capstone project will be completed in the student's area of specialization. The course will include an examination of the student's growth in diversity, critical thinking, and writing. The capstone course concludes with a role-transition experience that includes resume development, effective interview skills, and career laddering.

Prerequisites: COM 1110.

History (HST)**HST 1011 – Western Civilization I**

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Provides an introduction to Western Civilization from ancient times to 1648. This course looks at the historical development of the Western World with critical examination of primary sources.

Transfer: TM.

Corequisites: COM 1110.

HST 1012 – Western Civilization II

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Provides an introduction to Western Civilization from 1648 to modern times. This course looks at the historical development of the Western World with critical examination of primary sources.

Transfer: TAG, TM.

Corequisites: COM 1110.

HST 1333 – World Civilization I

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides a survey of world history from its earliest origins in the Near East through 1500. Includes Western and non-Western political, religious, economic, intellectual, and cultural evolution of world history.

HST 1333H – World Civilization I (Honors Component)

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: HST 1333.

HST 1334 – World Civilization II

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides a survey of world history from its earliest origins in the Near East since 1500. Includes Western and non-Western political, religious, economic, intellectual, and cultural evolution of world history.

HST 1334H – World Civilization II (Honors Component)

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: HST 1334.

HST 1610 – American History to 1877

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides the student with the basic historical structures in the United States from its discovery to Reconstruction. Specific insights will be gained through intensive study of moments in the nation's development and crises: discovery and colonialism, the decade of discontent and revolution, the founding of the republic, the institution of slavery, manifest destiny, the Civil War and Reconstruction.

Transfer: TAG, TM.

HST 1610H – American History to 1877 (Honors Component)**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: HST 1610.

HST 1620 – American History Since 1877**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides the student with the basic historical structures of the late 19th and 20th century United States. Specific insights will be gained through intensive study of moments in crisis in the century: the rise of industrialism, the two world wars, the "normalcy" of the twenties, the depression of the thirties and the urban crisis of the sixties and seventies.

Transfer: TAG, TM.

HST 1620H – American History Since 1877 (Honors Component)**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: HST 1620.

HST 2300 – Technology and Civilization**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the student an opportunity to analyze and evaluate the historical relationship between technology and society. Emphasis is on the way technology is a response to society's needs and ultimately a catalyst for more societal changes. Simultaneously, the course provides an overview of Western civilization from Ancient Greece to the rise of the modern world.

HST 2510 – History of Latin America**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the student with the basic historical structure of Latin America from pre-discovery to modern times. Topics include the study of ancient American peoples and cultures, discovery and colonialism, independence movements, labor systems, political structures, and foreign relations.

Transfer: TM.

HST 2521 – Women in World History**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers societies from classical times to the twentieth century, enabling exploration of what happens to established ideas about men, women, and gender roles when different cultural systems come into contact. Some topics discussed include Women & Athenian Democracy, Women's access to power in Imperial Rome, Concubines & foot binding, Queen Victoria, Cleopatra, Tz'u Hsi, Florence Nightingale, Marie Curie, among others.

Transfer: TM.

Human Service (HUM)

HUM 1111 – Introduction to Social Work**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introductory understanding of the human service and social work professions. Topics such as historical developments, underlying assumptions, core values, ethical principles, functions, major social problems, and methods of human service/social work will be covered. Goals of the human/social service system and the role of human service professionals, social work assistants, and social workers will be examined. "C" grade policy applies.

Transfer: TAG.

HUM 1150 – Interviewing Techniques in Addictions, Mental Health and Social Work**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Covers the principles and practices of interviewing clients in the human service area. Students will be taught a model of interviewing and learn to use various techniques such as verbal/nonverbal communication skills. Students will practice skills through role playing. "C" grade policy applies.

HUM 1212 – Social Welfare in the United States**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the history, structure, functions, and challenges of the American social welfare system. Various social problems along with societal/student values and beliefs on social welfare topics will be examined. Topical areas include factors in the delivery of social services, issues of diversity and discrimination, empowering at-risk and vulnerable populations, and fields of practice. "C" grade policy applies for Human Service majors.

Transfer: TAG.

HUM 1310 – Activity Directing I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces activity directing; specifically covers textbook knowledge, lecture, and in-field demonstrations to gain working knowledge of the activity profession. Students will also learn about the elderly as individuals and what makes them unique human beings, and what happens to them as they age. They will also learn about Resident Rights, activities of daily living and community resources. This is part one of a two part class. "C" grade policy applies.

HUM 1320 – Activity Directing II**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the various aspects of management such as planning, organizing, hiring, creating job descriptions, and maintaining employee-employer relations. They also learn about the controlling function of management. They will also learn about the evaluating function of management: managing risks, establishing department and people performance standards, measuring performance, and correcting deviations from standards and plans. This class completes the MEPAPII 90 hour Advanced Class for Activity Directing this is required for National Certification by NCCAP (National Certification Council of Activity Professionals). This is part two of the two part Activity Directing class. "C" grade policy applies.

Prerequisites: HUM 1310.**HUM 1710 – Substance-Related and Addictive Disorders****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces a variety of topics in working with addicted populations such as chemicals of use, theories, diagnosis, treatment approaches, legal and ethical issues. "C" grade policy applies.

HUM 1720 – Aging and Gerontology**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an overview of the study of gerontology and aging. Covers a variety of theories, issues, the positives and challenges facing aging adults, their families, and their communities. "C" grade policy applies.

HUM 1900 – Professional Preparation and Engagement**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Apply knowledge, skills and strategies to career preparation and development. Advises students of the requirements and preparation needed for entering practicum courses.

Prerequisites: HUM 1150.**HUM 1980 – The Color of Justice****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Examines race in the context of the criminal justice system. Emphasis on the treatment of racial minorities as victims and offenders by law enforcement, courts, and corrections.

HUM 1990 – Independent Study in HUM**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides individualized instruction with students working on a one-on-one basis with an instructor on a project entailing reading, writing, and discussion. The subject matter is set by the instructor and student and will relate to the Human Service field. A student may register for 1, 2, or 3 hours of Independent Study. Independent Study may be taken more than one time, BUT Human Service majors may not apply more than 3 hours in total of Independent Study toward their elective hours requirement. "C" grade policy applies.

HUM 2000 – Special Topics in Human Services**Credit Hours: 0.00 Total Contact Hours: 0.00**

Explores current topics in Human Services. This allows students to explore material in Human Services outside of the regular course offerings. Offered on demand as determined by the Chair of Human Services. "C" grade policy applies.

HUM 2030 – Criminal Minds**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an understanding of criminal behavior and antisocial behavior from a psychological perspective. Contemporary research, theory, and practice concerning the psychology of crime will be explored. Students will learn about the factors associated with the onset and maintenance of antisocial and criminal behavior.

HUM 2040 – Psychology and the Legal System**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Describes the law from a psychological perspective. Students will be introduced to legally relevant science and how psychology plays a role in that science. The course explores a multitude of topics such as psychology of crime, psychology of police, crime victims, eyewitnesses, evaluating suspects, and forensic assessments.

HUM 2100 – Case Management in Addictions, Mental Health and Social Work**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Emphasizes case management process and the skills related to the management of client cases in human service agencies. The course will cover planning, implementing, coordinating and documenting. Students will also research and understand the various agencies that assist clients in various settings. "C" grade policy applies.

HUM 2170 – Dynamics of Mental Health and Substance Use**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores the historical perspective of mental illness and how changes have occurred. Symptoms, causes, and treatment modalities will be discussed with emphasis on deinstitutionalization. Specific emphasis will be placed on developing a working knowledge of the mental health system and an introduction of the common treatment practices in mental health. "C" grade policy applies.

HUM 2230 – Issues and Ethics in Helping**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Applies the Ohio Laws and Rules, Ethical Standards of Human Service Professionals, and NASW Code of Ethics in the practice of social work assistants and human service professionals. Students will create their own style of intervention based on current and past learning. "C" grade policy applies.

HUM 2310 – Group Dynamics/Intervention**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines group process, group behaviors and the application of group work in the human service field. Emphasis will be placed on current issues, ethical and specific needs of various populations. Students will practice group leadership skills and lead assimilated groups. They will also learn to research and write group proposals. 'C' grade policy applies.

HUM 2400 – Crisis Management**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Utilizes interview skills and learns how to use them in a crisis intervention format. Students will learn to deal with a variety of crisis situations ranging from suicidal situations to natural catastrophes. The class involves a combination of interpersonal communication skills and crisis intervention strategies for diverse populations. Emphasis will be placed on de-escalation techniques. 'C' grade policy applies.

HUM 2710 – Addictions Counseling**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers topics in addiction services such as basic principles, theoretical considerations, pharmacotherapeutics, treatment modalities, clinical skills, considerations of diversity, and ethics. 'C' grade policy applies.

HUM 2991 – Practicum I**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 1.00 Lab Hours: 1.00**

Provides on-the-job training for students in Human Service agencies. Students will work in the field learning and implementing human service skills. Students will complete a total of 180 hours of supervised experience, which is equivalent to 12 hours weekly at their practicum agency over a 15-week semester. In addition, the student is required to attend a 1-hour weekly class. This course is graded S/U.

Prerequisites: HUM 1150, HUM 2100, HUM 2230, HUM 1900.**HUM 2992 – Practicum II** **Credit Hours: 2.00 Total Contact Hours: 13.00 Lecture Hours: 1.00 Lab Hours: 12.00**

Provides continuing on-the-job training either at the same agency as HUM 2991 or at a different agency. Upon completion of HUM 1900 or 2500, HUM 2230, HUM 2991, and HUM 2992, students should be familiar with the operations of a human service agency including client/staff relationships and employee responsibilities. Students will complete 180 hours of practical experience, which is equivalent to 12 hours weekly at their practicum agency over a 15-week semester. In addition, the student is required to attend a 1-hour weekly class. This course is graded S/U.

Prerequisites: HUM 1900, HUM 2230, HUM 2991.

Industrial Manufacturing Technology (IMT)

IMT 1000 – AutoCAD Basics**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces students to the fundamentals of AutoCAD while preparing them for drawing in MasterCAM. This course will cover the fundamentals of 2D drawing in addition to providing an introduction to 3D wireframe drawings, Geometric Dimensioning and Tolerancing (GD&T).

IMT 1010 – Mechanical and Electrical Print Reading**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Covers reading, sketching and interpreting work drawings. Symbolism, conventional practices and standards used in the drafting area are studied. Concentration will be in the machine part drawings. This course is not part of any engineering degree.

IMT 1020 – Manufacturing Concepts**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces the student to the manufacturing environment. Students gain basic skills required by modern manufacturers in areas of community, mathematics, teaming, safety, workplace readiness, quality, continuous improvement and understanding of some manufacturing processes. This course matches requirements for the West Central Ohio Manufacturing Consortium's Basic Certification.

IMT 1021 – Manufacturing Principles**Credit Hours: 4.00 Total Contact Hours: 8.00 Lecture Hours: 8.00**

Introduce the student to the manufacturing environment. Students gain basic skills required by modern manufacturers in areas of mathematics, teaming, safety, workplace readiness, quality, continuous improvement, understanding of some manufacturing processes and gains maintenance awareness. Students are required to successfully complete and will earn the nationally recognized credential Manufacturing Skills Standard Council (MSSC).

IMT 1190 – Tool and Die Technology**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces the fundamentals of tool and die technology as it relates to the manufacturing industry. Covers the various types of dies, and machining processes required to make dies and the impact of lean manufacturing on die selection.

IMT 1195 – Tool and Die Troubleshooting**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces the fundamentals of troubleshooting and problem solving as it relates to tool and die technology. Covers basic nomenclature, terminology, classification of problems related to manufactured parts, repair techniques and maintenance of new/existing tools in the manufacturing industry.

IMT 1330 – Plant Layout and Equipment**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Covers blueprint reading and simplified drawings related to the fabrication and installation of hoists, catwalks, platforms, machinery foundations, exhaust systems, heat treat furnaces, helical and continuous washers. Practice in making simple plant layouts.

IMT 1911 – Technical Math I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the first in a two course math sequence, which emphasizes the practical application of mathematics to a variety of industries such as: business, technical, trade and/or allied health programs. This course concentrates on providing the essential algebra and geometry needed in technical and trade programs.

IMT 1921 – Technical Math II**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the second, in a two course math sequence, which emphasizes the practical application of mathematics to the needs of people in skilled trades. The course concentrates on topics out of algebra, complex numbers, trigonometry, and vectors and phasors.

Prerequisites: IMT 1911.**IMT 2080 – Introduction to Electricity****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an overview of direct current and alternating current electricity, magnetism and applications. Topics include: atomic structure of matter, static electricity, Ohm's Law, series and parallel circuits, power, magnetism and electromagnetism, generation of EMF, inductance, capacitance, reactance, resonance, generators, motors, transformers and measuring instruments.

IMT 2170 – Industrial Motor Drives**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides a hands-on introduction to industrial servo motors including the various power supplies, speed control systems and feedback systems. Students will construct servo control circuits using schematic diagrams to install and troubleshoot the completed circuit.

IMT 2260 – Industrial Electronic Controls**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the fundamental concept of industrial electronic control circuits. Topics include: introduction to control electronics, control system components, signal conditioning and power control, motor and controls, closed-loop control, programmable logic controllers, power distribution effects, and safety automation.

IMT 2400 – Introduction to Fluid Power**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a broad overview of basic fluid power uses in the manufacturing environment. Topics include hydraulic and pneumatic energy, force & pressure, basic system components, and system flow rates. Laboratory experiences involve troubleshooting basic circuits.

IMT 2710 – Fundamentals of Refrigeration**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Introduces the fundamentals of refrigeration to prospective refrigeration or air conditioning operators or heating and cooling servicepersons. Topics covered: refrigeration systems and cycles, refrigerants, compressors, condensers, evaporators, metering and control devices, electric motors and controls, basic servicing and use of tools, equipment and instruments.

IMT 2740 – Advanced Refrigeration and HVAC**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Explains cooling systems used in commercial, institutional and industrial applications. Types of equipment include reciprocating and centrifugal chillers, absorption systems, cooling towers, fans and air handlers. Topics include psychometrics, pressure-enthalpy diagrams and commercial load calculation. This course is a continuation of IMT 2710.

Prerequisites: IMT 2710.**IMT 2750 – Wastewater Treatment and Operation****Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides an overview of the treatment of municipal wastewater, and is designed to assist in the preparation of the State of Ohio Class I Wastewater Operator exam. The course will emphasize wastewater treatment processes and equipment, as well as an understanding of sewer systems and laboratory processes. The wastewater treatment theory and the math involved in taking the state exam will be emphasized.

IMT 2810 – Millwright Tools and Equipment**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces students to foundation for study of manufacturing methods, processes, related equipment, and tools for industry. Requires students to understand shop safety practices, job planning, feeds and speeds, layout tools and procedures, hand tool and bench work, metal cutting saws, drilling machines, lathes, milling machines, jig bore and jig grinder EDM abrasives.

IMT 2820 – Mechanical Power Transmission Systems**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Covers installation and maintenance of mechanical power transmission systems. Topics include: belts, pulleys, shafts, couplings, bearing, speed reducers and chains used in the modern factory by the millwright.

IMT 2850 – Power Plant Equipment**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the fundamentals of power plant equipment, operation and maintenance designed for operators of small and large power plants and building engineers. Topics include: boilers, combustion, fuels and firing, steam engines and turbines, auxiliary (pumps, heat exchangers, compressed air systems, building heating systems, and water treatment systems), accessories (feed water regulation, fans and blowers, control systems), refrigeration and air conditioning systems, and basic power plant operation.

IMT 2910 – Physics for Apprentices**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers applied mechanical physics. Selected topics include vector forces, momentum, constant acceleration, trajectories, friction, concepts of simple machines, rotary motion, work, power, energy, torque, simple harmonic motion, waves and sound, solid and fluid properties, heat and thermodynamics and kinetic theory of gases.

Prerequisites: IMT 1911 or equivalent.

Laboratory Science Technology (LST)

LST 1210 – Experimental Design**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides learners the opportunity to analyze the principles of successful experimental design and execution. Learners will build upon and compose the steps of the scientific method to design sound experiments based on scenarios from research and industrial settings.

Prerequisites: BIO 1220, CHM 1210.**LST 1220 – Internship Experience****Credit Hour: 1.00 Total Contact Hour: 7.00 Lecture Hour: 7.00**

Provides learners the opportunity to practice skills in a true laboratory setting. Emphases include successful execution of operating procedures and protocols, accurate and complete data collection and documentation, and relation of routine tasks to larger context of major project objectives and/or elements of research goals. Students will have the opportunity to reflect on the experience and the science involved as it pertains to their future career choices.

Prerequisites: LST 1210.

Law Enforcement (LAW)

LAW 1130 – Introduction to Criminal Justice**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores the functions and interactions of law enforcement, prosecutors, courts, and corrections. Upon course completion, the student should be able to explain the process from the point of the crime occurring through release from a correctional agency. Emphasis will be placed on the funneling process in the justice system.

Transfer: TAG.**LAW 1210 – Criminology****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Studies the nature of the factors of crime, criminal behavior, and prevention. A primary emphasis will be placed on the psychological and sociological factors of the problem. Other aspects to be addressed are criminal topologies involving the street criminal in addition to the white-collar criminal and cyber criminals.

Transfer: TAG.**LAW 1660 – Ethics in Criminal Justice****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines ethical theories and their application to current issues, controversies, and professional scenarios in law, crime, and justice. It introduces students to the foundations of the study of ethics and morality; examines prominent moral and ethical themes, conflicts, and struggles in criminology and criminal justice; and explores the conceptual and practical value of key ethical concepts, principles, and arguments.

Corequisites: COM 1110, LAW 1130.

LAW 1880 – Report Writing for Criminal Justice**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Emphasizes an all-inclusive system of report writing that is characterized by following a methodical process from arrival at a crime scene to presentation in court. Course utilizes presentation of information, video, scenarios, and practical exercises. You will be taken through the report-writing process in three methodical phases. These phases are called the "crawl, walk, and run" method. Each phase builds on the knowledge gained from the previous phase.

Prerequisites: COM 1110, LAW 1130.**LAW 1980 – The Color of Justice****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Examines race in the context of the criminal justice system. Emphasis on the treatment of racial minorities as victims and offenders by law enforcement, courts, and corrections.

LAW 1990 – Independent Study in LAW**Credit Hours: 0.00 Total Contact Hours: 0.00**

Assists students who wish to work independently of other students on a one to one basis with the instructor on a project entailing reading, writing, and discussion. The subject matter is set by the instructor and student and will relate to the criminal justice field.

LAW 2010 – Psychology and the Legal System**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Describes the law from a psychological perspective. Students will be introduced to legally relevant science and how psychology plays a role in that science. We will be covering a multitude of topics such as psychology of crime, psychology of police, crime victims, eyewitnesses, evaluating suspects, and forensic assessments.

LAW 2020 – Criminal Law**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Studies the aspects of criminal law as they relate to the law enforcement officer. Included are studies of elements and proof in crimes of frequent concern, procedural consideration of criminal law and rules of law.

LAW 2022 – Criminal Minds**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an understanding of criminal behavior and antisocial behavior from a psychological perspective. Contemporary research, theory, and practice concerning the psychology of crime will be explored. Students will learn about the factors associated with the onset and maintenance of antisocial and criminal behavior.

LAW 2060 – Policing in the 21st Century**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Combines the theory and practical applications of police practices, drawing on the personal accounts of current and former police officers. This course covers all major areas of police field operations, including patrolling, investigations, crime mapping, community policing, hot pursuit issues, communications, gangs, and drugs.

Prerequisites: COM 1110, LAW 1130.**LAW 2080 – Criminal Evidence and Procedure****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Studies the rules of evidence and criminal procedure, arrest, search and seizure, role playing with attorneys, witness testimony, kinds of evidence and admissibility of evidence in court.

Prerequisites: COM 1110, LAW 1130.**LAW 2120 – Criminal Investigation****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00**

Explores methods of investigation, report writing, crime scene search techniques, evidence documentation and collection procedures, fingerprint dusting and lifting techniques, as well as interview and interrogation styles and criminal case preparation.

Prerequisites: COM 1110.**LAW 2200 – Juvenile Delinquency****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores the sociological analysis of the delinquency situation in the United States, with specific attention to theoretical perspectives and causal interpretations. Examination of numerous factors on delinquent behavior and on the production of a delinquent personality, patterns of delinquent behavior, institutional efforts at control and treatment and legal methods of dealing with delinquents.

LAW 2250 – Terrorism, Intelligence and Homeland Security**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces domestic and foreign terrorism and international responses. Drawing on current research, it provides a balanced approach to understanding the issues we face as a nation, including securing the country from threats while still safeguarding civil and personal liberties. Simultaneously historical and contemporary, this course interrelates terrorism, intelligence, and homeland security by focusing on people, ideas, organizations, and movements as well as new issues in the field.

Prerequisites: COM 1110, LAW 1130.**LAW 2400 – Cyber Crime and Cyber Terrorism****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Introduces computer crime through an examination of the crime and those individuals committing it, as well as the specific laws, investigative techniques, and criminological theories applicable to computer crime.

Prerequisites: LAW 1130, LAW 2250.**LAW 2730 – Criminal Justice Practicum ****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 1.00 Lab Hours: 1.00**

Demonstrates theoretical knowledge and applies it to practical real world scenarios through on-the-job training under the direction of local criminal justice officials. Students are to complete a total of 210 hours.

Prerequisites: LAW 1660.**LAW 2800 – Basic Police Academy****Credit Hours: 22.00 Total Contact Hours: 40.00 Lecture Hours: 40.00**

Provides certification for those aspiring to be police officers. This academy will be conducted in accordance with the rules established by the Ohio Peace Officers Training Council and the training curriculum of the Ohio Peace Officers Training Academy. Requirements include: Minimum age 21, physical from a physician to participate in strenuous training and activities, no felony record, crimes of violence, OVI, crimes of theft, excessive bad driving record, or domestic violence convictions. Valid driver's license required. Must be fingerprinted and record checked through BCI&I and FBI. This course is graded S/U.

Prerequisites: Minimum 21 years of age by the end of the academy.**LAW 2810 – Basic Policy Academy I****Credit Hours: 11.00 Total Contact Hours: 20.00 Lecture Hours: 20.00**

Trains students for the Ohio Peace Officer Training Academy. Completion of Part I and Part II comply with statutory requirements as defined by the Ohio Peace Officer Training Council. This course is graded S/U.

Prerequisites: Minimum 21 years of age by the end of the academy.

LAW 2820 – Basic Policy Academy II**Credit Hours: 11.00 Total Contact Hours: 20.00 Lecture Hours: 20.00**

Trains students for the Ohio Peace Officer Training Academy. Completing of Part I and Part II comply with statutory requirements as defined by the Ohio Peace Officer Training Council. This course is graded S/U.

Prerequisites: Minimum 21 years of age by end of the academy and completion of Police Academy I (LAW 2810).

LAW 2900 – Basic Police Academy**Credit Hours: 30.00 Total Contact Hours: 30.01 Lecture Hours: 27.33****Lab Hours: 2.68**

Provides certification for those aspiring to be police officers. This academy will be conducted in accordance with the rules established by the Ohio Peace Officers Training Council and the training curriculum of the Ohio Peace Officers Training Academy. Requirements include: Minimum age 21, physical from a physician to participate in strenuous training and activities, no felony record, crimes of violence, OVI, crimes of theft, excessive bad driving record, or domestic violence convictions. Valid driver's license required. Must be fingerprinted and record checked through BCI&I and FBI. This course is graded S/U.

LAW 2910 – Basic Police Academy I**Credit Hours: 15.00 Total Contact Hours: 15.01 Lecture Hours: 13.67****Lab Hours: 1.34**

Trains students in the Ohio Peace Officer Training Academy. Completion of Part I and Part II comply with statutory requirements as defined by the Ohio Peace Officer Training Council. This course is graded S/U.

LAW 2920 – Basic Police Academy II**Credit Hours: 15.00 Total Contact Hours: 15.01 Lecture Hours: 13.67****Lab Hours: 1.34**

Provides certification for those aspiring to be police officers. This academy will be conducted in accordance with the rules established by the Ohio Peace Officers Training Council and the training curriculum of the Ohio Peace Officers Training Academy. Requirements include: Minimum age 21, physical from a physician to participate in strenuous training and activities, no felony record, crimes of violence, OVI, crimes of theft, excessive bad driving record, or domestic violence convictions. Valid driver's license required. Must be fingerprinted and record checked through BCI&I and FBI. This course is graded S/U.

Prerequisites: LAW 2910.

Literature (LIT)

LIT 1450 – Introduction to Film**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Focuses on a close study of films and film making. This course engages students in the exploration of films-how they are created, what techniques are used to create them and how to read their composition. In studying film, culture and ideology and how it is present within the frame will be explored. Students will study the meaning inherent in mise-en-scene, sound, acting, directing, kinetics and many other film components.

LIT 2210 – Introduction to Literature**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Serves as an introduction to the three major areas of literature: poetry, drama, and prose. It provides an overview of the three genres and may focus upon a central theme.

Transfer: TM.

LIT 2215 – Native American Literature**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Focuses on contemporary Native American literature written by and about the Great Lakes tribes of the Algonquian- language family (including the tribes of Shawnee, Delaware, Miami, Potawatomi, Ojibwe, and Ottawa) and of the Iroquoian-language family (including the tribes of Wyandotte, Seneca, Mohawk, Onondaga, Oneida, and Cayuga). Genres include autobiography, poetry, short story, novel, and folklore.

Transfer: TM.

Prerequisites: COM 1110.

LIT 2227 – Literature of Graphic Novels**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines the visual and verbal media depicted in comic books and the graphic novel.

Transfer: TM.

LIT 2228 – African-American Literature**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to African-American Literature, both pre- and post-1900, in four genres: drama, poetry, fiction, and autobiography.

Transfer: TM.

LIT 2241 – World Literature I**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Emphasizes the study and consideration of the literary, cultural, and human significance of selected great works of the Western and non-Western literary traditions from Antiquity, the Middle Ages, and the Renaissance.

Transfer: TM.

LIT 2241H – World Literature I (Honors Component)**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: LIT 2241.

LIT 2242 – World Literature II**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Emphasizes the study and consideration of the literary, cultural, and human significance of selected great works of the Western and non-Western literary traditions, including women's, minority, and ethnic literature from around the world from the seventeenth century to the present.

Transfer: TM.

LIT 2242H – World Literature II (Honors Component)**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: LIT 2242.

LIT 2250 – The American Short Story**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Centers of American authors and their themes. These themes are often a reflection of the author's education, experiences, and social milieu. The course will focus on the historical, social, philosophical and theological implications of the stories.

Transfer: TM.

LIT 2260 – Fantasy Literature**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Focuses on the fantasy literature of major writers, illustrating the major themes of fantasy literature and some of the relationships between fantasy and reality.

Transfer: TM.

LIT 2301 – British Literature I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introductory survey of British literature, spanning from the Old English period to the Early Modern or Renaissance period. In this course, students will be introduced to a variety of literary styles (poetry, essay, drama), and to the historical contexts from which these literary works came. This course requires analytical and critical reading and writing, mastery of objective knowledge of the texts, and culminates in a research project focusing on a specific text from the early period of British literature.

Transfer: TAG, TM.

LIT 2305 – Introduction to Shakespeare**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides students with the opportunity to get to know the life, era, and work of William Shakespeare.

LIT 2310 – Literature and the Holocaust**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines the events leading to the Holocaust, the Holocaust itself, and the aftermath; emphasis is placed on the victims and survivors through the study of various fiction and non-fiction.

Transfer: TM.

LIT 2450 – Themes in Literature and Film**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Focuses on themes and connections between literature and film. The overarching course theme is "crossing boundaries" in literature and film. A close textual examination of course readings will provide insight on how people have multiple identities and how these identities are tested and formed when crossing borders. The class will be exploring the idea of borders, how they are created, how they are enforced, how they are crossed, and what happens when they are crossed.

Transfer: TM.

Management (MGT)

MGT 1010 – Principles of Management**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the basic concepts and methods of management in the business enterprise is presented through a comparison of evolving management approaches, and through an examination of motivation, ethics, leadership, communication, and decision-making processes within the management functions of planning, organizing, leading and controlling. Past and present business situations are examined through events currently reported in the news media for the purpose of promoting the application of management theories and techniques.

Transfer: TAG.

MGT 1050 – Principles of Entrepreneurship**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Investigates the skills necessary in creating and establishing a small business. Students will learn about the start-up process, how to research fundamental small business issues, strategies, decision making, risk and reward considerations and techniques designed to help students to create and operate their own business. Upon successful completion of the course, students should be able conceptualize the characteristics and entrepreneurial traits necessary for successful development of small business enterprises.

MGT 1250 – Team Building**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Offers real business team situations and develops critical leadership skills to interact effectively. Students will conduct meetings, develop teams, lead discussions, conduct self-assessments, practice assertiveness, do problem-solving and decision-making in a group environment.

MGT 1990 – Independent Study in MGT**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides Independent Study for students.

MGT 2000 – Human Resource Management**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces students to the human resources function for future managers in all departments. The employment process will be covered from writing job descriptions and employment planning to recruiting, interviewing, testing and hiring. Orientation and training will be discussed followed by various methods used for performance reviews and compensation. Employees' legal rights and labor relations are included with practical applications.

Prerequisites: MGT 1010.

MGT 2010 – Organizational Behavior**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines the reactions, interactions, attitudes, and activities of individuals and groups within a goal-seeking organization. Includes business communication, motivation, team building, and conflict resolution. Course considers business relationships among supervisors and subordinates, business and its clients and informal groups with emphasis on the development of effective human relations.

Prerequisites: PSY 1010 or SOC 1010.**MGT 2060 – Employee and Labor Relations****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides students with a complete picture of labor relations from the initial establishment of a bargaining relationship to the interactions that occur in a long established mature relationship. After developing a theoretical perspective, the negotiation process and contract administration are analyzed with modern issues included.

MGT 2410 – Employee Selection and Placement**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces legal and regulatory factors affecting selection and placement. Major topics include: Recruitment, Selection, Equal Employment Opportunity, Affirmative Action and Case Histories.

MGT 2435 – Benefits and Compensation**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces legal and regulatory factors affecting benefits and compensation. Other major topics covered include tax and accounting treatment of programs; economic factors affecting compensation philosophy, strategies and policy; job analysis, description and specification; job evaluations, pay structures, employee benefit programs, managing employee benefit programs, and evaluating the effectiveness of total benefit programs.

MGT 2440 – Training, Development and Safety**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines legal and regulatory factors; HR training and the organization; training needs analysis; training and development programs; evaluation of training effectiveness, and presentation skills as well as introductory safety principles and practice; safety and the law, safety concepts, OSHA requirements, organization and administration effects, hazard control technology, human factors and relevant professional areas.

MGT 2490 – Applications in Business Administration **Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Integrates the knowledge gained, and skills developed, in prior course study. Students will apply their knowledge and skills in a business simulation. Students will analyze ethical issues and research current events in the business world. Students will also participate in a mock job interview.

Prerequisites: ACC 1010, COM 1110, MGT 1010**Corequisites:** MGT 2000, MGT 2010, MKT 1010.**MGT 2530 – Applications in Human Resources** **Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Integrates the knowledge gained, and skills developed, in prior course study. Students will apply their knowledge and skills in a human resource simulation. Students will analyze ethical issues and research current events in the human resource world. Students will also participate in a mock job interview.

Prerequisites: ACC 1010, COM 1110, MGT 1010**Corequisites:** MGT 2060, MGT 2410, MGT 2435, MGT 2440.**MGT 2991 – Practicum****Credit Hour: 1.00 Total Contact Hour: 7.00 Lecture Hour: 7.00**

Requires the student to participate in an internship work experience in which the student will work for a minimum of 105 hours in a business administration, marketing or human resource related position. Exact duties will be agreed upon by the Faculty Member/Chair, Work Experience Supervisor and the Student. Student will be required to present a portfolio which summarizes their time spent in the work experience.

Corequisite: MGT 2992.**MGT 2992 – Seminar****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Brings practicum students together with their instructor to discuss achievements, progress, and challenges occurring during their internship work experiences.

Corequisites: MGT 2991.

Manufacturing Engineering Technology (FMS)

FMS 1990 – Independent Study in FMS**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the student with the opportunity for in-depth work on a special topic within the field of Manufacturing Engineering Technology which the student was not able to pursue in the desired degree of depth in the regular course offerings. During the first week of the semester, the student is required to describe the proposed course of study in writing that he/she wishes to pursue. Such proposal must be submitted to the division Dean for approval and student assignment to a Manufacturing Engineering Technology faculty member for overseeing the project. This course of independent study may be substituted for a Manufacturing Engineering technical course if it is applicable. No more than five (5) credit hours will count toward graduation. This course is graded S/U.

FMS 2110 – Basic Robotics and Mechatronics**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides combined classroom and laboratory study of robotics, with the lecture stressing an overview of robotics. Topics will include such aspects as the historical perspective, mechanics, electronics, sensors, vision systems and the future of robotics. The laboratory will offer a more in-depth study of programming, interfacing and control of a robotic device using off the shelf components.

FMS 2120 – Additive Manufacturing**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces and explores the fundamentals of additive manufacturing technologies. It includes the understanding of common additive manufacturing processes and their applications. The course also explores design considerations and constraints for additive manufacturing. Students will also be introduced to CAD and slicing software used for modeling of parts. The course will also focus on the materials used in additive manufacturing and the economics of 3D printing.

FMS 2130 – Industrial Mechatronics and Robotics**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides comprehensive training in the operation, programming, troubleshooting, maintenance, etc. of industrial robots. Various applications such as MIG welding, assembly, pick and place will be presented in a work cell environment. Labs will be performed on industrial robots.

FMS 2210 – CAM/CNC Machining I**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Covers the basic principles of Computer Numerical Control Programming. Emphasis is placed on the manual hand programming of CNC Mills and CNC Lathes using G and M codes. Topics include point to point, continuous path, circular interpolation, canned cycles and four axis programming. The course will introduce and cover the latest processes in Computer Aided Manufacturing (CAM) software. The laboratory assignments will offer the students hands-on experience in each of these areas on industrial grade equipment.

FMS 2220 – CAM/CNC Machining II**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Continues on from FMS 2210 and provides the student with additional experiences in producing accurate, detailed, engineering drawings on the computer, using AutoCAD, EZCAM and MasterCam to generate programs for the CNC equipment. This course will provide the student with experience in rapid prototyping using 3D and solid types of software and techniques.

Prerequisites: FMS 2210.**FMS 2320 – Manual Machining I****Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Provides an in-depth knowledge and practice of lathes, mills, jig borers and grinders. Students will be expected to already have the knowledge of and have used lathe tooling and accessories, and vertical milling machine tooling and accessories. The course is designed to provide more extensive classroom use of basic machine operations on lathes and mills and various grinding and jig boring processes as well as an introduction to electro-chemical and electrical discharge machine procedures.

Prerequisites: AMT 1200 or MET 1110 or equivalent.**FMS 2340 – Numerical Control Concepts****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Introduces programming numerically controlled machines. In addition to terminology, systems and formats employed for programming, the course includes system analysis, axis and motion nomenclature, point-to-point programming and general machine operation.

FMS 2460 – Process Tech Instrumentation**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Prepares future process operators to observe, read, and interpret the data provided by the types of instrumentation typically found on an operating unit and be able to make decisions to maintain the safe and economical operation of their process unit based on that data.

FMS 2470 – Process Technology Equipment**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the many kinds of equipment found in common to the different process industries. Special emphasis will be given to equipment like storage tanks and pumping equipment. This will be from an operational, but relatively non-technical viewpoint as seen from the operator's perspective.

Marketing (MKT)

MKT 1010 – Principles of Marketing**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the essentials of marketing. The environments of marketing, the nature of the consumption forces in the economy, the institutional structure of the American marketing system, distribution, wholesaling and retailing, ultimate consumers and industrial consumers and pricing are studied in detail.

Transfer: TAG.**Corequisites:** ECN 1430.**MKT 1610 – Customer Service****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Develops the necessary skills to be successful in today's customer centric business world. This course examines various service situations and develops the skills necessary to provide superior customer service to all stakeholders.

MKT 1620 – Public Relations**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Explores the public relations role in the modern world by examining each component of public relations and how it functions using real-world problems and solutions.

MKT 1630 – Mobile Marketing**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Examines how mobile marketing is defining business today, including strategy, tracking ROI, and advertising. Investigate consumer interactions with mobile devices, and the laws and ethics of mobile marketing.

Corequisites: CPT 1250, MKT 1010.**MKT 2000 – Digital Marketing and Analytics****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores marketing strategies and tactics in digital marketing. Search engine optimization, online advertising, web analytics, and social media will be utilized to build brand awareness and contribute to an integrated marketing communication campaign.

Corequisites: CPT 1250, MKT 1010.**MKT 2210 – Comprehensive Sales Techniques****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines and studies the principles of professional selling including its historical and economic aspects; the selling processes; types of selling; personal selling as a communicative and promotional element in the marketing of goods and services; pre-sale essentials; pre-sale planning; the selling formula; salesmanship at work and self-management.

Corequisites: MKT 1010.**MKT 2300 – Social Media Marketing****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Explores the various social media channels to build social marketing strategies and track their effectiveness.

Corequisites: CPT 1250, MKT 1010.

MKT 2490 – Applications in Digital Marketing and Media **Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Integrates the knowledge gained, and skills developed, in prior course study. The focus of this capstone course is to apply knowledge and skills to develop a strategic marketing plan and design a digital media project. The course requires the use of marketing information from primary and secondary sources, and the interpretation of such information to design a fully integrated strategic marketing and digital media plan. Course requirements include students' working in teams to select, research, and develop a product, create, and execute a strategic marketing and digital media plan as a capstone project.

Prerequisites: COM 1110, CPT 1250, CPT 1580, CPT 2650, CPT 2670, MKT 1010.

Mathematics (MTH)

MTH 0900 – Mathematics Foundations**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Reviews foundational mathematical skills for students preparing for pathways other than College Algebra. Topics include review of arithmetic skills (fractions and decimals including numbers in scientific notation), variable expressions, solving equations, operations on polynomials, creating and interpreting graphs, and conversions and their applications.

Prerequisites: Placement.

MTH 0901 – College Prep Math 1**Credit Hour: 1.00 Total Contact Hour: 2.00 Lecture Hour: 2.00**

Reviews arithmetic (whole number, fractions, and decimals), rational numbers, variable expressions solving equations, and their applications. This course is offered in a lab only environment where students work at their own pace to achieve the learning outcomes. This is a credit course and will be counted in a student's grade point average; however, it will not count toward graduation requirements or as an elective substitute.

Prerequisites: Placement.

MTH 0902 – College Prep Math 2**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Covers a review of variable expressions, solving equations, operations on polynomials, factoring and conversions. This is a credit course and will be counted in a student's grade point average; however, it will not count toward graduation requirements or as an elective substitute.

Prerequisites: MTH 0901 (with a grade of "C" or better) or placement.

MTH 0903 – College Prep Math 3**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers conversions, rational expressions, introduction to functions, graphing linear functions and inequalities in two variables. This is a credit course and will be counted in a student's grade point average; however, it will not count toward graduation requirements or as an elective substitute.

Prerequisites: MTH 0902 (with a grade of "C" or better) or placement.

MTH 0904 – College Prep Math 4**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Covers linear functions and inequalities in two variables, radicals, systems of equations and quadratic equations. This is a credit course and will be counted in a student's grade point average; however, it will not count toward graduation requirements or as an elective substitute.

Prerequisites: MTH 0903 (with a grade of "C" or better) or placement.

MTH 0926 – Statistics Companion Course**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Supports college level statistics and taken in conjunction with MTH 1260, Statistics. This course reviews prerequisite skills and concepts for topics in MTH 1260.

Prerequisites: MTH 0900 (with a grade of "C" or higher) or placement

Corequisites: MTH 1260.

MTH 0937 – College Algebra Companion Course**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Supports college algebra and taken in conjunction with MTH 1370, College Algebra. This course reviews prerequisite skills and concepts for topics in MTH 1370.

Prerequisites: MTH 0953 (with a grade of "C" or higher) or placement

Corequisites: MTH 1370.

MTH 0951 – Quantitative Reasoning Companion Course**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Supports college level quantitative reasoning and taken in conjunction with MTH 1151, Quantitative Reasoning. This course reviews prerequisite skills and concepts for topics in MTH 1151.

Prerequisites: MTH 0900 (with a grade of "C" or better) or placement

Corequisites: MTH 1151.

MTH 0953 – Foundations for College Algebra**Credit Hours: 5.00 Total Contact Hours: 5.00 Lecture Hours: 5.00**

Reviews foundational topics for students preparing for the College Algebra pathway. Topics covered include linear functions and inequalities in two variables, systems of linear equations and inequalities, polynomials, factoring, rational expressions, exponents, radicals, quadratic equations, exponential and logarithmic functions.

Prerequisites: Placement.

MTH 1100 – Math of Business**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Emphasizes the application of fundamental algebra to a wide range of business topics. Included are studies of percents, discounts, markups, markdowns, payroll, checkbook reconciliation, taxes, annuities, and simple and compound interest.

Prerequisites: Placement.

MTH 1151 – Quantitative Reasoning**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers quantitative relationships and solving problems in a variety of real-world contexts, mathematical models used to make decisions, language and structure of statistics and probability to investigate, represent, make decisions, and draw conclusions from real-world contexts. Topics include solving, graphing, and applying linear, quadratic, and exponential equations, an introduction to functions, systems of linear equations, linear inequalities, elements of consumer math, including simple and compound interest and annuities, introductory descriptive statistics, and unit conversions.

Transfer: TM

Prerequisites: MTH 0902 (with a grade of "C" or better) or placement

Corequisites: MTH 0951.

MTH 1190 – Finite Mathematics/Business**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to Finite Mathematics, with an emphasis on business and economics applications, and Mathematics of Finance. Topics covered include: linear equations, linear functions (with exploration of other function types), linear models including Least Square Line, systems of linear equations, a brief introduction to matrices, and linear programming. Topics from finance covered: simple interest and discount, compound interest, annuities, and amortization schedules.

Transfer: TM.**Prerequisites:** MTH 0904 (with a grade of "C" or better) or placement.**MTH 1210 – Mathematics I****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Combines algebra with an introduction to trigonometry. Topics include: systems of linear equations, quadratic equations, exponents, radicals, graphing, right-triangle trigonometry, trigonometric functions of any angle, Law of Sines, Law of Cosines, and vectors.

Prerequisites: MTH 0904 (with a grade of "C" or better) or placement.**MTH 1260 – Statistics****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Covers data collection, frequency distribution, graphs, measures of central tendency and dispersion, probability concepts, probability distributions, sampling distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation and regression analysis.

Transfer: TM.**Prerequisites:** MTH 0903 (with a grade of "C" or better) or placement**Corequisites:** MTH 0926.**MTH 1260H – Statistics (Honors Component)****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** MTH 1260.**MTH 1370 – College Algebra****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 4.00 Lab Hours: 1.00**

Covers equations and inequalities, complex numbers, graphs and equations of lines, functions including quadratic functions and composite functions, inverse functions, polynomial and rational functions, the Fundamental Theorem of Algebra, exponential and logarithmic functions, systems of equations and inequalities, conic sections, and sequences and series. A specific calculator requirement will be made by the instructor on the first day of class.

Transfer: TM**Prerequisites:** MTH 0904 (with a "C" or better) or placement.**Corequisites:** MTH 0937.**MTH 1370H – College Algebra (Honors Component)****Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 4.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** MTH 1370.**MTH 1430 – Trigonometry****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Concentrates on the development and use of the trigonometric functions with additional study of vectors. The course will cover trigonometric functions, solving right and oblique triangles, graphs of trigonometric functions, identities, trigonometric equations, inverse trigonometric functions, complex numbers, polar coordinates and graphs, and vectors.

Transfer: TM.**Prerequisites:** MTH 1370 (with a grade of "C" or better) or placement.**MTH 1611 – Business Calculus****Credit Hours: 5.00 Total Contact Hours: 5.00 Lecture Hours: 5.00**

Covers limits and continuity, derivatives and integration and their applications in a business environment.

Transfer: TM.**Prerequisites:** MTH 1370 with a "C" or better or placement.**MTH 1711 – Calculus I****Credit Hours: 5.00 Total Contact Hours: 5.00 Lecture Hours: 5.00**

Covers limits including the definition and l'Hospital's Rule; continuity; derivatives including the transcendental functions; applications of derivatives including related rate, curve sketching, and optimization problems; introduction to integration; Fundamental Theorem of Calculus; and applications to area and volumes.

Transfer: TM.**Prerequisites:** MTH 1370, MTH 1430 (with grade of "C" or better) or placement.**MTH 1721 – Calculus II****Credit Hours: 5.00 Total Contact Hours: 5.00 Lecture Hours: 5.00**

Covers integrals including techniques of integration; applications of integration including volume and work problems; approximating definite integrals; improper integrals; arc length of a curve; area of a surface; solving separable differential equations; parametric equations; polar coordinates; infinite sequences and series; and vectors and geometry of space.

Transfer: TM.**Prerequisites:** MTH 1711 (with a "C" or better).**MTH 2261 – Discrete Mathematics****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces mathematical reasoning and several topics from discrete mathematics that underlie, inform, or elucidate the development, study, and practice of related fields. Topics include logic, proof techniques, set theory, functions and relations, counting and probability, elementary number theory, graphs and tree theory, base-n arithmetic, and Boolean algebra.

Prerequisites: MTH 1611 or MTH 1711 (with a grade of 'C-' or better).

MTH 2660 – Calculus III**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Provides students with a rigorous background in vector functions, partial derivatives, multiple integrals and vector calculus. Applications of differential and integral calculus to surfaces in space and of multiple integrals to volumes, areas, and moments are studied. Green's Theorem, Stokes' Theorem, and the Divergence Theorem and their application to problems in physics and engineering are also included. MTH 1711, MTH 1721, and MTH 2660 (Calculus I, II, and III) provide students with a traditional Calculus sequence.

Transfer: TAG, TM**Prerequisites:** MTH 1721 (with a grade of "C" or better).**MTH 2670 – Differential Equations****Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Provides students with a background in solving first order separable, linear, and exact differential equations; solving higher order homogeneous and nonhomogeneous differential equations using a variety of methods including Laplace transforms; and solving systems of first order linear equations. Applications of these concepts are also covered.

Transfer: TAG, TM.**Prerequisites:** MTH 1721 (with a grade of "C" or better).**MTH 2680 – Elementary Linear Algebra****Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Provides students with a background in solving systems of linear equations using various methods including the Gauss-Jordan method, matrices and their operations and properties, determinants, vector spaces, inner product spaces, linear transformations, and eigenvalues and eigenvectors. Applications of these concepts are also covered.

Transfer: TAG, TM.**Prerequisites:** MTH 1721 (with a grade of "C" or better).

Mechanical Engineering Technology (MET)

MET 1000 – Engineering Graphics with AutoCAD**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces engineering graphics to technology majors. Broad coverage of blueprints, symbols, sketching, views, dimensioning and tolerancing practices, scale reading, and fundamentals of drawing with AutoCAD software.

Transfer: TAG.**MET 1010 – Blueprint Reading and Sketching****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers reading, sketching and interpreting working drawings. Symbolism, conventional practices and standards used in the drafting area are studied. Concentration will be on the machine part drawings. Not open to students who have completed MET-1000.

MET 1020 – Material Science**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the properties of common engineering materials. It will provide a broad understanding of theory, manufacturing, processing and testing of industrial materials including metals, polymers, woods, ceramics, composites, adhesives and coatings. Laboratory activities will serve to enhance the principles learned in the classroom.

Transfer: TAG.**Corequisites:** MET 1020L.**MET 1020L – Material Science Lab****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Accompanies MET 1020.

MET 1050 – CAD for Electronics**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Introduces IT, Networking and Electronic Engineering student to beginning level drafting using AutoCAD and Microsoft VISIO software. Topics covered will be the preparation of various electrical and network drawings including block diagrams, flow charts, schematic wiring diagrams, and printed circuit layouts. The course will stress the use of electronic symbols and nomenclature.

MET 1110 – Manufacturing Processes**Credit Hours: 3.00 Total Contact Hours: 1.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces manufacturing processes and their relation to the design of machine elements. Basic and advanced machine tool operations, press tool operation, welding, casting and forging are studied.

Transfer: TAG.**Corequisites:** MET 1110L.**MET 1110L – Manufacturing Processes Lab****Credit Hours: 3.00 Total Contact Hours: 1.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Accompanies MET 1110.

MET 1130 – Statics**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Engineering applications of basic statics. Classroom discussion includes concurrent and non-concurrent force systems, resultants, equilibrium, trusses, centroids, moments of inertia and friction. Computers are used in problem solving and design analysis.

Transfer: TAG.**Prerequisites:** PHY 1120.**MET 1990 – Independent Study in MET****Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the student with the opportunity for in-depth works on a special topic within the field of Mechanical Engineering Technology which the student was not able to pursue in the desired degree for depth in the regular course offerings. During the first week of the semester, the student is required to describe in writing, the proposed course of study that he/she wishes to pursue. Such proposal must be submitted to the division Dean for approval and student assignment to a Mechanical Engineering Technology area faculty member for overseeing the project. This course of independent study may be substituted for a Mechanical Engineering technical course if it is applicable. No more than five (5) credit hours will count toward graduation. This course is graded S/U.

MET 2210 – Strength of Materials**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the study of elementary strength of materials applied to basic structural and machine components. Course topics will cover tension and compression, torsion, and shear stresses. Included will be beam stresses, shear and moments and combined stresses. Computers are used in problem solving and design analysis.

Transfer: TAG.**Prerequisites:** MET 1130.**MET 2310 – Fluid Power****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the development, transmission and utilization of power through fluid power circuits and controls. Emphasis is on selecting and applying fluid power devices and related equipment to machine circuits for both linear and rotary motion. Applications of pneumatics and fluid mechanics will also be covered.

Transfer: TAG.**Corequisites:** MET 2310L.**MET 2310L – Fluid Power Lab****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Accompanies MET 2310L.

MET 2440 – Computer Aided Design**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Covers three-dimensional parametric solid modeling. Topics will include constraining sketches, creating and editing solid objects and assemblies and converting them to two-dimensional drawings.

Transfer: TAG.**Prerequisite:** MET 1000.**MET 2970 – MET Department Capstone** **Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Taken during the semester of scheduled graduation for MET, MED and FMS majors. Students demonstrate comprehensive proficiency by integrating technical knowledge with core skills and abilities. Students will combine the skills acquired in the MET, MED and FMS majors, and apply them to perform mechanical analysis, produce detailed drawings, and actually manufacture a product. The course is designed to simulate and support teamwork concepts necessary to be successful in industry. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing.

Prerequisites: COM 1110, COM 1140, MET 1000, MET 1110, MET 1020.**MET 2991 – Field Experience****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Enables work activity which relates to an individual student's occupational objectives. With permission of a faculty advisor, the field experience replaces elective or required courses in a student's associate degree program. The experience is coordinated by a faculty member of the college who assists the student in planning the experience, visits the site of the experience for a conference with the student and his/her supervisor at least once during the semester and assigns a grade to the student after appropriate consultation with the employer/supervisor. This course is graded S/U.

Prerequisites: Completion of 1st semester and faculty advisor approval.

Music (MUS)

MUS 1010 – Music Appreciation I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to music from its origins in Gregorian Chant to the Romantic Period. Students will acquire background information on the various aspects of music from music notation, analysis, aesthetic value, and an overall brief history of music within various cultures and eras.

Transfer: TM.

Medical Assisting Technology (MAT)

MAT 1100 – Introduction to Medical Assisting**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the health care delivery system and the role of the medical assistant and scope of practice in a variety of health-care environments with an emphasis on communication, legal implications, ethical considerations and infection control fundamentals in the exam and treatment areas. Investigation and exploration of medical records including the introduction of electronic health records (EHR). The student will describe the impact personal ethics and morals have on the delivery of healthcare to diverse individuals. 'C' grade policy applies.

Prerequisites: Acceptance into the Medical Assisting Program**Corequisites:** BHS 1390, BIO 1000 or BIO 1110, MAT 1200.**MAT 1200 – Clinical Medical Assisting I****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Demonstrates knowledge of the techniques employed by the medical assistant during a general physical examination, taking and recording vital signs, proper chart documentation, practicing and applying medical and surgical asepsis and infection control. An introduction to diagnostic laboratory procedures performed in the physician's office laboratory and medical laboratory science. Principles of laboratory procedures will be studied by observation, discussion and practice in the laboratory sessions. Emphasis on collection, proper handling, including blood and body fluid restrictions, basic hematology procedures, routine urinalysis, Clinical Laboratory Improvement Amendment- waived laboratory testing, capillary puncture and venipuncture for competency. Office safety and emergency preparedness for the medical assistant will be covered and participation in a mock exposure event. 'C' grade policy applies.

Prerequisites: Acceptance into the Medical Assisting Program**Corequisites:** BHS 1390, BIO 1000 or BIO 1110, MAT 1100.**MAT 1300 – Medical Office Procedures I****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces the theory and practice of administrative skills used in the medical office. Topics included are receiving patients in the office, appointment management, telephone techniques, records management, filing procedures, office brochures, office inventory, patient coaching, patient navigation, processing mail and correspondence in the medical office and composing professional/business letters.

Prerequisites: MAT 1100, MAT 1200.

MAT 1400 – Clinical Medical Assisting II

Credit Hours: 6.00 Total Contact Hours: 9.00 Lecture Hours: 3.00 Lab Hours: 6.00

Investigates numerous clinical exam room procedures. Classroom and lab instruction on outpatient specialty procedures employed in a general medical examination including assisting with minor office surgery, instrument identification and specialty exams associated with all body systems, performing EKG and pulmonary function testing. Understanding and assessing the differences in working with pediatrics, geriatrics, female/male systems and assisting the physicians in exams with each of these. Also covered in this course will be the theories and principles of pharmacology, dosage calculations and medical administration within the medical assistant's scope of practice. Clinical procedures in each of these areas will be practiced and evaluated in the campus lab. 'C' grade policy applies.

Prerequisites: MAT 1100, MAT 1200.

MAT 1990 – Independent Study in MAT

Credit Hours: 0.00 Total Contact Hours: 0.00

Guides exploration of an independent study designed to provide the medical assisting student with the opportunity for in-depth work on a selected topic, within the field of medical assisting for which the student was unable to pursue to the desired degree of depth in regular course offerings. Medical Assisting students will have several options to complete this course including observation of skills, research papers and skill development. During the first week of the semester, the student will meet with the Chairperson and submit in writing the proposed topic of study he/she wishes to pursue and the methods of pursuit that will be used. A faculty member will be assigned to the student for support throughout the project. No more than 3 credit hours of independent study will count toward graduation. This course is graded S/U.

Prerequisites: MAT-1020.

MAT 2310 – Healthcare Reimbursement

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Examines the basic types of medical insurance available in today's healthcare environment. It acquaints students with billing formats, claim form processing, and the necessary skills to master basic aspects of medical insurance billing and adjudication. Current reimbursement methodologies and compliance will also be covered. This course covers both outpatient physician and inpatient/outpatient hospital situations. Recommended that students have Medical Coding experience. "C" grade policy applies.

MAT 2320 – Medical Office Procedures II

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Continues the theory and practice of administrative skills of the medical office. Topics include management of the medical office, analyzing health information for clinical practice, patient navigation, basic medical practice of finances including accounts payable/receivable, banking and collection procedures in manual and computerized formats. Preparation for medical assistant practicum and employment. 'C' grade policy applies.

Prerequisites: MAT 1300, MAT 1400.

MAT 2410 – Medical Office Coding

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Introduces medical coding for the entry-level professional with emphasis on theory and development of skills required to code outpatient and ambulatory services coding for physical reporting requirements. Introduction to the basic principles and fundamentals of the International Classification of Disease, Ninth Revision classification system, as well as the International Classification of Diseases, Tenth Revision classification system. Introduction to the basic principles and fundamentals of the Physician's Current Procedure Terminology coding nomenclature. The student should have sufficient background in medical terminology and anatomy/physiology to provide a solid foundation for coding knowledge. This may be acquired through course work or workplace experience. "C" grade policy applies.

MAT 2420 – Medical Coding - Advanced

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Applies the principles of procedural and diagnostic coding theories. Students should have completed MAT 2410 successfully or have a minimum of two years full time documented coding experience in the healthcare setting. This course is designed to serve as a review course for Certified Procedural Coding examinations. College credit from this course may be utilized as continuing education for many health professions. "C" grade policy applies.

Prerequisites: MAT 2410.

MAT 2430 – Electronic Health Records and Procedures

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Develops skills in building and posting to patient files, making and canceling appointments, entering and printing hospital rounds and reports, patient and insurance billing, posting payments and adjustments and generating aging reports using computer-based medical office software. This course is also designed to introduce students to the electronic health record (EHR) through practical applications and guided exercises. Students will have a working knowledge of the history, theory, benefits, and skills of EHR through guided and critical thinking exercises. 'C' grade policy applies.

Corequisites: BHS 1390, BIO 1000 or BIO 1110.

MAT 2510 – Medical Assisting Clinical (Practicum)

Credit Hours: 2.00 Total Contact Hours: 10.00 Lecture Hours: 10.00

Provides participation in a 160 hour non-reimbursed, on-the-job, supervised clinical (practicum) in an ambulatory healthcare medical facility. This class enables the student to apply all of the classroom training to an actual work situation and is an integral part of the Medical Assistant Program. The student will observe, assist and demonstrate administrative, general and clinical skills in the office. All required courses must have been successfully completed or must be taken concurrently. If any required courses being taken concurrently are dropped, the clinical (practicum) may be terminated also. "C" grade policy applies.

Prerequisites: MAT 1300, MAT 1400

Corequisites: MAT 2320, MAT 2520.

MAT 2520 – Capstone for Medical Assisting **Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides assessment of medical assisting knowledge presented in a capstone experience. Students will demonstrate their proficiency by integrating technical knowledge with core skills and abilities. Through discussion boards, roundtable discussions, psychomotor demonstrations and various other learning modalities, the student will demonstrate their core skills and abilities that have reinforced throughout the program. All required courses must have been successfully completed or must be taken concurrently. 'C' grade policy applies.

Prerequisites: MAT 1300, MAT 1400**Corequisites:** MAT 2320, MAT 2510.

Nursing (NSG)

NSG 1320 – Foundations of Nursing Advanced Standing Credit for LPN**Credit Hours: 5.00 Total Contact Hours: 5.00 Lecture Hours: 5.00**

Introduces the philosophy and conceptual framework of the nursing program. Focuses on the foundational knowledge, skills, and attitudes required to practice evidence based, quality and safe patient centered care utilizing teamwork and collaboration and informatics to formulate patient centered nursing decisions. Integrates foundational nursing concepts, the nursing process and nursing skills to promote critical thinking and safe patient care. The student builds upon knowledge acquired from general education and applied general education course work. "C" grade policy applies.

Prerequisites: Acceptance to Nursing Clinical Program**Corequisites:** BIO 1110, BHS 1711, BHS 2110.**NSG 1323 – Adult Health Advanced Standing Credit for LPN****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the opportunity to incorporate the nursing process in the care of adult clients. The characteristics of the individual are studied with a major focus placed on common health problems related to the human needs of oxygenation (respiration), hydration, skin and tissue integrity, and physiological safety (hormonal and sensory). Evidence-based practice and critical thinking skills are emphasized. The student builds upon previously acquired knowledge from general education and basic health related course work. Clinical opportunities are provided for students to give safe and competent nursing care to client in structured settings. "C" grade policy applies.

Prerequisites: Acceptance into the LPN to ADN Transition Program in Nursing.**NSG 1324 – OB Advanced Standing for LPN****Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 1.00 Lab Hours: 3.00**

Provides the opportunity to incorporate the nursing process in the care of the child-bearing family. Characteristics of the individual are studied with a major focus on the human need of sexuality. Specific topics explored include: pregnancy, labor, and delivery, postpartum care of the newborn, and male/female reproductive issues. Emphasis is placed on client centered care and collaboration which includes valuing a partnership with the childbearing family. The student builds upon previously acquired knowledge from general education and basic health related course work. Clinical opportunities are provided for students to give safe and competent nursing care to clients in structured settings. "C" grade policy applies.

Prerequisites: Acceptance into the LPN to ADN Transition Program in Nursing.**NSG 1326 – Psychosocial Advanced Standing Credit for LPN****Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 1.00 Lab Hours: 3.00**

Provides opportunities to acquire knowledge regarding the psychosocial characteristics of the individual are explored through the nursing process. Specific topics include the human needs of sexuality, emotional security, communication and cognition, love and belonging, self-esteem, and self-actualization. Emphasis is placed on nursing care of patients with psychosocial health problems promoting collaboration, patient centered care, and evidence-based practice. Opportunities are provided for the student to utilize therapeutic communication techniques and structuring of interpersonal relationships. The student builds upon previously acquired knowledge from general education and applied general education course work. Clinical opportunities are provided for the students to give safe and competent nursing care to patients in structured settings. "C" grade policy applies.

Prerequisites: Acceptance into the LPN to ADN Transition Program in Nursing.**NSG 1421 – OB Transition for LPN to RN****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides the opportunity for the LPN student to incorporate the nursing process in the care of the child-bearing family. Characteristics of the individual are studied with a major focus on the human need of sexuality. Specific topics explored include: pregnancy, labor and delivery, postpartum, care of the newborn, and male/female reproductive issues. 'C' grade policy applies.

Prerequisites: BHS 2110, BIO 1110, BIO 1120, COM 1110, DTN 1220, SOC 1010**Corequisites:** BHS 1711.**NSG 1423 – Medical-Surgical I for the LPN to RN****Credit Hours: 6.00 Total Contact Hours: 9.00 Lecture Hours: 4.00 Lab Hours: 2.00 Clinical/Other Hours: 3.00**

Provides the opportunity to incorporate the nursing process in the care of adult patients. The characteristics of the individual are studied with a major focus placed on the common health problems related to the human needs of oxygenation (respiration), circulation (shock), hydration, skin and tissue integrity, physiological safety (hormonal and sensory) and health concerns related to the surgical patient (peri-operative nursing care). Evidence-based practice and critical thinking skills are emphasized. In addition, legal and ethical aspects are emphasized in regard to the scope of practice for the registered nurse. The student builds upon previously acquired knowledge from general education and applied general education course work. Clinical opportunities are provided for students to practice safe and competent nursing care to patients in structured settings. 'C' grade policy applies.

Prerequisites: BHS 2110, BIO 1110, BIO 1120, COM 1110, DTN 1220, SOC 1010**Corequisites:** BHS 1711.

NSG 1424 – Psychosocial Transition for LPN to RN**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides opportunities to acquire knowledge regarding the psychosocial characteristics of the individual are explored through the nursing process. Specific topics include the human needs of sexuality, emotional security, communication and cognition, love and belonging, self-esteem, and self-actualization. Emphasis is placed on nursing care of clients with psychosocial health problems promoting collaboration, client centered care, and evidence-based practice. Opportunities are provided for the student to utilize therapeutic communication techniques and structuring of interpersonal relationships. The student builds upon previously acquired knowledge from general education and applied general education course work. "C" grade policy applies.

Prerequisites: BIO 1110, BIO 1120, BHS 2110, COM 1110, DTN 1220, SOC 1010

Corequisites: BHS 1711.

NSG 1510 – Fundamentals of Nursing**Credit Hours: 6.00 Total Contact Hours: 10.40 Lecture Hours: 3.40 Lab Hours: 1.60 Clinical/Other Hours: 5.40**

Builds on the knowledge surrounding the philosophy and conceptual framework of the nursing program presented in the Introduction to Nursing pre-requisite course. Focuses on the foundational knowledge, skills, and attitudes required to practice evidence based, quality and safe patient centered care utilizing teamwork and collaboration and informatics to formulate patient centered nursing decisions. Integrates foundational nursing concepts, the nursing process and nursing skills to promote critical thinking and safe patient care. The student builds upon knowledge acquired from general education and applied general education course work. Psychomotor skills competency demonstration and clinical opportunities promote critical thinking while providing students the opportunity to give safe nursing care to patients in structured settings. 'C' grade policy applies to all prerequisite courses.

Prerequisites: BHS 2110, BHS 2120 or NSG 1990, BIO 1110, COM 1110, MTH 1151 or MTH 1260, SDE 1010

Corequisites: BIO 1120.

NSG 1523 – Adult Health I**Credit Hours: 6.00 Total Contact Hours: 10.23 Lecture Hours: 3.67 Lab Hours: 0.86 Clinical/Other Hours: 5.70**

Provides opportunities to incorporate the nursing process in the care of adult patients. The characteristics of the individual are studied with a major focus placed on the common health problems related to the human needs of oxygenation (respiration), hydration, skin and tissue integrity, and physiological safety (hormonal). Evidence-based practice and critical thinking skills are emphasized. The student builds upon previously acquired knowledge from general education and applied general education course work. Clinical opportunities are provided for students to give safe and competent nursing care to patients in structured settings. 'C' grade policy applies.

Prerequisites: NSG 1510

Corequisites: BIO 1120.

NSG 1524 – Care of Childbearing Family**Credit Hours: 3.00 Total Contact Hours: 5.02 Lecture Hours: 1.89 Lab Hours: 0.40 Clinical/Other Hours: 2.73**

Provides opportunities to incorporate the nursing process in the care of the child-bearing family. Characteristics of the individual are studied with a major focus on the human need of sexuality. Specific topics explored include: pregnancy, labor and delivery, postpartum, care of the newborn, and male/female reproductive issues. Emphasis is placed on patient centered care and collaboration, which includes valuing a partnership with the childbearing family. The student builds upon previously acquired knowledge from general education and applied general education course work. Clinical opportunities are provided for students to give safe and competent nursing care to patients in structured settings. 'C' grade policy applies.

Prerequisites: NSG 1510.

NSG 1721 – Pharmacology for Nursing**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Focuses on the general principles of pharmacology. Selected drug classifications related to the neurological, circulatory, urinary, respiratory, endocrine, gastrointestinal, and immune systems and process are discussed. Health care considerations appropriate to individual drug classification will be emphasized. "C" grade policy applies.

Prerequisites: Acceptance into the Nursing program or permission from Chair or Dean of Nursing.

NSG 1990 – Independent Study in NSG**Credit Hours: 0.00 Total Contact Hours: 0.00 Lecture Hours: 8.00 Lab Hours: 8.00**

Allows the student who has completed at least one clinical nursing course in the nursing major. The student will have opportunities to explore various assigned nursing related topics. A variety of instructional delivery techniques are used to emphasize nursing topics such as lecture, online learning, small group work, simulation, and etc. At the discretion of the instructor, various clinical opportunities in structured settings may be required. "C" grade policy applies.

NSG 2521 – Psychosocial Nursing**Credit Hours: 3.00 Total Contact Hours: 5.02 Lecture Hours: 1.89 Lab Hours: 0.40 Clinical/Other Hours: 2.73**

Provides opportunities to acquire knowledge regarding the psychosocial characteristics of the individual in the context of the nursing process. Specific topics include the human needs of sexuality, emotional security, communication and cognition, love and belonging, self-esteem, and self-actualization. Emphasis is placed on nursing care of patients with psychosocial health problems promoting collaboration, patient centered care, and evidence-based practice. Opportunities are provided for the student to utilize therapeutic communication techniques and structuring of interpersonal relationships in scheduled laboratory and clinical experiences. The student builds upon previously acquired knowledge from general education and applied general education course work. Clinical opportunities are provided for the students to give safe and competent nursing care to patients in structured settings. 'C' grade policy applies.

Prerequisites: BIO 1120, BHS 1711, NSG 1523, NSG 1524

Corequisites: NSG 1721.

NSG 2522 – Adult Health II

Credit Hours: 6.00 Total Contact Hours: 10.85 Lecture Hours: 3.50 Lab Hours: 0.30 Clinical/Other Hours: 7.05

Provides opportunities to incorporate the nursing process in the care of the adult patients. Characteristics of the individual are studied with a major focus placed on the common health problems related to the human needs of physiological safety (immunity-oncology), elimination (bowel and bladder), oxygenation (circulation), and activity and mobility. Emphasis is placed on collaboration among the health care team, evidence-based practice, and critical thinking skills. The student builds upon previously acquired knowledge from applied general education courses. Clinical opportunities are provided for students to practice safe and competent nursing care to patients in structured settings. 'C' grade policy applies.

Prerequisites: BIO 1120, BHS 1711, NSG 1523 or NSG 1423, NSG 1524 or NSG 1421

Corequisites: NSG 1721.

NSG 2525 – Essentials of Nurse Practice

Credit Hours: 9.00 Total Contact Hours: 15.67 Lecture Hours: 5.50 Lab Hours: 0.66 Clinical/Other Hours: 9.51

Provides opportunities to incorporate the nursing process in the care of adult and pediatric patients. Characteristics of the adult individual are studied with a focus on common health problems that include the human need of physiological safety (neurosensory/eye/ear). The pediatric individual is studied with a focus on common health problems that include the human needs of oxygenation, nutrition, elimination, physiological safety, activity/mobility and communication/cognition. Topics related to individual emergencies, trauma, bio-terrorism and disaster nursing are discussed. Emphasis is placed on collaboration, leadership, management and delegation as the student prepares to transition into practice. The student builds upon previously acquired knowledge from general education and applied general education course work. Clinical experiences are provided for students in a variety of structured settings to practice safe and competent nursing care. This capstone course concludes with a role-transition experience. 'C' grade policy applies.

Prerequisites: NSG 1721, NSG 2521 or NSG 1326, NSG 2522, Background check (fingerprint).

NSG 3010 – Evolving Roles in Professional Nursing

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Examines and discusses various professional nursing roles and values in contemporary nursing practice as it relates to current issues and trends. Explore theories and elements of professional nursing in a global healthcare community. 'C' grade policy applies.

NSG 3020 – Healthcare Research in Evidence-Based Practice

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Explores, analyzes, and synthesizes current scholarly healthcare literature to inform clinical decisions involved in nursing care. Students will have the opportunity to implement acquired research concepts to various activities. 'C' grade policy applies.

NSG 3030 – Nursing Informatics in Technological Healthcare Community

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Accesses and utilizes various nursing documentation to integrate nursing science, computer science, and information science to manage and communicate data and knowledge in nursing practice. 'C' grade policy applies.

NSG 3040 – Nursing Leadership and Management

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Explores the different concepts and types of leadership and management (i.e. policies, procedures, and budgetary measures) in a complex healthcare society. At the end of this course the student will be able to apply leadership and managerial concepts, skills, and decision-making in a changing healthcare system. 'C' grade policy applies.

NSG 4010 – Advanced Health Assessment for Individuals and Families

Credit Hours: 3.00 Total Contact Hours: 3.20 Lecture Hours: 2.80 Lab Hours: 0.40

Develops and coordinates the health assessment of individuals and families through systematic and deliberative interactive processes. Nurses will use advanced clinical decision-making to validate, analyze, and synthesize the collected data to plan and collaborate multidisciplinary care. 'C' grade policy applies.

Prerequisites: NSG 3010, NSG 3020, NSG 3030, NSG 3040.

NSG 4011 – Advanced Health Assessment for Complex Health Disorders

Credit Hours: 3.00 Total Contact Hours: 3.20 Lecture Hours: 2.80 Lab Hours: 0.40

Develops and coordinates the health assessment of complex health disorders through systematic and deliberative interactive processes. Nurses will use advanced clinical decision-making to validate, analyze, and synthesize the collected data to plan and collaborate multidisciplinary care. 'C' grade policy applies.

Prerequisites: NSG 3010, NSG 3020, NSG 3030, NSG 3040, NSG 4010.

NSG 4020 – Birth to Middle Age Nursing Care in a Global Community

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Promotes and maintains effective care of a diverse and global population from birth to middle age. The student utilizes a holistic approach to promote preventative healthcare, the maintenance of chronic illnesses and restoration to optimal health. 'C' grade policy applies.

Prerequisites: NSG 3010, NSG 3020, NSG 3030, NSG 3040.

NSG 4021 – Gerontological Nursing Care in a Global Community

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Promotes and maintains effective care of a diverse and global Gerontological population. The student utilizes a holistic approach to promote preventative healthcare, the maintenance of chronic illnesses and restoration to optimal health. 'C' grade policy applies.

Prerequisites: NSG 3010, NSG 3020, NSG 3030, NSG 3040.

NSG 4030 – Capstone in Professional Nursing

Credit Hours: 6.00 Total Contact Hours: 10.00 Lecture Hours: 4.00 Lab Hours: 6.00

Design, develop and implement a capstone project based on his/her area of interest. The faculty approved capstone project allows the student to demonstrate accumulated knowledge from the program as he/she transitions into baccalaureate practice. 'C' grade policy applies.

Prerequisites: NSG 3010, NSG 3020, NSG 3030, NSG 3040, NSG 4010, NSG 4020, NSG 4021

Corequisites: NSG 4011.

Nutrition and Food Management (DTN)

DTN 1000 – Basic Nutrition

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Provides opportunities to increase knowledge and understanding of basic nutrition concepts. Emphasis is on nutrients and the varied needs of individuals during the life cycle. Application of nutrition concepts to daily life should enable students to make decisions for healthful nutrition for self and others. Students are introduced to the principles and practices of basic nutritional screening. This course cannot be substituted for DTN 1220 Principles of Nutrition. "C" grade policy applies.

Transfer: TAG.

DTN 1220 – Principles of Nutrition

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Studies each major class of nutrients as it relates to the maintenance of health. The emphasis is on the functions of each nutrient and the specific nutrient requirements to maintain health and prevent disease. Food composition of each specific nutrient to maintain health and prevent disease. Food composition of each specific nutrient is stressed. Students are introduced to the basic energy calculations, exchange system, food guides, and the basic issue of weight control.

Occupational Therapy Assistant (OTA)

OTA 1021 – Occupational Therapy Principles and Practice

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Provides an overview of the healthcare system, the role of the Occupational Therapy Assistant (OTA), and the provision and process of occupational therapy. Emphasis is on the profession's historical development, domain, standards of practice, professional ethics, and models of practice/frames of reference and the use of evidence to guide clinical reasoning. Importance of collaboration with the OT and other health care team members is stressed and includes basic documentation skills. Screening and assessment skills covered include observations, histories, interviews and standardized tests. The student will be expected to competently perform several standardized assessments, including but not limited to those related to Occupational Performance and the Biomechanical Frame of Reference. Application of assessment results in intervention planning, implementation and review is introduced. 'C' grade policy applies.

Prerequisites: BHS 1000 with a 'B-' or better, BHS 1390 with a 'C' or better, BIO 1110 with a 'C' or better, COM 1110 with a 'C' or better, MTH 1151 or MTH 1260 with a 'C' or better

Corequisites: OTA 1030, OTA 1050.

OTA 1030 – Therapeutic Activities and Occupations

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Examines the use of activity and occupation as therapeutic intervention. Students will be introduced to the tools and terminology for analysis of activity relative to areas of occupation, performance skills, performance patterns, activity demands, contexts, client factors and the interaction/significance of these areas. Emphasized will be the meaning and dynamics of occupation and activity, the profession's history relative to the use of activity, models of practice/frames of reference and the use of evidence to guide clinical reasoning. Students will experience a variety of crafts and creative media that can be used in therapy and gain skills for using the teaching-learning process. Introduced will be the ability to grade and adapt the environment, tools, materials, and tasks based on the changing needs of the client, as well as, documentation relative to this specific aspect of occupational therapy. 'C' grade policy applies.

Prerequisites: BHS 1000 with a 'B-' or better, BHS 1390 with a 'C' or better, BIO 1110 with a 'C' or better, COM 1110 with a 'C' or better, MTH 1151 or MTH 1260 with a 'C' or better

Corequisites: OTA 1021, OTA 1050.

OTA 1050 – Anatomy and Pathology I for OTA

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Examines human anatomy as it relates to the field of occupational therapy. Focus is on the musculoskeletal and nervous systems, specifically structure and function of the human body when engaged in occupation. Emphasized will be the action, innervations and function of major muscles. Unique Anatomage table, model, web-based and group laboratory study will allow visualization as well as palpation of bones, muscles, joints and nerves of the human body. Analysis of functional movement using medical terminology will be introduced and related to participation in occupation. Also studied will be common diseases and pathology of the musculoskeletal system which necessitate occupational therapy intervention and treatment. Logical thinking, critical analysis, problem solving and creativity will be used to apply knowledge about common clinical conditions to dysfunction in occupation and the impact to individual, family and society. The teaching-learning process will be used with emphasis on diverse learning styles and public speaking skills with opportunities for practice. 'C' grade policy applies.

Prerequisites: BHS 1000 with a 'B-' or better, BHS 1390 with a 'C' or better, BIO 1110 with a 'C' or better, COM 1110 with a 'C' or better, MTH 1151 or MTH 1260 with a 'C' or better

Corequisites: OTA 1021, OTA 1030.

OTA 1060 – Anatomy and Pathology II for OTA**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Continues the study of human anatomy as it relates to the field of occupational therapy. Focus is on the cardiopulmonary, neurological, respiratory, endocrine, and integument systems specific to the human while engaged in occupation. Common diseases and pathology of these systems and their medical/pharmacological diagnostic and treatment procedures will be studied. Also discussed are the effects of heritable diseases and predisposing genetic conditions, pathophysiology, immunopathology, and infection. The student will work with others to discover the effects of aging, stress, pain, and inactivity on well-being. Critical thinking will be developed related to the impact of disease on occupational performance to the individual, family and society; and the use of occupation for the promotion of health/prevention of disease. Team work will be utilized to analyze the impact of disease on areas of occupation, performance skills, performance patterns, activity demands, contexts and client factors and to develop appropriate treatment planning based on this impact utilizing evidence-based practice. The teaching-learning process, interview techniques, literature review professional behavior and public speaking skills will be refined and utilized throughout. 'C' grade policy applies.

Prerequisites: BIO 1120, OTA 1021, OTA 1030, OTA 1050**Corequisites:** OTA 1141.**OTA 1141 – OTA Therapeutic Procedures I****Credit Hours: 4.00 Total Contact Hours: 9.00 Lecture Hours: 2.00 Lab Hours: 4.50 Clinical/Other Hours: 2.50**

Involves the application of basic functional anatomy and an in-depth analysis of human motion. Theories, models and frames of reference related to the biomechanical, rehabilitative and occupational performance approaches are examined. Focus is on treatment interventions related to range of motion, strength, endurance, edema control, hand-use, coordination and sensation. Treatment principles specific to orthopedic injuries, burns and surgical repairs including standard protocols and precautions will be discussed and applied. More in-depth study and application of screening/standardized assessments specific to this area will occur and the student will learn to critically analyze activity relative to occupations and the OTPF domain areas. Developed will be the ability to utilize physical agent modalities for common clinical conditions, as well as, splinting, utilization of orthotics and training in the use of prosthetics. Also emphasized will be a variety of functional activities, utilization of adaptive/assistive equipment and compensatory as well as remedial techniques, and ergonomics/return to work issues. Skills related to therapeutic use of self, professional behaviors, activity analysis, grading and adapting activity and occupation, documentation, and the use of evidence for treatment planning will be further developed. Level I fieldwork begins with biomechanical and activity focus. 'C' grade policy applies.

Prerequisites: BIO 1120, OTA 1021, OTA 1030, OTA 1050**Corequisites:** OTA 1060.**OTA 1990 – Independent Study in OTA****Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the OTA student with the opportunity for in-depth work in a selected topic with the field of occupational therapy which the student was unable to pursue to the desired degree of depth in regular course offerings. OTA students have the option of observing occupational therapy and/or writing a paper. During the first week of the term, the student meets with the chairperson and submits in writing the proposed topic of study he/she wishes to pursue either through observation or research. An OTA faculty member will be assigned to the student for continued support throughout the project.

Prerequisites: any OTA course.**OTA 1991 – Special Topics in OTA I****Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the OTA student with for in-depth work in selected topics within the field of occupational therapy which the student was unable to pursue to the desired degree of depth in regular course offerings. During the first week of the term, the student meets with the chairperson and submits the ideas for further study. Through collaboration between the program chairperson and student, a syllabus and course requirements will be developed and agreed upon. Course requirements will involve work beyond writing and research. Additional OTA faculty members may be assigned to the student for continued support throughout the project.

OTA 1992 – Special Topics in OTA II**Credit Hours: 0.00 Total Contact Hours: 0.00**

Provides the OTA student with the opportunity for in-depth work in selected topics within the field of occupational therapy which the student was unable to pursue in Special Topics in OTA I. During the first week of the term, the student meets with the chairperson and submits the ideas for further study. Through collaboration between the program chairperson and student, a syllabus and course requirements will be developed and agreed upon. Course requirements will involve work beyond writing and research. Additional OTA faculty members may be assigned to the student for continued support throughout the project. "C" grade policy applies.

Prerequisites: OTA 1991.

OTA 2130 – OTA Therapeutic Procedures II

Credit Hours: 4.00 Total Contact Hours: 7.50 Lecture Hours: 2.00 Lab Hours: 3.00 Clinical/Other Hours: 2.50

Focuses on cognitive/perceptual, neurological, rehabilitative and related frames of reference as applicable to the adult and elderly population, while also incorporating previously learned knowledge and intervention techniques to provide for the total needs of the patient. Standardized assessments and practical applications for the intervention of cognitive/perceptual and neurological dysfunctions are introduced and emphasized. Focus on traditional and modern theories related to motor control and learning for neurological dysfunction and application of the rehabilitative approach specific to this population will allow students to develop skills for treatment intervention. Specialty areas related to these theories including driver re-education, and treatment interventions for other conditions common to the adult and elderly population will be studied. Examined will be normal development, health and wellness, sexuality and continence in the aging population, as well as, ethical concerns and working with families and caregivers of elders. Regulation of public policy and reimbursement issues will be studied at more in-depth levels. Students are expected to build upon previously learned theories and knowledge regarding documentation. Therapeutic use of self, activity analysis, use of evidence for treatment to be at a proficient level. Level I Fieldwork continues with neurological focus. 'C' grade policy applies.

Prerequisites: OTA 1060, OTA 1141.

OTA 2140 – Occupational Therapy for Pediatrics

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Focuses on the role of the OTA in the provision of OT services for the pediatric population, ages 0-21. Common diagnoses / disorders and their impact on the occupational performance of children are explored. Intervention will focus on the frames of reference appropriate to this population, particularly the developmental, biomechanical, neurodevelopmental, motor learning, sensory integration / sensory processing, and visuo-cognitive frames of reference as they are applied in various contexts including, but not limited to school / community-based settings. Documentation of services across settings continues to be practiced and the student is introduced to the IEP process. Assistive technology, educational legislation and reimbursement are also emphasized. Critical thinking skills will be fostered throughout via group as well as individual case study assignments and competency testing incorporating current technology. The ability to critically analyze activity relative to areas of occupation, performance skills, performance patterns, activity demands, contexts and client factors and the interaction/significance of these areas; as well as, therapeutic use of self, professional behaviors, activity analysis, grading and adapting activity and occupation, and the use of evidence for treatment planning is expected to be developed specific to OT for this population. 'C' grade policy applies.

Prerequisites: OTA 2130

Corequisites: OTA 2151, OTA 2161.

OTA 2151 – Psychosocial Occupational Therapy

Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00

Relates occupational therapy treatment theories and intervention to psychosocial function. The diversity of the consumer will be explored, as will diagnoses, symptoms and behaviors, psychotropic medications, and specific needs for various populations. The history of occupational therapy in mental health, current treatment settings and issues, the role of the OTA, and ethical concerns will be discussed. Management, reimbursement and business aspects of practice, as well as emerging areas of practice will be studied and explored. The occupational therapy process and documentation specific to this area will be modeled and practiced. Also examined will be group process, group dynamics, group behaviors and the application of group work in the occupational therapy field. Occupational therapy treatment theories, models and frames of references will be used to establish group treatment plans. Therapeutic use of self in group leadership and understanding and facilitating group dynamics will be discussed, implemented and assessed. Students will integrate knowledge through formulating and implementing group treatment plans. Therapeutic use of self and professionalism will be fostered through reflection and assessment in final preparation for Level II Fieldwork. 'C' grade policy applies.

Prerequisites: OTA 2130, PSY 1730

Corequisites: OTA 2140, OTA 2161.

OTA 2161 – OTA Therapeutic Procedures III

Credit Hours: 2.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 1.50 Clinical/Other Hours: 2.50

Incorporates previously taught knowledge and skills to provide for the total needs of medically complex patients. Advanced activity analysis and therapeutic use of self to address multiple system dysfunction is emphasized. Specialty areas including use of assistive technology, wheelchair assessment and specialized positioning, vision rehabilitation, work in academic setting as well as other emerging areas of practice will be studied and practiced. Students are expected to build upon previously learned knowledge related to documentation, reimbursement, regulation of public policy and the business aspects of practice. Level I fieldwork continues with exposure to specialized settings of pediatrics and mental health. 'C' grade policy applies.

Prerequisites: OTA 2130

Corequisites: OTA 2140, OTA 2151.

OTA 2170 – Fieldwork I

Credit Hours: 4.00 Total Contact Hours: 18.95 Lecture Hours: 0.25 Lab Hours: 18.70

Provides an advanced clinical experience under the guidance and supervision of an occupational therapy practitioner. Students prepare for the work force by developing their level skills relating to the provision of role appropriate OT services, and demonstration of professional and ethical behavior while completing a minimum of 8 full-time hours at an assigned fieldwork site. In addition, the student will meet with the course instructor virtually one time/week where reflection and self-assessment will allow the students to begin to integrate technical and clinical knowledge and develop the clinical reasoning, professional behaviors, and therapeutic use of self necessary for entry-level work as an OTA. A "Satisfactory" grade must be achieved for the continuation in the program. "C" grade policy applies.

Prerequisites: OTA 2140, OTA 2151, OTA 2161

Corequisites: OTA 2180, OTA 2200.

OTA 2180 – Fieldwork II**Credit Hours: 4.00 Total Contact Hours: 18.95 Lecture Hours: 0.25 Lab Hours: 18.70**

Provides an advanced clinical experience under the guidance and supervision of an occupational therapy practitioner. Prepares students for the work force by developing their entry-level skills relating to the provision of role appropriate OT services, and demonstration of professional and ethical behavior while completing a minimum of 8 full-time hours at an assigned field work site. In addition, the student will meet with the course instructor one time/week where reflection and self-assessment will allow the students to fully integrate technical and clinical knowledge and develop the clinical reasoning, professional behaviors and the use of self necessary for entry-level work as an OTA. A "Satisfactory" grade must be achieved for graduation. "C" grade policy applies.

Prerequisites: OTA 2140, OTA 2151, OTA 2161**Corequisites:** OTA 2170, OTA 2200.**OTA 2200 – Capstone for Occupational Therapy Assistant** **Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides the student with opportunities to become increasingly aware of professional issues affecting the field of occupational therapy and to demonstrate their proficiency of integrating technical knowledge with core skills and abilities. Sharing of experiences from clinical practice in various occupational therapy work settings enhances knowledge. Discussion related to clinical and management experiences allows for exploration of multiple practice and management issues which will emphasize situational problem solving and ultimately encourage the establishment of life-long learning habits. The course will include an examination of the student's growth in diversity, critical thinking and writing. Promotion and performance of the OTA's role in the interdisciplinary team and to the public will be required at the proficient level. Preparation for the OTA national certification, and state licensure exams will occur. 'C' grade policy applies.

Prerequisites: OTA 2140, OTA 2151, OTA 2161**Corequisites:** OTA 2170, OTA 2180.

Operations Excellence Technology (OET)

OET 1100 – Operations Management**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the principals involved in the organization and management of a manufacturing plant. Discussion includes industrial organization, work measurement, factory cost, production planning, and personnel management.

OET 1110 – Introduction to Operations Excellence**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the principles, systems, and tools involved with operational and personal excellence. Discussion includes the habits of effectiveness, personal improvement plans, and roles in leadership, operations excellence model and organization assessment.

OET 1120 – Tools of Operations Excellence**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Provides a detailed study of the tools involved with operational excellence. Discussion includes value stream analysis, rapid improvement, problem solving, corrective action, and flow control. Other specialized topics of study include total productive maintenance, quick changeover, production preparation process (3P), process preparation (2P) and A3 Thinking.

OET 2015 – Statistics for SPC**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Covers foundational statistics which are necessary for advanced tools of operational excellence such as statistical process control and design of experiments. Discussion includes collecting and summarizing data, quantitative concepts, probability distributions, statistical decision making, and relationships between variables.

OET 2021 – Advanced Tools of Operations Excellence**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an in depth review of the quality concepts, statistical methods, and tools used today for continual improvement in processes and products in all human endeavors. Students will be introduced to the basics of the Lean Enterprise and Six Sigma. A detailed study will be undertaken in the qualitative aspects of statistical process control, fundamentals of statistics and probability, acceptance sampling, reliability, and management and planning tools.

Prerequisites: OET 2015.**OET 2120 – Quality Management Systems****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the components of a modern quality management system which encompasses the entire organization and all activities required to ensure customer satisfaction in quality cost and delivery of a product or service. The detailed requirements of ISO/QS9000, TS 16949 quality systems are explored. Technique such as Failure Mode, Effects Analysis, Measurement Systems, Quality System Assessments, Production Part Approval Process, Advanced Product Quality Planning and Control Plan are reviewed.

Prerequisites: OET 1110.**OET 2210 – Logistics and Supply Chain****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Presents an overview of logistics including: effects on information, financial, and management activities. Supply chain management concepts including: procurement, demand management, order management, and customer service. Inventory management will be explored to understand the concepts in distribution and warehouse management and materials management. Additionally, transportation and transportation management will be introduced along with international logistics.

OET 2510 – Lean Systems**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Encompasses a detailed study of the lean systems involved with driving the behaviors of operational excellence. Discussion includes daily improvement, visual management, standard follow up, and strategy deployment. There is also a special emphasis on the four disciplines of execution, which sustains the operational excellence for the long term.

Prerequisites: OET 1120.**OET 2970 – Cost Analysis and Estimating****Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Covers the latest principles and techniques for the evaluation of engineering design. Chapters 1 through 4 reviews cost analysis and its importance in engineering, labor break down, elemental calculations, material component calculations, and financial documents used to manage a budget. Chapters 7 through 11 review methods for estimating labor and material, and looks at key elements in engineering economy and the enterprise.

OET 2980 – OET Capstone

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00
Incorporates all operational excellence tools, systems, and principles applied in a project situation. Discussion includes business assessment, analysis, strategic implementation, and creating long term sustaining results in behavior and performance.

Prerequisites: OET 1110, OET 1120, OET 2510.

Paralegal/Legal Assisting (LEG)

LEG 1010 – Introduction to Paralegals and the Legal System

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Introduces the role of the paralegal within the American legal system, including an overview of the American system of law, an examination of federal and state criminal and civil courts; and appellate process. Emphasis is on ethical requirements for paralegals and practical skills necessary for this profession.

LEG 1020 – Legal Ethics

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Introduces and discusses how attorneys are regulated, what ethical rules governing lawyer conduct and how ethical rules affects paralegals. Topics include what constitutes the unauthorized practice of law, confidentiality, conflicts of interest, competency and professionalism. Emphasis is on the Ohio Code of Professional Responsibility.

LEG 1100 – Legal Research and Writing I

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Emphasizes legal research techniques; understanding when and how to use primary and secondary sources of law; and distinguishing between mandatory and persuasive law. The course includes an introduction to finding the law, analyzing the research and applying it to specific legal issues. Students will complete case briefs, an initial legal memorandum, and legal correspondence. Course is Part 1 of a two-part series in legal research and writing.

Corequisites: LEG 1100L.

LEG 1100L – Legal Research and Writing I Lab

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Accompanies LEG 1100.

LEG 1110 – Legal Research and Writing II

Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00

Continues to develop the research and writing skills utilized in Legal Research I. Emphasizes legal writing to various audiences including: the court, clients, and attorneys. Students research and write legal memoranda, letters, and an appellate brief and participate in an oral argument. This class is Part 2 of a two-part course in legal research and writing. C grade policy applies.

Prerequisites: LEG 1100

Corequisites: COM 1110, LEG 1110L.

LEG 1110L – Legal Research and Writing II Lab

Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00

Accompanies LEG 1110.

LEG 1150 – Litigation

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Introduces the process of the American adversarial judicial system, including local, state, and federal jurisdiction and venue; civil procedure, Ohio Rules of Evidence, and an overview of the paralegal's and attorney's function in the civil trial process. Students practice skills in interviewing, preparation of legal documents, and organizing materials for a civil trial.

LEG 1190 – Criminal Law

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Explores the basics of criminal law and procedures including basic constitutional law and the Ohio Criminal Code and procedures.

LEG 1200 – Family Law

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Introduces and examines legal issues relating to marriage, divorce, dissolution, marital and non-marital property rights, child custody and support, visitation and other related domestic issues. Students prepare documents for a dissolution case study.

LEG 1300 – Legal Office Management and Technology

Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00

Studies basic principles and methods used in a law office, including time/billing, electronic document production, e-discovery, calendaring/docket control, e-file court forms, controlling conflicts, contacts, organizing documents and files, and trust accounting.

LEG 2000 – Civil Procedure

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Demonstrates proficiency by integrating technical knowledge with core skills and abilities; reviews federal civil procedures such as pleadings, discovery, pretrial, and remedies in the litigation process. A case study approach is utilized. This course includes an e-portfolio assignment and an exit evaluation of critical thinking and writing. "C" grade policy applies.

Prerequisites: LEG 1110.

LEG 2050 – Real Estate Law

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Introduces law of real property and common types of real estate transactions. Students prepare deeds, perform title searches, and draft a title option.

LEG 2100 – Probate Administration

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Demonstrates knowledge of wills, trusts, estates and estate administration, taxation, testate and intestate estates, the law of descent and distribution, estate planning, and additional end of life documents. Students will draft a will and prepare basic probate estate documents for case study. "C" grade policy applies.

Prerequisites: LEG 1100

Corequisites: ACC 1010.

LEG 2200 – Debtor/Creditor/Bankruptcy

Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00

Examines the law of Debtor-Creditor relations including negotiable instruments, secured transactions, Consumer Protection laws, non-judicial and judicial collection methods; distinguishes between Chapter 7, 11, and 13 bankruptcy procedures: prepare Chapter 7 bankruptcy petition with case study. "C" grade policy applies.

Prerequisites: BUS 2100.

LEG 2250 – Administrative Law**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Examines legal framework of administrative law; differentiates between federal, state, and local administrative agencies. "C" grade policy applies.

Prerequisites: LEG 1010**Corequisites:** BUS 2100.**LEG 991 – Paralegal Legal Assisting Practicum****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

A guided work experience in which the student will be employed for a minimum of 14 hours per week over the 15 week semester term (210 hours) in a law office, business, or agency offering legal services. Each student will meet with the faculty member/Chair to discuss the internship experience for one hour per week; duties will be agreed upon by the faculty member, internship supervisors, and the students.

Prerequisites: LEG 1110, LEG 1150, Chair approval**Corequisites:** LEG 2000.

Philosophy (PHL)

PHL 1011 – Introduction to Philosophy**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces learners to the nature, subject matter, and techniques of philosophy. The course begins by defining philosophy and by introducing learners to a variety of standard philosophical tools and techniques leading to an examination of epistemology, philosophy of science, metaphysics, ethics, and political philosophy from a multicultural perspective.

PHL 1300 – Introduction to Ethics**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces the student to theories about the nature and foundations of moral judgments and applications to contemporary moral issues. This course focuses on human conduct and character, emphasizing theories of the good life, the morally good person, morally right action, as well as a critical evaluation of these theories and concepts.

Prerequisites: COM 1110.

Physical Therapist Assisting (PTA)

PTA 1000 – Fundamentals of Physical Therapy for the PTA**Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Builds the fundamentals of physical therapy practice for the PTA. The course will examine the utilization of appropriate medical terminology, documentation, and an overview of interventions in the clinical setting. Laboratory sessions will focus on application of patient positioning, bed mobility, transfers, selection and fitting of appropriate mobility devices, applied gait patterns and gait training, infection control and vital signs to specific therapeutic interventions. The acquisition of communicating in an effective and culturally sensitive manner in the clinical setting is also reinforced during laboratory sessions. 'C' grade policy applies.

Prerequisites: BHS 1000 with a 'B-' or better, BHS 1390 with a 'C' or better, BIO 1110 with a 'C' or better, COM 1110 with a 'C' or better, MTH 1260 with a 'C' or better**Corequisites:** PTA 1110, PTA 1140.**PTA 1110 – Functional Anatomy for the PTA****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Involves the study of basic functional anatomy as it relates to the field of physical therapy. Students will study descriptive terminology, osteology, arthrology, and neurology and muscle physiology. Emphasis is placed on origin, insertion, action, and innervation of major muscles along with the ligamentous integrity of peripheral joints of the human body. Common diseases of the musculoskeletal system are introduced to provide clinical relevance. Group laboratory activities will focus on visualization of bony landmarks, muscles and nerves on anatomical models and the cadaver. Palpation of bones, muscles and joints will also be emphasized during laboratory sessions. 'C' grade policy applies.

Prerequisites: BHS 1000 with a 'B-' or better, BHS 1390 with a 'C' or better, BIO 1110 with a 'C' or better, COM 1110 with a 'C' or better, MTH 1260 with a 'C' or better**Corequisites:** PTA 1000, PTA 1140.**PTA 1140 – Therapeutic Modalities for the PTA****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Educates the physical therapist assistant student in the theory and application of different types of therapeutic modalities. The course will analyze the use and application of therapeutic modalities according to current best evidence in order to support patient/client treatment and management decisions for rehabilitation, health promotion, and performance across the lifespan. Topics include: thermal modalities, cryotherapy, hydrotherapy, electrotherapy, iontophoresis, phonophoresis, ultrasound, mechanical traction, biofeedback, diathermy, massage and pneumatic compression modalities. The principles of physics employed as well as the indications, contraindications, and precautions of each modality are discussed. Laboratory activities seek to promote clinical decision making and competency in the application of the above treatment interventions by the student. 'C' grade policy applies.

Prerequisites: BHS 1000 with a 'B-' or better, BHS 1390 with a 'C' or better, BIO 1110 with a 'C' or better, COM 1110 with a 'C' or better, MTH 1260 with a 'C' or better**Corequisites:** PTA 1000, PTA 1110.**PTA 1200 – Therapeutic Exercise for the PTA****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Covers the basic concepts and principles of therapeutic exercise and foundational techniques. The course includes instruction in the areas of progressive resistive exercise, range of motion, stretching, coordination, balance, relaxation, aquatic therapy, general fitness, posture and core stabilization. A multitude of orthopedic pathologies and appropriate therapeutic exercise programs are covered and adapted for various aged patients. Case studies will be utilized to facilitate implementation of therapeutic exercise progression and to underscore the importance of evidence based practice in the clinical setting. 'C' grade policy applies.

Prerequisites: BIO 1120, PTA 1000, PTA 1110, PTA 1140**Corequisites:** PTA 1220.

PTA 1220 – Clinical Kinesiology for the PTA**Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Involves the application of basic functional anatomy to an in-depth analysis of human motion. The biomechanics of each joint will be discussed along with common orthopedic joint dysfunctions, compensatory strategies, special tests, and surgical procedures. Students will also examine the gait cycle and identify possible causes for abnormal gait. Detailed goniometry and manual muscle testing will be the focus of lab content. 'C' grade policy applies.

Prerequisites: BIO 1120, PTA 1000, PTA 1110, PTA 1140**Corequisites:** PTA 1200.**PTA 2010 – PTA Seminar I****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Prepares students for the requirements and expectations of the first clinical experience, including an orientation to the Clinical Performance Instrument utilized to assess student performance in the clinic. Students will complete a "Clinical Education Passport" to validate exposure to a variety of patients and interventions and to document completion of supplemental learning activities. A cumulative written examination is given to assess mastery of first year content. 'C' grade policy applies.

Prerequisites: PTA 1200, PTA 1220**Corequisite:** PTA 2020, PTA 2100, PTA 2120.**PTA 2020 – Clinical Application I****Credit Hours: 2.00 Total Contact Hours: 10.00 Lecture Hours: 10.00**

Provides a supervised learning experience in an outpatient or inpatient setting. The student will complete a minimum of 150 hours of clinical experience with emphasis placed on treatment interventions and data collection skills learned in the first year of the didactic program. Students are expected to maintain 50% of a full time physical therapist assistant's patient care workload with direction and supervision from the physical therapist. This course is graded S/U.

Prerequisites: BIO 1110, BIO 1120, PTA 1000, PTA 1110, PTA 1140, PTA 1200, PTA 1220**Corequisites:** PTA 2010, PTA 2100, PTA 2120.**PTA 2100 – Physical Therapy for the Medically Complex Patient****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Introduces students to a variety of topics and areas of treatment including but not limited to cardiac and pulmonary rehabilitation, women's health, diabetes, geriatrics, amputations, prosthetics, orthotics, and burn/wound care management. Laboratory activities seek to promote clinical decision making and student competency in the application of postural drainage techniques, residual limb wrapping, and sterile wound care management as related to infection control procedures. 'C' grade policy applies.

Prerequisites: PTA 1200, PTA 1220**Corequisites:** PTA 2010, PTA 2020, PTA 2120.**PTA 2120 – Functional Neurorehabilitation****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Links the structure and function of the central and peripheral nervous systems to the functional aspects of human movement. Lecture content will focus on the anatomy of the brain, spinal cord, its arterial supply, and the influences of neurological pathways on muscle tone, sensation, reflexes, coordination, and balance. Continued course content involves the application of the above knowledge to the treatment of patients with selected neurological deficits resultant from CVA, traumatic brain injury, spinal cord injury and birth. Laboratory activities will focus on instruction and competency of commonly utilized techniques by the PTA such as PNF and NDT, facilitation/inhibition, and developmental sequence and pediatric intervention. Clinical case studies will also be utilized throughout the semester to facilitate critical thinking in the selection and implementation of appropriate therapeutic interventions learned throughout the course. 'C' grade policy applies.

Prerequisites: PTA 1200, PTA 1220**Corequisites:** PTA 2010, PTA 2020, PTA 2100.**PTA 2200 – Clinical Application II****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Provides a supervised learning experience in an outpatient or inpatient setting. The student will complete a minimum of 225 hours of directed practice with emphasis placed on refinement of skills taught in the PTA curriculum. Students are expected to maintain 75% of a full time physical therapist assistant's patient care workload with the direction and supervision from the physical therapist. This course is graded S/U.

Prerequisites: PTA 2100, PTA 2120**Corequisites:** PTA 2220, PTA 2250.**PTA 2220 – Clinical Application III****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Provides a terminal full-time learning experience in an outpatient or inpatient setting. The student will complete a minimum of 225 hours of clinical experience with emphasis placed on demonstrating PTA skills at entry level competency. Students are expected to maintain 100% of a full time physical therapist assistant's patient care workload in a cost effective manner with direction and supervision from the physical therapist. This course is graded S/U.

Prerequisites: PTA 2100, PTA 2120**Corequisites:** PTA 2200, PTA 2250.**PTA 2230 – Capstone Course for the PTA** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Prepares the student clinician to transition into the healthcare workforce as a licensed physical therapist assistant. The capstone experience in PTA allows students to demonstrate their proficiency in technical knowledge with integration of core skills and abilities. This is accomplished through student participation in the Health Science Division's Cultural Competency Retreat. Students will work as interdisciplinary teams to address a complex patient diagnosis. Students will also actively prepare for the national Physical Therapist Assistant Licensure Examination through biweekly review modules to identify personal strengths and weaknesses. Other elements of the course include an e-portfolio writing assignment and the completion of selected Collegiate Assessment of Academic Proficiency tests. "C" grade policy applies.

Prerequisites: PTA 2100, PTA 2120**Corequisites:** PTA 2200, PTA 2220, PTA 2240.

PTA 2240 – PTA Seminar II**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Accompanies the terminal clinical rotations of the Physical Therapist Assistant Program. Students will complete a "Clinical Education Passport" to validate exposure to a variety of patients and interventions and to document completion of supplemental learning activities. The seminar also prepares the student for transition to entry level practice with an in depth focus on the laws and rules governing physical therapy practice in the state of Ohio, resume development, participation in mock interviews, and application for the physical therapist assistant licensure examination. "C" grade policy applies.

Prerequisites: PTA 2100, PTA 2120**Corequisites:** PTA 2200, PTA 2220, PTA 2230.**PTA 2250 – Capstone Course for the PTA** **Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Accompanies the terminal clinical rotations of the Physical Therapist Assistant Program and prepares the student clinician to transition into the healthcare workforce as a licensed physical therapist assistant. Students will complete a "Clinical Education Passport" to validate exposure to a variety of patients and interventions and to document completion of supplemental learning activities. The capstone experience in PTA allows students to demonstrate their proficiency in technical knowledge with integration of the Rhodes State College Institutional Learning Objectives (ILOs). This is accomplished through student participation in the Health Science Division's Cultural and Diversity Awareness Retreat where students will work as interdisciplinary teams to address a complex patient diagnosis. Students will also actively prepare for the national Physical Therapist Assistant Licensure Examination with in depth focus on the laws and rules governing physical therapy practice in the state of Ohio and through biweekly review modules to identify personal strengths and weaknesses. Other elements of the course include resume development, participation in mock interviews, and application for the physical therapist assistant licensure examination. 'C' grade policy applies.

Prerequisites: PTA 2100, PTA 2120**Corequisites:** PTA 2200, PTA 2220.

Physics (PHY)

PHY 1120 – Physics I**Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Introduces applied mechanical physics, which includes: Vector forces, moments, constant acceleration trajectories, friction, concepts of simple machines, rotary motion, work, power, energy, torque, simple harmonic motion, waves & sound, solid & fluid properties, heat & thermodynamics and kinetic theory of gases. Algebra-based.

Transfer: TAG, TM.**Prerequisites:** MTH 0904, MTH 0953 with a 'C' or better**Corequisites:** MTH 1210 or MTH 1370.**PHY 1120H – Physics I (Honors Component)****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** PHY 1120.**PHY 1130 – Physics II****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Introduces applied mechanical physics, which includes: Electric field potential and forces, current and magnetic field integration over continuous charge/current distribution, quantum physics, atomic physics, nuclear physics, induction and inductance, resistance-capacitance and basic circuit analysis, EMF and electric power, electromagnetic waves, Kirchoff's Law, RLC circuits, Faraday's Law, conductivity, geometric optics, diffractions, interference, polarization.

Transfer: TAG, TM.**Prerequisites:** MTH 0904, MTH 0953 with a grade of 'C' or better**Corequisites:** MTH 1210 or MTH 1370.**PHY 1130H – Physics II (Honors Component)****Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 3.00 Lab Hours: 2.00 Clinical/Other Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program**Corequisites:** PHY 1130.**PHY 1220 – Physics I - Calculus Based****Credit Hours: 5.00 Total Contact Hours: 6.00 Lecture Hours: 4.00 Lab Hours: 2.00**

Introduces calculus-based classical physics: Newton's laws, fluids, thermodynamics, waves; for students in physical sciences, mathematics, and engineering.

Corequisites: MTH 1711.**PHY 1230 – Physics II - Calculus Based****Credit Hours: 5.00 Total Contact Hours: 6.00 Lecture Hours: 4.00 Lab Hours: 2.00**

Introduces classical physics as calculus based: Newton's laws, fluids, thermodynamics, waves; for students in physical sciences, mathematics, and engineering.

Prerequisites: PHY 1220 (with a "D" or better).

Political Science (POL)

POL 1010 – Introduction to Political Science

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Provides an overview of the American political system. It explores the institutions and activities which combine to create public policy. It emphasizes political concepts and their transformation into practices which shapes the public good in areas such as justice, equality, freedom, democracy, political parties, and citizenship and their application to local, national, and international issues.

Transfer: TAG, TM

Prerequisites: COM 0990.

Practical Nursing (PNS)

PNS 1200 – Foundations of Practical Nursing

Credit Hours: 6.00 Total Contact Hours: 10.00 Lecture Hours: 3.50 Lab Hours: 2.00 Clinical/Other Hours: 4.50

Introduces students to the philosophy and the conceptual framework of the Practical Nursing Program. Students will build upon previously learned concepts of the nursing process, evidence-based practice and clinical judgement/reasoning, as well as be introduced to the fundamental concepts of nursing practice. Six major concepts are emphasized throughout the course, which include the Nursing Process, Human Development, Human Needs, Common Health Problems, Role of the Practical Nurse, and Caring Behaviors are discussed. Students are introduced to the role of the practical nurse and standards of nursing care, utilization of the nursing process for problem solving, observational assessment skills, communication techniques, effects of cultural and spiritual beliefs on health care principles of patient safety and infection control. Students will continue to build upon previously learned communication techniques, as well as develop and practice the various psycho-motor skills necessary for nursing. The nursing skills related to common health problems of medical and surgical patients are discussed. The student contributes to the nursing process in the clinical setting in order to assist the gerontological patient in meeting his/her needs. 'C' grade policy applies.

Prerequisites: BHS 2110, BHS 2120 or NSG 1990, BIO 1000 or BIO 1120.

PNS 1202 – Adult Medical-Surgical Nursing

Credit Hours: 10.00 Total Contact Hours: 16.13 Lecture Hours: 6.50 Lab Hours: 1.74 Clinical/Other Hours: 7.89

Introduces the student to common health problems and nursing care related to the function of a variety of body systems including cardiovascular, neurological, hematological, respiratory, gastrointestinal, reproductive, sensory and endocrine. Intravenous therapy concepts are introduced and explored, which includes IV therapy skills. Supervised practice in the campus laboratory and clinical learning experiences occur in a variety of health care facilities and build upon previously acquired knowledge from PNS-1201 and related courses. Knowledge of pharmacological data about medications, administration of medications, and the role of the LPN in regards to medication administration for commonly occurring health problems is emphasized. 'C' grade policy applies.

Prerequisites: PNS 1200 or NSG 1510

Corequisites: NSG 1721.

PNS 1203 – PN-Issues and Trends

Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00

Explores a variety of issues related to the role of the practical nurse and changes in health care. Issues related to reimbursement methodologies, role of the Ohio Board of Nursing and other agencies, the impaired nurse, ethical and legal issues in health care, roles of the nurse in bio-terrorism events, QSEN, leadership and delegation are explored. The student develops a resume to be used upon completion of the program. 'C' grade policy applies.

Prerequisites: PNS 1202

Corequisites: PNS 1204.

PNS 1204 – Maternal Child Nursing

Credit Hours: 5.00 Total Contact Hours: 8.25 Lecture Hours: 3.25 Lab Hours: 0.50 Clinical/Other Hours: 4.50

Introduces the student to the principles of nursing care for newborns through the developing family. Emphasis is placed on the normal processes and common gynecological problems of pregnancy. Community services for the emerging family are introduced. In addition, common health problems of children are discussed. The student continues to apply knowledge from the basic health sciences to address human needs by contributing to the nursing process. 'C' grade policy applies.

Prerequisites: PNS 1202, NSG 1721

Corequisites: PNS 1203, SOC 1010.

Project Management (PGM)

PGM 2004 – Project Management Fundamentals 1

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Introduces the subject of project management including the five project management process groups and the processes within each group, the hierarchy of projects, programs and portfolios, the purpose of project integration management and the project manager's role within it, and project scope management for agile/adaptive projects, including the use of prototypes. Students will use simulation labs in this course.

PGM 2005 – Project Management Fundamentals 2

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Continues to introduce the fundamentals of project management. Cost management, quality management, project resource management, communication management, risk management, procurement management, and project stakeholder management knowledge areas will be covered. Special considerations for agile/adaptive environments will also be included. Students will use simulation labs in this course.

Corequisites: PGM 2004.

PGM 2006 – Project Management Applications

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Introduces basic project management tools, earned value performance measurement (EVPM) systems, Gantt charts, project planning and control tools, data analysis tools, and quantitative and qualitative project management software.

Corequisites: PGM 2004, PGM 2005.

PGM 2007 – Project Lifecycle

Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00

Collaborate with a business to manage a project through the entire lifecycle. Students will act as a project manager in the development and implementation of a project using project management tools.

Corequisites: PGM 2004, PGM 2005, PGM 2006.

Psychology (PSY)

PSY 1010 – General Psychology

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides an introduction to psychology; a prerequisite to advanced courses. The emphasis of this class is on the application of the scientific method to individual behavior and thought processes. The five major theoretical perspectives discussed are physiological, behavioral, cognitive, humanistic and psychoanalytic perspectives. Topics include physiology, learning, cognition development personality, social and abnormal behavior and therapy.

Transfer: TAG, TM.

Prerequisites: Placement

Corequisites: COM 0990.

PSY 1010H – General Psychology (Honors Component)

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: PSY 1010.

PSY 1730 – Abnormal Psychology

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides the student an opportunity to study many forms of mental disorders and abnormalities. Students will be presented with the major theoretical perspectives in terms of causation and treatment of these disorders. Students will study, evaluate, and apply the following approaches: psychodynamic, humanistic, cognitive, behavioral, and biological. Included also will be the classification of personality and behavior disturbances as defined by the current edition of the Diagnostic and Statistical Manual. Additionally, examples of the current therapeutic techniques will be presented.

Transfer: TAG, TM.

Prerequisites: PSY 1010 or SOC 1010.

PSY 1730H – Abnormal Psychology (Honors Component)

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: PSY 1730.

PSY 2150 – Lifespan Psychology

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides a broad overview of development and change physiologically, psychologically, socially and cognitively from conception to death. Influences on development such as heredity, environment, culture and diversity will also be examined based on research and major psychological theories.

Transfer: TAG, TM.

Prerequisites: PSY 1010.

PSY 2150H – Lifespan Psychology (Honors Component)

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: PSY 2150.

PSY 2200 – Social Psychology

Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00

Provides an overview of the study of social psychology emphasizing how individual and social interactions influence the behaviors, thoughts, and feelings of an individual. This course balances research and application topics covering social cognition, attitude formation and change, conformity/obedience, group processes, pro-social behavior, aggression, and stereotyping/prejudice.

Transfer: TAG, TM.

Prerequisites: PSY 1010.

PSY 2301 – Educational Psychology**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Examines major theories of human development and learning, motivation, instructional strategies, assessment, and similarities and differences in learners are examined. The role of factors in the student's environment that influence student's learning and development are considered. Research literature will serve as the foundation for course exploration.

Transfer: TAG, TM.**Prerequisites:** PSY 1010.**PSY 2311 – The Brain and Human Behavior****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides students with an introduction to the biological bases of behavior through a behavioral science perspective and is a prerequisite to advanced courses in psychology. Topics include history, functional anatomy, genetics and evolution, research methods, hearing and language, motor movement, sleep/circadian rhythms, homeostasis, emotions and stress, drugs, addiction, developmental disorders, and other complex disorders and behaviors.

Prerequisites: PSY 1010.**PSY 2530 – Psychology of Personality****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces students to the psychological study of personality. Emphasis is placed on theoretical and scientific explanations for individuals' characteristic patterns of perception, thought, emotion and behavior and the different ways in which these theories are validated. The course examines both historical and modern-day approaches to the study of personality including biological, psychoanalytic, cognitive, behavioral, humanistic, social, and developmental theories.

Prerequisites: PSY 1010.

Radiography (RAD)

RAD 1210 – Principles of Imaging I**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the structure of matter, electricity, and basic physical sciences leading to the principles of x-ray production. Students will also study x-ray emission spectrums, prime factors of exposure, and radiation interactions with matter. Laboratory activities will allow students to apply radiographic principles in producing images in preparation for use in clinical situations. "C" grade policy applies.

Prerequisites: MTH 1370 Good standing in Radiographic Imaging Program.**RAD 1220 – Principles of Imaging II****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers the process of radiographic image formation and the basic factors controlling quality of the radiographic image. Students will also explore imaging informatics and PACS. "C" grade policy applies.

Prerequisites: RAD 1210**Corequisites:** Any Radiographic Imaging clinical course.**RAD 1310 – Radiographic Procedures I****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides instruction in radiographic positioning and image critique for procedures of the chest, abdomen, hand, wrist, fingers, forearm, elbow, foot, calcaneus, ankle, toes, lower leg, knee, intercondylar fossa, patella, humerus, shoulder, AC joints, clavicle, scapula, and foreign body localization. Students study basics common to all radiographic procedures and arthrology/osteology. 'C' grade policy applies.

Prerequisites: BIO 1110.**RAD 1320 – Radiographic Procedures II****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides instruction in radiographic positioning and image critique for procedures of the pelvis, hip, femur, orthoroentgenography, cervical spine, thoracic spine, lumbar spine, sacrum, coccyx, SI joints, ribs, sternum, and contrast exams of the alimentary, hepatobiliary, and urinary tracts. 'C' grade policy applies.

Prerequisites: RAD 1310**Corequisites:** Any Radiographic Imaging clinical course.**RAD 1410 – Introduction to Radiography****Credit Hours: 2.00 Total Contact Hours: 3.00 Lecture Hours: 1.00 Lab Hours: 2.00**

Prepares students for the requirements and expectations of the introductory clinical experience, including instruction in radiation protection, patient care procedures, and professional concepts for radiographers. 'C' grade policy applies.

Prerequisites: Good standing in Radiographic Imaging Program.**RAD 1510 – Clinical Education I - Radiography****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Provides a supervised learning experience in a clinical setting with emphasis on procedures of the appendicular and axial skeleton, chest, and abdomen. Students begin practical experience with principles of exposure, image critique, and other associated professional skills in actual clinical practice. Practical competencies are utilized to determine if students can safely and accurately perform radiographic procedures. "C" grade policy applies.

Prerequisites: RAD 1310, RAD 1410**Corequisites:** RAD 1320.**RAD 1520 – Clinical Education II - Radiography****Credit Hours: 4.00 Total Contact Hours: 20.00 Lecture Hours: 20.00**

Provides a supervised learning experience in a clinical setting with emphasis on procedures of the appendicular and axial skeleton. Application of principles of exposure, with emphasis on image critique, and other associated professional skills continues in this course. "C" grade policy applies.

Prerequisite: RAD 1510 or RAD 2590.**RAD 2210 – Principles of Imaging III****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Covers advanced radiographic principles including quality assurance and quality control, fluoroscopy, mobile radiography, exposure systems, and the analysis of complex exposure problems. This course also explores some of the specialized imaging modalities including computed tomography (CT), magnetic resonance imaging (MRI), ultrasonography, and DEXA. Laboratory exercises support key concepts of the subject matter. "C" grade policy applies.

Prerequisites: RAD 1220**Corequisites:** Any Radiographic Imaging Clinical course.

RAD 2220 – Radiation Biology**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Covers radiation interactions, radiosensitivity, radiation dose/response relationships, deterministic and stochastic radiation effects, radiation protection, and health physics in a lecture and laboratory format. Course discussions will also include the impact of macro- and micro-culture on radiation protection policies and practices. This course also explores nuclear medicine, PET, SPECT, radiation oncology, and emerging modalities. 'C' grade policy applies.

Prerequisites: BIO 1120, RAD 1210, RAD 2210**Corequisites:** Any Radiographic Imaging clinical course.**RAD 2310 – Radiographic Procedures III****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides instruction in radiographic positioning and image critique for procedures of the skull, facial bones, zygomatic arches, mandible, TMJs, sinuses, orbits, and nasal bones. The course also includes instruction in radiography of trauma, pediatric, geriatric, and surgical patients. Furthermore, the course provides students with a basic understanding of mammography, arthrography, urography, and interventional radiography including specialized equipment used in these exams. Students are also introduced to sectional anatomy in cadaver sections and image correlation.

Prerequisites: BIO 1120, RAD 1320**Corequisites:** Any Radiographic Imaging clinical course.**RAD 2320 – Radiographic Patient Analysis****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Presents common radiographically demonstrated pathologies and anomalies in reference to structural and functional changes in the human body. The course also provides an increased knowledge of basic pharmacology, medical emergencies, and principles of patient care. "C" grade policy applies.

Prerequisites: Any two Radiographic Imaging clinical courses, BIO 1120**Corequisites:** Any Radiographic Imaging clinical course.**RAD 2490 – Selected Topics in Radiography** **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Prepares students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities taught in the Radiographic Imaging program. Students will actively prepare for the national radiography certification exam through instructor facilitated review sessions and online review modules to identify individual strengths and weaknesses. This capstone course will include an e-portfolio assignment, a capstone project including a video and oral presentation, and participation in the Health Sciences cultural competency retreat. 'C' grade policy applies.

Prerequisites: BHS 1390, BIO 1110, BIO 1120, PSY 1010, RAD 2210, RAD 2310, RAD 2510, Good standing in Radiographic Imaging Program, or permission by department coordinator and chair.**RAD 2510 – Clinical Education III - Radiography****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Provides a supervised learning experience in a clinical setting with emphasis on procedures of the skull including paranasal sinuses and facial bones, contrast exams, and fluoroscopic procedures. Students continue growth of associated professional skills and application of knowledge from previous and current courses. Practical competencies are utilized to determine if students can safely and accurately perform radiographic procedures. "C" grade policy applies.

Prerequisites: RAD 1520 or RAD 2590.**RAD 2520 – Clinical Education IV - Radiography****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Provides a supervised learning experience in a clinical setting with emphasis on advanced exams including surgical, trauma, and computed tomography procedures. Students continue growth of associated professional skills and application of knowledge from previous and current courses. Practical competencies are utilized to determine if students can safely and accurately perform radiographic procedures. "C" grade policy applies.

Prerequisites: RAD 2510 or RAD 2590.**RAD 2590 – Clinical Education Seminar - Radiography****Credit Hours: 0.00 Total Contact Hours: 20.00 Lecture Hours: 20.00**

Provides a supervised learning experience in a clinical setting with emphasis on radiographic and fluoroscopic exams appropriate to the student's knowledge. Students continue growth of associated professional skills and application of knowledge from previous and current courses. Practical competencies are utilized to determine if students can safely and accurately perform radiographic procedures. "C" grade policy applies.

Prerequisites: Good standing in Radiographic Imaging Program
Permission of Program Coordinator/Chair.**RAD 2621 – Principles of Computed Tomography****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Covers the basic principles of computed tomography inclusive of historical evolution of CT, x-ray tube structure, detector design, scan geometry, digital imaging reconstruction, and radiation dose to the patient.

Prerequisites: Current RT(R) certification by the ARRT must be on file with program coordinator.**RAD 2622 – Computed Tomography Procedures****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Presents computed tomography procedures common in most medical imaging departments, inclusive of sectional anatomy and associated patient care.

Prerequisites: Current RT(R) certification by the ARRT must be on file with the program coordinator.**RAD 2631 – Clinical Education I - CT****Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides a supervised learning experience in a clinical setting with emphasis on computed tomography procedures common in medical imaging practice.

Prerequisites: Current RT(R) certification by the ARRT must be on file with the program coordinator.**RAD 2632 – Clinical Education II - CT****Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides a continuation of a supervised learning experience in a clinical setting with emphasis on computed tomography procedures common in medical imaging practice.

Prerequisites: Current RT(R) certification by the ARRT must be on file with the program coordinator.**RAD 2721 – Principles of Mammography****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Covers the basic principles of mammography inclusive of historical evolution of mammography, mammography equipment, quality assurance and control including MQSA, and radiation dose to the patient.

Prerequisites: Current RT(R) certification by the ARRT must be on file with program coordinator.

RAD 2722 – Mammographic Procedures**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Presents mammography procedures common in most medical imaging departments inclusive of breast anatomy, common pathologies, and associated patient care.

Prerequisites: Current RT(R) certification by the ARRT must be on file with the program coordinator.

RAD 2731 – Clinical Education I - Mammography**Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides a supervised learning experience in a clinical setting with emphasis on mammography procedures common in medical imaging practice.

Prerequisites: Current RT(R) certification by the ARRT must be on file with the program coordinator.

RAD 2732 – Clinical Education II - Mammography**Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides a continuation of a supervised learning experience in a clinical setting with emphasis on mammography procedures common in medical imaging practice.

Prerequisites: Current RT(R) certification by the ARRT must be on file with the program coordinator.

Real Estate (RST)

RST 1020 – Real Estate Practice & Appraisal**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Introduces real estate designed for those interested in entering the real estate field as a salesperson and covers the general background knowledge of real estate law terminology, practice, and procedures. This course will also cover definitions and terminology of real estate appraising, analyzing the real estate market, and explaining the appraisal process. Basic determination to an estimate of value using cost, income, and market approaches as well as the mechanics of inspecting, measuring improvements, and cost estimating will be covered.

RST 1120 – Real Estate Law & Finance**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Focuses on the areas of law pertinent to real estate sales. Emphasis is on the laws of property, agency, conveyance, zoning, licensure, and classification of types of estates. This course will also explore the financial aspects of real estate with primary consideration being toward the fundamentals of mortgage banking; sources of funds for mortgage lending; loan application procedures; processing, inspection, and appraisal of collateral; attracting new business; investing; and the effects of governmental monetary and fiscal policies.

Respiratory Care (RES)

RES 1010 – Respiratory Care Procedures I**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides an overview of the equipment and procedures which are used by entry-level respiratory care practitioners to administer floor therapy. This includes: oxygen therapy, humidity and aerosol therapy, volume expansion therapy, and bronchial hygiene therapy. "C" grade policy applies.

Corequisites: RES 1110, RES 1090.

RES 1020 – Respiratory Care Procedures II**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides an introduction of the student to care and maintenance of various artificial airways, including placement and suctioning techniques. An introduction to positive pressure ventilation will be provided, as well as the many cardiopulmonary resuscitation techniques that are used in the field of Respiratory Care. "C" grade policy applies.

Prerequisites: RES 1010, RES 1110

Corequisites: RES 1120, RES 1410.

RES 1090 – Respiratory Care Pharmacology**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Instructs Respiratory Care students in an overview of the cardiopulmonary medications covered by Ohio Law regarding the practice of Respiratory Care and focuses on the general principles of pharmacology and selected drug classifications related to the cardiac, circulatory, respiratory, endocrine, neurological, and musculoskeletal systems. "C" grade policy applies.

Corequisites: RES 1010, RES 1110.

RES 1110 – Cardiopulmonary Anatomy and Physiology**Credit Hours: 4.00 Total Contact Hours: 6.00 Lecture Hours: 2.00 Lab Hours: 4.00**

Study in depth the structure and function of the human pulmonary and cardiovascular systems, with particular implications for the respiratory care professional will be discussed. The characteristics and theories of chemical laws, theories of gas behavior, and hemodynamic principles will be thoroughly examined and explored. The basis of oxygen and carbon dioxide transport, diffusion, and gas flow within the human body will be covered, as well as basic cardiac electrocardiogram analysis and interpretation. The laboratory portion of this course will focus on hands on application and real world implications of the topics covered in lecture. Students will be permitted to explore and learn more about human pulmonary and cardiac anatomy and physiology through the use of anatomical models, interactive demonstrations, human patient simulator models, and cadavers. "C" grade policy applies.

Prerequisites: BHS 1000

Corequisites: RES 1010, RES 1090.

RES 1120 – Pulmonary Diagnostics**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Includes a survey of the many types of tests used to diagnose and treat illness in the field of respiratory care. Included will be the principles and techniques used in the measurement and interpretation of Pulmonary Function Studies. Acid-based physiology and factors determining normal and abnormal blood gases as well as interpretation and application of the results will also be covered. Hemodynamics and other types of critical care monitoring will be introduced and explained as they pertain to the critical care respiratory patient. "C" grade policy applies.

Prerequisites: RES 1010, RES 1090, RES 1110

Corequisites: RES 1020, RES 1410.

RES 1410 – Clinical Experience I**Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides clinical experience in the maintenance and safe handling of equipment and oxygen therapy, basic respiratory therapeutic procedures, patient assessment skills, collecting and gathering medical information from the electronic and hard copy patient chart, aerosol therapy, humidity therapy, lung volume expansion therapy, metered dose inhaler use, and bronchial hygiene therapy. Students will participate, as available, in equipment sterilization and disinfection procedures. A valid CPR card is required for all clinical courses. 'C' grade policy applies.

Prerequisites: RES 1010, RES 1090, RES 1110**Corequisites:** RES 1020, RES-1020L, RES 1120, RES-1120L.**RES 1420 – Clinical Experience II****Credit Hours: 2.00 Total Contact Hours: 16.00 Lecture Hours: 16.00**

Provides clinical experience in positive pressure therapy, aerosol therapy, and a variety of pulmonary function tests. Students will gain further experience with bronchial hygiene therapies, including postural drainage and chest percussion. Students will perform arterial blood gas sampling on hospital patients, and will observe/ assist with maintenance of blood gas analyzer machines. Surgery rotations for intubation experience will be provided. "C" grade policy applies.

Prerequisites: RES 1020, RES 1120, RES 1410**Corequisites:** RES 2100, RES-2100L, RES 2230.**RES 1990 – Independent Study in RES****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides the Respiratory student the opportunity for in depth work on a respiratory topic. The first week of the term, the student will meet with the chairperson and submit in writing the proposed topic of study and the plan. The chairperson or another Respiratory faculty will provide continued support throughout the project. "C" grade policy applies.

RES 2100 – Respiratory Procedures III**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides instruction in the theory and procedures with advanced respiratory care as associated with mechanical ventilation. This course will explore the various devices and monitoring techniques used in the management of ventilators. Students will also be given the opportunity to accomplish experiments simulating set-up modification, operation, and troubleshooting of various ventilators. "C" grade policy applies.

Corequisites: RES 1420, RES 2230.**RES 2200 – Respiratory Procedures IV****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Provides an in-depth study of the respiratory management of both the neonatal and pediatric patient. Emphasis will be placed on the development of the cardiorespiratory system in relation to pathologies and critical care management. Essential knowledge, skill and abilities required for the practice of respiratory care in the perinatal and pediatric specialty area will be presented. Laboratory instruction for this course will focus on the critical care equipment and therapeutic modalities required for the care of the neonatal, infant, and pediatric populations. 'C' grade policy applies.

Prerequisites: RES 2100**Corequisites:** RES 2410.**RES 2230 – Respiratory Disease****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Provides a full review clinical assessment skills and introduces Respiratory Care students to techniques used in diagnosing cardiopulmonary disease. A wide variety of lung diseases will be explored in a problem-based learning format which integrates case studies, clinical simulations and use of Human Patient Simulator. Emphasis will be placed on the basic pathologies of each disease and a review of treatment options will be discussed. "C" grade policy applies.

Prerequisites: RES 1120, RES 1410**Corequisites:** RES 1420, RES 2100, RES-2100L.**RES 2410 – Advanced Clinical Experience I****Credit Hours: 3.00 Total Contact Hours: 24.00 Lecture Hours: 24.00**

Provides advanced clinical practice in the art of patient assessment and testing that is essential to the discipline. Various clinical tests including arterial blood gas measurement, chest radiographic imaging, and cardiac and pulmonary stress testing will be provided to the student during clinical rotations to correlate findings with patient disease states and conditions. Students will take part in physician rounds, and attend physician lectures where patient case studies will be presented. Students will begin rotations in the adult critical care setting, where they will gain experience in managing artificial airways, mechanical ventilators, and hemodynamic measurement equipment. Students will also take part in rotations with department managers to gain an appreciation for the skills needed to manage a respiratory care department, while meeting quality assurance standards. 'C' grade policy applies.

Prerequisites: RES 1420, RES 2230, RES 2100**Corequisites:** RES 2200.**RES 2430 – Advanced Clinical Experience II****Credit Hours: 4.00 Total Contact Hours: 20.00 Lecture Hours: 20.00**

Provides further clinical experiences that will include continued rotations in adult critical care settings, as well as new specialty rotations in such areas as neonatal/pediatrics, sleep disorder clinics, home care, skilled nursing facilities, and HPS. Students will also gain clinical experience in the care of neonatal patients through rotations in the labor & delivery and neonatal ICU areas. The clinical experience will culminate in a preceptorship rotation in which the student gains real-world experience through management of a full work assignment, under the watchful eye of an assigned mentor. "C" grade policy applies.

Prerequisites: BHS 2100, BHS 2200, BHS 2300, RES 2410**Corequisites:** RES 2510.**RES 2500 – Respiratory Care Seminar****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Review of current best practices and evidence-based research in the field of respiratory care, with emphasis on enhancing the students' ability to critically think while solving complex patient care problems in a variety of scenarios in preparation for professional practice. A content analysis of the current NBRC Entry-Level exam will be included.

Prerequisites: RES 2200, RES 2410**Corequisites:** RES 2430, RES 2510.

RES 2510 – Respiratory Care Capstone **Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Allows students to demonstrate their proficiency by integrating technical knowledge with core skills and abilities. Study will be done of realistic clinical problems and situations with emphasis on analyzing and evaluating these problems to formulate acceptable respiratory care plans. Such care plans shall include selection of appropriate equipment, drugs, laboratory tests, equipment parameters and changes, treatment modalities and suggestions to physicians. Practice will be provided in the necessary techniques to take the NBRC clinical simulation examination. Computer simulations are an integral part of this course. The course will include an e-portfolio assignment and an exit evaluation of critical thinking and writing. "C" grade policy applies.

Prerequisites: RES 2100, RES 2410**Corequisites:** RES 2430.**RES 2610 – Polysomnography Clinical I****Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides clinical experience in an orientation to the sleep center, patient assessment, preparation, hook-up, monitoring, and education. Opportunities in stage recognition, troubleshooting, equipment preparation and disinfecting, and documentation will also be offered to the participant. A valid CPR card is required in all clinical courses. "C" grade policy applies.

Prerequisites: Current second year Respiratory Care student or currently licensed Respiratory Care Practitioner.**RES 2620 – Polysomnography Clinical II****Credit Hour: 1.00 Total Contact Hour: 5.00 Lecture Hour: 5.00**

Provides clinical experience and orientation to the sleep center, patient assessment, preparation, hook-up, monitoring, and education. Opportunities in stage recognition, troubleshooting, equipment preparation and disinfecting, and documentation will also be offered to the participant. A valid CPR card is required in all clinical courses. "C" grade policy applies.

Prerequisites: RES 2710, RES 2610**Corequisites:** RES 2720, RES 2720L.**RES 2710 – Polysomnography Technology I****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00**

Introduces the student to sleep medical technology, instrumentation set up and calibration of polysomnographic equipment, and recording and monitoring the patient during a polysomnogram. This course is the first in a two course sequence and is designed for the Respiratory Therapist wanting to enter into sleep technology. "C" grade policy applies.

Prerequisites: RES 1420, RES 2230, or currently licensed Respiratory Care Practitioner.**RES 2710L – Polysomnography Technology I Lab****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00**

Accompanies RES 2710.

RES 2720 – Polysomnography Technology II**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00**

Provides the student with an introduction to the different types of sleep studies and the purpose of each. The student will learn about a variety of sleep disorders, the symptoms of each, and pharmacologic and non-pharmacologic treatments. Scoring of Polysomnograms and sleep stages will also be discussed. "C" grade policy applies.

Prerequisites: RES 2610, RES 2710**Corequisites:** RES 2720L.**RES 2720L – Polysomnography Technology II Lab****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 2.00 Lab Hours: 3.00**

Accompanies RES 2720.

Semiconductors (SMC)

SMC 1000 – Semiconductors 101**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Covers the manufacturing of semiconductor devices. Introduces semiconductor manufacturing and testing equipment.

SMC 1100 – Vacuum and Gases**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Covers the generation and testing of gases in a vacuum. Introduces equipment used in the semiconductor process.

SMC 1200 – Introduction to Manufacturing**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Introduces print reading and part visualization from drawings, including sketching multi-view drawings and three-dimensional models, location of key features and dimensioning specifications. Students introduced to beginning concepts in geometric dimensioning and tolerancing. Instruction in using precision measurement tools including, but not limited to scales, calipers, micrometers, dial indicators, coordinate measurement machines. Students will incorporate use of computer interfaces in metrology and basic statistical process control and topics in lean manufacturing.

Sociology (SOC)

SOC 1010 – Sociology**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Introduces students to terms, concepts and theories fundamental to the discipline of sociology. It is designed to: develop the students' overall store of sociological knowledge; offer a unique approach to thinking about, studying and understanding society; and develop and enhance the students' ability to think critically. General topics include: the history of sociology; theory, and research methodology; culture; social structure; socialization; deviance and social control; social stratification; social institutions, social movements, and social change.

Transfer: TAG, TM.**Prerequisites:** Placement**Corequisites:** COM 0990.

SOC 1010H – Sociology (Honors Component)**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00**

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: SOC 1010.

SOC 1200 – Death and Dying**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Presents issues of death, dying and bereavement, as well as moral and conceptual issues that deal with the meaning and place of death in life. Topics covered will include: American attitudes toward death and dying; changing patterns of death encounters; features of the American death system including funerals and hospice; cultural differences within American society; coping with dying; life cycle issues; death related law; euthanasia and suicide.

Transfer: TM.

Prerequisites: COM 0990.

SOC 1210 – Family Sociology**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Addresses issues related to the social institution of families. Emphasis is placed on the development and changing structures of American families, and ongoing patterns of interaction within individual family units as influenced by social, political, and economic forces in the larger society. General topics to be covered will include: the multi-cultural history of the American family; family and social institutions; family and the organization of race, class and gender; love and partner selection; diversity in family forms; communication and conflict resolution; parenting; family violence and crisis; separation and divorce; and family policy and the state.

Transfer: TAG, TM.

Prerequisites: SOC 1010.

SOC 1320 – American Cultural Diversity**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces students to a sociological framework for understanding the dynamics and implications of a multicultural society. Issues addressed include the social construction of race; immigration; human diversity in culture, gender, sexual orientation, and age; race and ethnic relations; and the influence of social institutions on public perceptions of and responses to diversity. Topics will be explored from both historical and contemporary perspectives.

Transfer: TAG, TM

Prerequisites: COM 0990.

SOC 2211 – World Religions: History, Belief, and Practice**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Introduces students to the academic study of religions, including emphasis on the social-structural and cultural elements of religious systems. Key concepts to be covered will include approaches to the study of religions; the implications of particular definitions of religion; and common ideas found in many religious systems (e.g., myth, symbol, ritual). Students will also learn the history, beliefs, and practices of many religious systems. Religions to be studied include several religions commonly defined as "world religions" (including Hinduism, Buddhism, Judaism, Christianity, and Islam), as well as various ancient religions, indigenous religions, and new religious movements.

Transfer: TM.

SOC 2300 – Social Problems**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Surveys a variety of issues and perspectives surrounding the definition, evaluation, and amelioration of social problems. While its focus is on the U.S., the global context in which social problems develop is also addressed. Issues to be covered include: illness and healthcare; drugs and alcohol; problems of youth and the elderly; gender, race and class inequality; work and unemployment; urban crisis; and science and technology. The course fulfills requirements for the University of Cincinnati Addiction Studies degree, and provides a Social Science elective for non-majors.

Transfer: TAG, TM.

Prerequisites: SOC 1010.

SOC 2340 – Human Sexuality: Cross-Cultural Perspectives**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a comprehensive overview of the sociological perspective on sexual activity and attitudes, and their consequences for individuals and society across western and non-western cultures. This course examines ways in which an individual's perceptions, learning, motivation and personality, along with cultural factors such as race, ethnicity, religion and the media shape his or her or their sexual attitudes and behaviors. Topics include the cultural context of sexuality, theoretical perspectives of sexuality, research methods, sexual development, gender/sex roles, sexual orientation, sexual coercion, pornography, sexual anatomy, sexual arousal, pregnancy, STIs, love and human intimacy, and human sexuality through the life span.

Prerequisites: COM 1110.

Spanish (SPN)

SPN 1010 – Beginning Spanish Language I**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to Spanish language and culture through multiple approaches in order to develop spoken and written communication skills, listening and reading comprehension skills, and cultural awareness. This course will practice functional Spanish in basic listening and speaking situations. The focus will be on meaningful and achievable communication as per the American Council on the Teaching of Foreign Languages (ACTFL) current national standards.

Transfer: TAG.

SPN 1020 – Beginning Spanish Language II**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the second course in a series of two courses which serve as an introduction to Spanish Language and culture. Spoken and written communication skills will be developed as will listening and reading comprehension skills, and cultural awareness. This course will continue introducing and practicing functional Spanish in basic listening and speaking situations, as well as basic reading and writing. The focus will be on meaningful and achievable communication as per the American Council on the Teaching of Foreign Languages (ACTFL) current national standards.

Transfer: TAG.**Prerequisites:** SPN 1010 (with a grade of "C" or better).**SPN 2010 – Intermediate Spanish I****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the first in a series of two intermediate courses in Spanish language and culture. The course focuses on using the five skills needed to learn a language: reading, writing, speaking, culture, and listening. The course will adhere to the national communication standards as identified by the American Council on the Teaching of Foreign Languages (ACTFL).

Transfer: TAG.**Prerequisite:** SPN 1020 (with a grade of "C" or better).**SPN 2020 – Intermediate Spanish II****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides the second in a series of two intermediate courses in Spanish language and culture. The course focuses on using the five skills needed to learn a language: reading, writing, speaking, culture, and listening. The course will adhere to the national communication standards as identified by the American Council on the Teaching of Foreign Languages (ACTFL).

Transfer: TAG**Prerequisite:** SPN 2010 with a grade of C or better.

Sterile Processing (STP)

STP 1000 – Sterile Processing I**Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to the principles, techniques and issues in the surgical and sterile processing environment. Topics include, sterile technique, packaging and wrapping techniques, sterilization methods, basic surgical instruments, basic microbiology, and hospital equipment identification.

STP 1200 – Sterile Processing II**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 2.00**

Offers advanced principles of inventory control, materials management, information technology, and quality control systems integral to the Sterile Processing department in health-care facilities. Introduces specialty surgical instrumentation and patient care equipment.

Prerequisites: STP 1000**Corequisites:** STP 1207.**STP 1207 – Directed Practice For Sterile Processing****Credit Hours: 6.00 Total Contact Hours: 30.00 Lecture Hours: 30.00**

Provides 'hands on' experience in a clinical environment to assist in integration of all concepts basic to the field of Sterile Processing. Students will participate in all areas of the Sterile Processing department to include decontamination, instrument set preparation, sterilization, case cart preparation, business technologies for storage and distribution, and quality control and monitoring processes. This course meets the required hours needed for the Certified Registered Central Service Technician (CRCST) exam.

Prerequisites: STP 1000**Corequisites:** STP 1200.

Student Development Education (SDE)

SDE 1010 – First Year Experience**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides an introduction to Rhodes State College with emphasis on assessment and development of the academic, interpersonal and life management skills necessary to function within the college environment and a global society. Designed to provide experiences in which students use critical thinking to improve academic, interpersonal and intrapersonal skills related to professional behavior.

SDE 1100 – Team Sports: Volleyball**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 14.00**

Allows participation as a player in club sports, which may include women's volleyball in the Fall, women's or men's basketball in the Spring, and men's baseball, and men's golf in the Spring. No greater than six (6) credit hours may be earned for participation in club sports. No greater than four (4) credits may be earned in any single semester. Credits earned must have permission of coach. Credits earned are not counted toward graduation. This course is graded S/U.

Prerequisites: Must participate on the Barons' Volleyball team.**SDE 1110 – Team Sports: Basketball****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 14.00**

Allows participation as a player in club sports, which may include women's volleyball in the Fall, women's or men's basketball in the Spring, and men's basketball, and men's golf in the Spring. No greater than six (6) credit hours may be earned for participation in club sports. No greater than four(4) credits may be earned in any single semester. Credits earned must have permission of coach. Credits are not counted toward graduation. This course is graded S/U.

Prerequisites: Must participate on Barons' Basketball Team.**SDE 1130 – Team Sports: Baseball****Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 14.00**

Allows participation as a player in club sports, which may include women's volleyball in the Fall, women's or men's basketball in the Spring, and men's baseball, and men's golf in the Spring. No greater than six (6) credit hours may be earned for participation in club sports. No greater than four (4) credits may be earned in any single semester. Credits earned must have permission of coach. Credits earned are not counted toward graduation. This course is graded S/U.

Prerequisites: Must participate on Barons' Baseball Team.

SDE 1140 – Team Sports: Golf**Credit Hours: 2.00 Total Contact Hours: 2.00 Lecture Hours: 14.00**

Allows participation as a player in club sports, which may include women's volleyball in the Fall, women's or men's basketball in the Spring, and men's baseball and men's golf in the Spring. No greater than six (6) credit hours may be earned for participation in club sports. No greater than four (4) credits may be earned in any single semester. Credits earned must have permission of coach. Credits earned are not counted toward graduation. This course is graded S/U.

Prerequisites: Must participate on Barons' Golf Team.

Supply Chain Management (SCM)

SCM 1100 – Supply Chain Management Principles**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Concentrates on effective supply chain strategic principles for companies that operate domestically and globally with emphasis on how to plan and integrate supply chain components into a coordinated system. Students are exposed to concepts and models important in supply chain planning with emphasis on the seven principles of supply chain management.

SCM 1200 – Logistics and Transportation Management**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an overview of logistics including logistics management functions and the interrelationships among strategic support and operational logistics. Students examine the logistics functions of business involved in the managerial strategies in transportation with movement and storage of goods.

SCM 1300 – Purchasing and Negotiation**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Applies the basic principles of negotiation through the introduction and analysis of the negotiation process. It focuses on accurately identifying requirements specifications, analyzing proposals and conducting purchasing and contracting negotiations ethically and legally through compromise.

Surgical Technology (SRG)

SRG 1000 – Theory and Fundamentals**Credit Hours: 7.00 Total Contact Hours: 10.00 Lecture Hours: 4.00 Lab Hours: 6.00**

Introduces the framework and environment for the practice of Surgical Technology. Focuses on safety through the impact of sterile technique and sterilization practices, patient care, anesthesia, 'all hazards', and introduces the use of therapeutic communication, professionalism, group process, and critical thinking. Students will be introduced to basic instrumentation, surgical equipment, supplies, sutures, stapling devices, as well as the care, handling, use and assembly of instruments and equipment. During laboratory exercise, students will be introduced to the layout of the operating room suite, sterile and sub-sterile areas. Lab competencies will be assessed in aseptic technique, surgical hand preparation, gowning and gloving techniques, patient positioning, patient skin preparation, patient draping, preoperative patient care techniques to include chart review, vital signs, and intraoperative surgical case management. 'C' grade policy applies.

Corequisites: BIO 1110.

SRG 1100 – Pharmacology for Surgical Technology**Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Emphasizes the role of the surgical technologist in safe handling of drugs according to operating room policies and procedures. The student will also learn the classification of drugs, and federal and state pharmacy regulations applying to the surgical patient. Further, the student will study the complications and safety of the patient during local, regional and general anesthesia administration. Dosage calculation, life-saving drugs, and other drugs commonly used in the Operating Room (OR) will be discussed. 'C' grade policy applies.

Prerequisites: BIO 1110, SRG 1000

Corequisites: SRG 1500, SRG 1510.

SRG 1500 – Surgical Procedures I**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Presents the role of the surgical technologist in the intraoperative setting. This course emphasizes specimen care, abdominal incisions, hemostasis, exposure, catheters and drains, wound closure, surgical dressings, wound healing, tissue replacement materials, and emergency patient situations. 'C' grade policy applies.

Prerequisites: SRG 1000

Corequisites: SRG 1100, SRG 1510.

SRG 1510 – Directed Practice for Surgical Procedures I**Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Applies the knowledge and skills learned in SRG 1000 and SRG 1500 in the operating room for general surgical procedures. Underscores the principles of asepsis and patient care concepts of positioning, prepping, draping, and procedural techniques to the investigation of general surgical procedures. Maintaining the integrity, safety, and efficiency of the sterile and non-sterile areas throughout surgical procedures will be emphasized. This course is graded S/U.

Prerequisites: SRG 1000

Corequisites: SRG 1100, SRG 1500.

SRG 2100 – Surgical Procedures II**Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Covers selected operating room procedures and techniques. Discussed will be the relevant anatomy, indications for surgery, special equipment, supplies, purpose and expected outcome and possible complications for procedures in the following surgical specialties: General, Gastrointestinal, Obstetric and Gynecologic, Orthopedic, Ophthalmic, Ear/Nose/Throat, Dental/Oral/Maxillofacial, Plastic and Reconstructive and Neurological surgery. 'C' grade policy applies.

Prerequisites: SRG 1100, SRG 1500, SRG 1510

Corequisites: BIO 1400, SRG 2110.

SRG 2110 – Directed Practice for Surgical Procedures II**Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Presents a continuation of patient care in the intraoperative setting as performed by the intermediate to advanced level surgical technologist. The student will scrub independently with minimal assistance from a preceptor for surgical procedures of the following body systems: Gastrointestinal, Obstetrics, Gynecological, Orthopedic, Ophthalmic, Ear/Nose/Throat, Dental/Oral/Maxillofacial, Plastic and Reconstructive and Neurological. This course is graded S/U.

Prerequisites: SRG 1100, SRG 1500, SRG 1510

Corequisites: SRG 2100.

SRG 2200 – Surgical Technology Professional Trends**Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides a correlation between previously learned concepts and clinical application. It is designed to aid in transition from surgical technology student to entry level Surgical Technologist. Requirements for ethical and legal practice as defined by the National Association of Surgical Technologists will be reviewed and discussed. Topics discussed will be: factors that affect the student's personal life, professional relations and organizations, preparation for the national certification examination, type of health care delivery agencies, accrediting agencies and job seeking skills. 'C' grade policy applies.

Prerequisites: SRG 2100, SRG 2110**Corequisites:** SRG 2500, SRG 2510, SRG 2600.**SRG 2500 – Surgical Procedures III****Credit Hours: 4.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Presents a continuation of patient care in the intraoperative setting as performed by the intermediate- to advanced-level surgical technologist. Discussed during this course will be the relevant anatomy, indications of surgery, special equipment and supplies, purpose and expected outcome and possible complications for procedures in thoracic, cardiovascular, peripheral vascular, and procurement/transplants. The student will also be acquainted with pediatric patients and a variety of surgical procedures unique to this special group. 'C' grade policy applies.

Prerequisites: SRG 2100, SRG 2110**Corequisites:** SRG 2200, SRG 2510, SRG 2600.**SRG 2510 – Directed Practice for Surgical Procedures III****Credit Hours: 3.00 Total Contact Hours: 15.00 Lecture Hours: 15.00**

Presents a continuation of patient care in the intraoperative setting as performed by the advanced level student surgical technologist. The student will perform in the position of first scrub surgical technologist in cardiothoracic, peripheral vascular, procurement/transplants, and pediatric surgical procedures. This course is graded S/U.

Prerequisites: SRG 2100, SRG 2110**Corequisites:** SRG 2200, SRG 2500, SRG 2600.**SRG 2600 – Surgical Technology Capstone ****Credit Hour: 1.00 Total Contact Hour: 1.00 Lecture Hour: 1.00**

Provides an opportunity for the prospective graduate to demonstrate achievement of the program's learning outcomes and competencies as well as the college's general education core skills and abilities. A major component of this course will facilitate a team approach to patient care and cultural diversity through an interdisciplinary team case study project. A final electronic portfolio writing assignment will also be completed. 'C' grade policy applies.

Prerequisites: SRG 2100, SRG 2110**Corequisites:** SRG 2200, SRG 2500, SRG 2510.**Surveying (SUR)****SUR 2200 – Subdivision Design****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Provides an introduction to residential subdivision design with emphasis on general zoning and subdivision regulations (i.e., lot, street, and easement design) utilizing COGO and CADD computer programs.

Prerequisite: MET 1000.**Theater (THR)****THR 1010 – Introduction to Theatre****Credit Hours: 3.00 Total Contact Hours: 3.00 Lecture Hours: 3.00**

Provides an introduction to theatre from its origins in Ancient Greece to modern day. Students will acquire background information on various aspects of theatre ranging from acting and production to script analysis as well as an overall history of theatre arts within various cultures and eras.

Transfer: TAG, TM.**Welding (WLD)****WLD 1000 – Weld Joint Design and Preparation****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces students to the field of welding. This course is broken into three modules. It is competency based and each module must be completed before continuing on to the next. Module 1 (Safety and Joint Design) covers safety rules for the welding lab and issues such as dealing with ultraviolet rays, burns, fumes, and electrical hazards. Introduces the print symbols and terminology used in fabricating and welding basic joints that are commonly seen on blueprints. Module 2 (Welding Code/Weld Measurement/Hand Tools) introduces welding codes and standards, identification of welding flaws, and the tools used to measure aspects of the weld. Emphasizes safety protocols and proper usage of hand tools in a welding lab. Module 3 (Material Cutting/Grinding/Fabrication) explores the set-up and use of the Oxy/Fuel cutting torch, the Oxy/Fuel line cutter, Plasma Arc cutting, safety protocols, and proper use of power tools in the welding lab. Also explores how to assemble various weld joints.

WLD 1100 – Shielded Metal Arc Welding**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces students to shielded metal arc welding. This course is broken into three modules. It is competency based and each module must be completed before continuing on to the next. Module 1 (Flat and Horizontal Welding) examines the theory and practical operation of shielded metal arc welding in both a flat and horizontal welding position. Emphasizes safety protocols, machine settings, and filler metals. Module 2 (Vertical Welding) explores the theory and operation of shielded metal arc welding in a vertical welding position. Module 3 (Overhead Welding) discusses theory and operation of shielded metal arc welding. Emphasizes safety protocols and working specifically in the overhead welding position.

Corequisites: WLD 1000.

WLD 1200 – Gas Tungsten Arc Welding**Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces students to gas tungsten arc welding. This course is broken into three modules. It is competency based and each module must be completed before continuing on to the next. Module 1 (Safety and Technology) covers theory and operation of gas tungsten arc welding equipment. Emphasizes safety protocols, machine settings, and filler metals. Module 2 (Steel and Stainless Steel-Flat and Horizontal) discusses theory and operation of gas tungsten arc welding. Emphasizes safety protocols, and flat and horizontal welding positions while using mild and stainless steel. Module 3 (Steel and Stainless Steel-Vertical) covers theory and operation of gas tungsten arc welding. Emphasizes proper safety protocols and vertical welding position using mild steel and stainless steel.

Corequisites: WLD 1100.**WLD 1300 – Gas Metal Arc Welding****Credit Hours: 3.00 Total Contact Hours: 5.00 Lecture Hours: 1.00 Lab Hours: 4.00**

Introduces students to gas metal arc welding. This course is broken into two modules. It is competency based and each module must be completed before continuing on to the next. Module 1 (Flat and Horizontal) covers theory, machine settings, filler metals, and operation of gas metal arc welding. Emphasizes safety protocols, flat welding position, and horizontal welding position using mild steel. Module 2 (Vertical and Overhead Welding) presents the theory and operation of gas metal arc welding. Emphasizes safety protocols, and proper vertical welding and overhead welding positions using mild steel and aluminum.

Prerequisites: WLD 1000.**WLD 1400 – Welding Metallurgy****Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00**

Introduces students to basic metallurgy principles pertaining to the field of welding. In this course students examine the basic metallurgical properties of steel and the changes that take place during cutting and welding operations. Students develop an understanding of the problems associated with these changes and strategies on how to avoid or minimize their adverse effects. In addition, various weld defects and faults which can occur in the shop floor environment are examined. Additional topics including heat treatment, stress relief and distortion are discussed in depth.

WLD 2300 – Shielded Metal Arc Welding AWS Certification**Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Examines the theory and practical operation of shielded metal arc welding in both a flat and horizontal welding position. Emphasizes safety protocols, machine settings, and filler metals. Provides students with directed practice required to pass the American Welding Society certification in shielded metal arc welding.

Prerequisites: WLD 1000, WLD 1100, WLD 1400.**WLD 2400 – Gas Tungsten Arc Welding AWS Certification****Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Discusses theory and operation of gas tungsten arc welding. Emphasizes safety protocols, and flat and horizontal welding positions while using mild and stainless steel. Provides students with directed practice required to pass the American Welding Society certification gas tungsten arc welding.

Prerequisites: WLD 1000, WLD 1200, WLD 1400.**WLD 2500 – Gas Metal Arc Welding AWS Certification****Credit Hours: 2.00 Total Contact Hours: 4.00 Lecture Hours: 4.00**

Covers theory, machine settings, filler metals, and operation of gas metal arc welding. Emphasizes safety protocols, flat welding position, and horizontal welding position using mild steel. Provides students with directed practice required to pass the American Welding Society certification in gas metal arc welding.

Prerequisites: WLD 1000, WLD 1300, WLD 1400.

CENTER FOR DISTANCE AND INNOVATIVE LEARNING

Jean A. Wisuri, MA, **Chair**

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Office: 151A SCI

With Rhodes State College's online offerings, students can work towards earning a certificate or degree in a way that's tailored to their goals and busy schedule. Experienced Rhodes State faculty deliver online courses utilizing Canvas, an industry-leading Learning Management System (LMS) that engages students in a dynamic and collaborative learning environment that supports achievement. Canvas facilitates online quizzes, discussion boards, videos, student/instructor feedback, and more. Students are a part of a community of learners when enrolled in online courses at Rhodes State College, and faculty support them every step of the way.

Online learners should have access to and be comfortable with using a computer and the internet and also be highly motivated, organized, and self-directed. Online courses **are not easier than traditional courses**, just more flexible, and students spend the same amount of time completing an online course as a traditionally structured course.

Online vs. Hybrid/Blended courses – two different types of delivery

Online courses provide flexibility to learn at home, work, or anywhere with internet access. All the content needed to complete your courses is available to you online, through Canvas, without stepping foot on campus. You can buy any required textbooks through the College's online bookstore.

Note: Some online courses may require proctored exams. Check the course syllabus for more information.

Hybrid/Blended courses combine the best features of **face-to-face classroom instruction and instruction online**. Students are expected to alternately attend regularly scheduled course or lab periods **on campus** and to have the motivation to study and complete coursework **online**. Online coursework may consist of video lectures, podcasts, or self-directed instruction. Specific information regarding the online course content is given to students during the scheduled class period.

Note: Some hybrid/blended courses may require proctored exams. Check the course syllabus for more information.

Note: Some classes may choose to use a hyflex delivery. This modality allows a student to choose to attend the class on campus or to join virtually.

Online vs. Hybrid/Blended certificates and degrees– two flexible ways to complete your education

Online certificates and programs provide flexibility to learn at home, work, or anywhere you are with internet access. All the content students need to complete a certificate or degree is available to online, through Canvas, without stepping foot on campus. Online certificates and degrees provide the most flexibility for completing educational goals.

Hybrid/Blended certificates and degrees provides the option of having some courses on-campus and other courses online. They take advantage of the best features of both face-to-face and online learning.

General Information

Attendance. Although distance education courses offer students the option of completing most of their coursework off-campus, attendance

will be tracked as an indication of progress. This means that all students must be actively working on all currently enrolled courses. Assignments must be turned in on time, and regular contact with the instructor is also required. Weekly progress on course assignments and projects is needed to gain an understanding of the course's content and to demonstrate required competencies satisfactorily. Lack of progress will negatively impact the earned grade and, if flagrant, could result in a grade of "E." Current information regarding distance education courses can be found at The Center for Distance and Innovative Learning website.

For More Information

For more information regarding online courses and programs, contact the Center for Distance and Innovative Learning at cdil@RhodesState.edu or (419) 995-8008.

Technical Requirements and Skills

To be successful online, students need the ability to:

- use Windows operating system or Macintosh operating system.
- use a web browser (such as Firefox or Google Chrome);
- use word processing software;
- download and upload files;
- manage files and folders;
- download software.

Recommended Computer Specifications

Student's computer should meet the minimum suggested specifications:

- Windows 7+ or Macintosh OS X 10.10;
- 2.5 GHz Processor;
- 8 GB RAM;
- Graphics Card: 1 GB GPU with 29 GB/s Bandwidth and DirectX 11 compliant;
- A high-speed Internet connection (minimum of 512kbps);
- Webcam and microphone;
- Android and iOS both support the two most recent versions of their respective operating systems.

Minimum Software Requirements:

Student's computer should meet the minimum software requirements:

- Latest version of Mozilla Firefox or Google Chrome

Note: Microsoft Office (Word, Excel, PowerPoint) is used by all faculty on campus and is required for select courses/programs. Please see your course syllabus for course-specific technology requirements.

You're all set, now check out the online certificates and degrees that can get you where you want to go!

Available Online Certificates and Degrees

Online certificates and degrees provide you the flexibility to continue your education when your busy life keeps you from coming to campus and you know the importance of continuing your education.

Fully Online Certificates

- Accounting Clerk
- Business Administration
- Business Management

- Cybersecurity Fundamentals
- Digital Marketing
- Esports Management & Coaching
- Human Resource Management
- Liberal Arts
- Marketing
- Medical Coding and Billing
- Project Management
- Real Estate
- Supply Chain Management
- Tax Preparer
- Team Leadership

Fully Online Two-Year Programs

- Accounting
- Business Administration
- Human Resource
- Digital Marketing and Media
- Associate of Science with Business Concentration

For more information about online certificates and degrees, contact the CDIL at cdil@rhodesstate.edu or 419-995-8008.

TRANSFER DEGREES

Rhodes State College Transfer Degrees

Rhodes State College's Associate of Arts and Associate of Science degrees are designed to serve as the first two years of a bachelor's degree and provide maximum transferability of courses from the associate level to the bachelor's level. In selecting courses for this degree, students are strongly encouraged to consult the specific academic plan in the College catalog, the faculty advisor, and the four-year institution to which they intend to transfer to determine appropriate curriculum choices.

Business Concentration

Cara Hurd, MACC, **Chair**
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Office: 260N Science Bldg

The Business concentration is for students intending to transfer to a four-year public university in Ohio for further study in the following areas: Accounting, Finance, Economics, Management, Marketing, Human Resources, Supply Chain and others.

Further information on the Ohio Guaranteed Transfer Pathway in Business is available at:

https://www.ohiohighered.org/content/ogtp_business

The Ohio Guaranteed Transfer Pathway designation guarantees the transfer and applicability of credits but does not guarantee admission to a program. Some bachelor-degree granting business programs may be competitive, and students should check with individual institutions for their program admission requirements.

Program Learning Outcomes

Upon completion, the student will be able to:

- Develop knowledge of best practices in the four key managerial functions: 1) Planning, 2) Organizing, 3) Leading and 4) Controlling.
- Apply team leadership skills needed in an entry-level supervisory position.
- Develop the ability to be a problem-solver utilizing critical thinking skills as they apply to their chosen profession.
- Prepare written & oral communication in professional formats.
- Utilize software platforms commonly used in the business administration profession.
- Apply ethical and professional behavior while working as an individual and as part of a team.

Business Concentration

Associate of Science Degree

(Available in a Traditional and Fully On-line Format)

Structured Course Sequence (4 Semester Plan)

First Year

First Semester

COM 1110	English Composition	3
ECN 1430	Micro Economics	3

MGT 1010	Principles of Management	3
SDE 1010	First Year Experience	1
MTH 1370	College Algebra	4
Term Hours		14

Second Semester

ACC 1010	Corporate Accounting Principles	4
ECN 1410	Macro Economics	3
HST 1620	American History Since 1877	3
MTH 1611	Business Calculus	5
SOC 1010	Sociology	3
Term Hours		18

Second Year

First Semester

MKT 1010	Principles of Marketing	3
Any TAG/TM approved Science course with lab		4
MTH 1260	Statistics	3
ACC 1020	Managerial Accounting Principles	4
COM 1160	Business Communications	3
Term Hours		17

Second Semester

BIO 2820	Associate of Science Capstone	1
BUS 2100	Business Law	3
Any TAG/TM approved Science course		3-4
Any TAG/TM approved Arts & Humanities course		3
COM 2110 or COM 2213	Public Speaking or Verbal Judo	3
Term Hours		13-14
Total Hours		62-63

Pick Any Course Elective Not Used to Meet Another Requirement Listed on this Plan of Study

Arts and Humanities Electives

Code	Title	Hours
COM 2110	Public Speaking (TM/TAG)	3
HST 1011	Western Civilization I (TM/TAG)	3
HST 1012	Western Civilization II (TM/TAG)	3
HST 1610	American History to 1877 (TM/TAG)	3
HST 2510	History of Latin America	3
HST 2521	Women in World History (TM)	3
LIT 2210	Introduction to Literature (TM)	3
LIT 2215	Native American Literature (TM)	3
LIT 2227	Literature of Graphic Novels (TM)	3
LIT 2228	African-American Literature	3
LIT 2241	World Literature I	3

LIT 2242	World Literature II	3
LIT 2250	The American Short Story (TM)	3
LIT 2260	Fantasy Literature (TM/TAG)	3
LIT 2301	British Literature I (TM)	3
LIT 2310	Literature and the Holocaust (TM)	3
LIT 2450	Themes in Literature and Film (TM)	3
MUS 1010	Music Appreciation I (TM)	3
THR 1010	Introduction to Theatre (TM)	3

Science Electives

Code	Title	Hours
BIO 1090	Concepts in Biology (TM)	4
BIO 1110	Anatomy and Physiology I (TM)	4
BIO 1120	Anatomy and Physiology II (TM)	4
BIO 1210	Biology I	4
BIO 1220	Biology II	4
BIO 1400	Microbiology (TM)	4
BIO 2121	Introduction to Human Genetics (TM)	4
CHM 1110	Introductory General Chemistry (TM)	4
GLG 1000	Physical Geology (TAG)	4
GLG 1004	Historical Geology (TAG)	4
PHY 1120	Physics I (TM/TAG)	4
PHY 1130	Physics II (TM/TAG)	4

 Capstone Course

Education Concentration

Joseph Abbott, PhD, Chair

Phone: (419) 995-8856

Email: abbott.j@RhodesState.edu

Office: 145E Tech Ed Lab

The Education concentration is for the student who intends to either pursue a bachelor's degree in Education with a focus in Elementary Education P-5, Middle Childhood Education, or Adolescence to Young Adult Education (AYA) licensure at a four-year college or university. The course offerings assure that students learn the foundations of education and child development while allowing students to pursue their electives in areas that interest them. To complete the concentration, students must complete the Associate of Arts distribution requirements and 15 credit hours of courses listed in the concentration.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate the ability to communicate effectively.
- Demonstrate the ability to evaluate arguments in a logical fashion.
- Employ the methods of inquiry characteristic of natural sciences, social sciences, and the arts and humanities.
- Demonstrate understanding of our global and diverse culture and society.
- Examine the importance of engaging in our democratic society through informed citizenship.

Associate of Arts - Education Concentration

Associate of Arts

First Year

Fall		Hours
EDU 1000	Introduction to Education	3
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
MTH 1151	Quantitative Reasoning	3-4
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		16-17

Spring

EDU 1050	Introductory Child Development	3
BIO 1210	Biology I	4
or BIO 1110	or Anatomy and Physiology I	
or CHM 1110	or Introductory General Chemistry	
or PHY 1120	or Physics I	
COM 2400	Composition and Literature	3
HST 1620	American History Since 1877	3
PSY 1010	General Psychology	3
Term Hours		16

Second Year

Fall

EDU 2030	Individuals with Exceptionalities	3
BIO 1400	Microbiology	4
or BIO 1120	or Anatomy and Physiology II	
or BIO 1220	or Biology II	
or CHM 1120	or Introductory Organic and Biochemistry	
or PHY 1130	or Physics II	
CPT 2070	Educational Technology	3
HST 1011	Western Civilization I	3
or HST 1012	or Western Civilization II	
or HST 2300	or Technology and Civilization	
or HST 2510	or History of Latin America	
or HST 2521	or Women in World History	
or LIT 2310	or Literature and the Holocaust	
MUS 1010	Music Appreciation I	3
or LIT 1450	or Introduction to Film	
or THR 1010	or Introduction to Theatre	

Term Hours 16

Spring

EDU 2130	Families, Communities and Schools	3
COM 2110	Public Speaking	3
or COM 2213	or Verbal Judo	
COM 2820	 AA Capstone Course	1
PSY 2301	Educational Psychology	3

SOC 1320	American Cultural Diversity	3
Term Hours		13
Total Hours		61-62

Course Electives

Social and Behavioral Sciences (12 Credits)

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science (OTM/TAG)	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3
SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM/TAG)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (12 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3
HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America (TAG)	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3
LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (3-5 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3
MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3

MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4
BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3
COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4
Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3
Mechanical Engineering Design		
MET 1000	Engineering Graphics with AutoCAD (TAG)	3
Mechanical Engineering Technology		
MET 1020	Material Science (TAG)	3
MET 2210	Strength of Materials (TAG)	3
Marketing		

MKT 1010	Principles of Marketing (TAG)	3
Spanish		
SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
COM 2820 	AA Capstone Course	1
SDE 1010	First Year Experience	1

 Capstone Course

English Writing/Literature Concentration

Joseph Abbott, PhD, Chair

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Email: abbott.j@RhodesState.edu

Office: 145E Tech Edu Lab

The English Writing/Literature concentration is for the student who intends to transfer to a four-year college or university for further study in areas including the following: Communication, English, Pre-law, and others. To complete the concentration a student must complete the Associate of Arts distribution requirements and an additional nine credit hours of courses listed in the concentration.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate effective communication in reading and writing.
- Apply critical thinking across the disciplines.
- Demonstrate an understanding of the diversity of human culture.

English Writing/Literature Concentration

Associate of Arts Degree

Structured Course Sequence (4 Semester Plan)

First Year

Fall		Hours
LIT 2241	World Literature I	3
or LIT 2242	or World Literature II	
or LIT 2301	or British Literature I	
or LIT 2310	or Literature and the Holocaust	
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		13

Spring		Hours
COM 2400	Composition and Literature	3
HST 1620	American History Since 1877	3

MTH 1151	Quantitative Reasoning	3-4
or MTH 1260	or Statistics	
or MTH 1370	or College Algebra	
MUS 1010	Music Appreciation I	3
or LIT 1450	or Introduction to Film	
or THR 1010	or Introduction to Theatre	
PSY 1010	General Psychology	3
Term Hours		15-16

Second Year

Fall

LIT 2250	The American Short Story	3
COM 2213	Verbal Judo	3
or COM 2110	or Public Speaking	
SOC 1320	American Cultural Diversity	3
OT36 ARTS AND HUMANITIES 1		3
OT36 NATURAL SCIENCES 2, 3		4
Term Hours		16

Spring

LIT 2301	British Literature I	3
or LIT 2305	or Introduction to Shakespeare	
COM 2820 	AA Capstone Course	1
OT36 ARTS AND HUMANITIES 1		3
OT36 ARTS AND HUMANITIES 1		3
OT36 ARTS AND HUMANITIES 1		3
OT36 NATURAL SCIENCES 2, 3		3-4
Term Hours		16-17

Term Hours		16-17
Total Hours		60-62

 Capstone Course

¹ Student may select any Ohio Transfer 36 (OT 36) course from Arts and Humanities. (p. 29)

² Student may select any Ohio Transfer 36 (OT 36) course from Natural Sciences (p. 29).

³ One Laboratory Natural Science Course is Required.

Course Electives

Social and Behavioral Sciences (12 Credits)

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science (OTM/TAG)	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3

SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM/TAG)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (12 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3
HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America (TAG)	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3
LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (3-5 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3
MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3
MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4

BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3
COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4
Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3
Mechanical Engineering Design		
MET 1000	Engineering Graphics with AutoCAD (TAG)	3
Mechanical Engineering Technology		
MET 1020	Material Science (TAG)	3
MET 2210	Strength of Materials (TAG)	3
Marketing		
MKT 1010	Principles of Marketing (TAG)	3
Spanish		
SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
COM 2820	 AA Capstone Course	1
SDE 1010	First Year Experience	1

 Capstone Course

Construction Management Concentration

J. Erik Robey, BS, PE/PS, Chair

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This Construction Management concentration is designed to provide the students with an entry-level position in construction management. Construction management positions include work assignments in marketing, sales, estimating, and purchasing; field assignments include those in scheduling, cost control, quality, safety, and other items within a construction project. Successful completion will result in earning the OSHA 30-Hour Construction Safety and Health credential and the opportunity to earn the Construction Specifications Institute (CSI) Construction Documents Technologist (CDT) credential. Construction management positions nationally are projected to grow 11% by 2030 and in Northwest Ohio by 9.4%. According to the U.S. Bureau of Labor Statistics, the 2020 median salary with an associate's degree was \$54,280/year.

Program Learning Outcomes

Upon completion, the student will be able to:

- Successfully interpret construction drawings.
- Apply their growing set of skills to creatively solve technical problems.
- Accurately compute overall job material and labor costs.
- Utilize safety in all aspects of construction.

Construction Management Concentration

Associate of Science Degree

Structured Course Sequence (4 Semester Plan)

First Year

First Semester		Hours
COM 1110	English Composition	3
CET 1100	Construction Documents	3
CPT 1250	Computer Applications in the Workplace	3
MTH 1370	College Algebra	4
SOC 1010	Sociology	3
SDE 1010	First Year Experience	1
Term Hours		17

Second Semester

BIO 1210	Biology I	4
COM 1140	Technical Writing	3
HST 2300	Technology and Civilization	3
CET 2110	Planning and Scheduling	3
MTH 1430	Trigonometry	3
Term Hours		16

Second Year

First Semester

COM 2110	Public Speaking	3
HST 1610	American History to 1877	3
CHM 1110	Introductory General Chemistry	4
CET 1110	Construction Methods	3
CET 1130	Construction Drawings	3
Term Hours		16

Second Semester

COM 1200	Writing in the Sciences	3
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ECN 1410	Macro Economics	3
PSY 1010	General Psychology	3
CET 1230	Quantity Survey	3
BIO 2820	Associate of Science Capstone	1
SOC 1320	American Cultural Diversity	3

Term Hours **16**

Total Hours **65**

Capstone course

Course Electives

Social and Behavioral Sciences (12 Credits)

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3
SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (9 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3
HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3
LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (6-10 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3
MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3
MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3
COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4
Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3

Mechanical Engineering Design

MET 1000	Engineering Graphics with AutoCAD (TAG)	3
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Mechanical Engineering Technology

MET 1020	Material Science (TAG)	3
MET 2210	Strength of Materials (TAG)	3

Marketing

MKT 1010	Principles of Marketing (TAG)	3
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Spanish

SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
BIO 2820	 Associate of Science Capstone	1
SDE 1010	First Year Experience	1

 Capstone Course

History Concentration

Joseph Abbott, PhD, Chair

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Office: 145E Tech Edu Lab

The History concentration is for the student who intends to transfer to a four-year college or university for further study in areas including: History, Political Science, Pre-law, and others. To complete the concentration, a student must complete the Associate of Arts distribution requirements and an additional six credit hours of courses listed in the concentration.

Program Learning Outcomes

Upon completion, the student will be able to:

1. Demonstrate effective communication in reading and writing (Core Skill/Ability: "Writing")
2. Apply critical thinking across the disciplines. (Core Skill/Ability: "Critical Thinking")
3. Utilize technological skills and knowledge to achieve academic and work-related goals. (Core Skill/Ability: "Information Literacy")
4. Demonstrate an understanding of the diversity of human culture. (Core Skill/Ability: "Global and Diversity Awareness")
5. Synthesize quantitative data and apply mathematics to solve problems. (Core Skill/Ability: "Computational Skills")
6. Demonstrate an understanding of natural science processes and laboratory competence. (Technical Competency: "Scientific Literacy")
7. Integrate competencies 1-6 into a comprehensive research application. (Technical Competency: "Skills/Abilities Integration")
8. Demonstrate abilities that enhance professional values. (Technical Competency: "Professional Skills")

History Concentration**Associate of Arts Degree****Structured Course Sequence (4 Semester Plan)****First Year**

Fall		Hours
HST 1011 or HST 1012 or HST 1333 or HST 1334	Western Civilization I or Western Civilization II or World Civilization I or World Civilization II	3
HST 1610	American History to 1877	3
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		16

Spring		Hours
HST 1012 or HST 1011 or HST 1333 or HST 1334	Western Civilization II or Western Civilization I or World Civilization I or World Civilization II	3
HST 1620	American History Since 1877	3
COM 2400	Composition and Literature	3
MTH 1151 or MTH 1260 or MTH 1370	Quantitative Reasoning or Statistics or College Algebra	3
PSY 1010	General Psychology	3
Term Hours		15

Second Year

Fall		Hours
OT36 ARTS AND HUMANITIES ¹		3
MUS 1010 or LIT 1450 or THR 1010	Music Appreciation I or Introduction to Film or Introduction to Theatre	3
COM 2213 or COM 2110	Verbal Judo or Public Speaking	3
SOC 1320	American Cultural Diversity	3
OT36 NATURAL SCIENCES ^{2,3}		4
Term Hours		16

Spring		Hours
COM 2820 	AA Capstone Course	1
OT36 ARTS AND HUMANITIES ¹		3
OT36 ARTS AND HUMANITIES ¹		3
OT36 ARTS AND HUMANITIES ¹		3
OT36 NATURAL SCIENCES ^{2,3}		3-4
Term Hours		13-14
Total Hours		60-61

 Capstone Course

- Student may select any Ohio Transfer 36 (OT 36) course from Arts and Humanities.
- Student may select any Ohio Transfer 36 (OT 36) course from Natural Sciences. (p. 29)
- One Laboratory Natural Science Course is Required.

Course Electives**Social and Behavioral Sciences (12 Credits)**

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science (OTM/TAG)	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3
SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM/TAG)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (12 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3
HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America (TAG)	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3
LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (3-5 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3

MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3
MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4
BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3
COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4
Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3
Mechanical Engineering Design		
MET 1000	Engineering Graphics with AutoCAD (TAG)	3
Mechanical Engineering Technology		
MET 1020	Material Science (TAG)	3

MET 2210	Strength of Materials (TAG)	3
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Marketing

MKT 1010	Principles of Marketing (TAG)	3
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Spanish

SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
COM 2820	AA Capstone Course	1
SDE 1010	First Year Experience	1

Capstone Course

Pre-Health Concentration

Amanda Kuck, **Program Coordinator, Biological Sciences**

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The Pre-Health Concentration is for the student who intends to transfer to a four-year college or university for further study in areas including the following: Pre-Medical, Pre-Dental, Pre-Veterinary, and other Pre-Health degrees. To complete the concentration, a student must complete the Associate of Science distribution requirements and the additional courses listed in the concentration.

Pre-Health Concentration

Associate of Science Degree

Structured Course Sequence (4 Semester Plan)

First Year

First Semester		Hours
BIO 1110	Anatomy and Physiology I	4
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
MTH 1370	College Algebra	4
SDE 1010	First Year Experience	1

Term Hours 15

Second Semester

BIO 1120	Anatomy and Physiology II	4
COM 2400	Composition and Literature	3
HST 1620	American History Since 1877	3
MTH 1260	Statistics	3
SOC 1010	Sociology	3

Term Hours 16

Second Year

First Semester

BHS 1390	Medical Terminology	2
BIO 1400	Microbiology	4
COM 2213	Verbal Judo	3
or COM 2110	or Public Speaking	

HST 1011	Western Civilization I	3
or HST 1012	or Western Civilization II	
or HST 2300	or Technology and Civilization	
or HST 2510	or History of Latin America	
or HST 2521	or Women in World History	
or LIT 2310	or Literature and the Holocaust	
PSY 1010	General Psychology	3
AS OT36 OR TAG ELECTIVE ¹		3
Term Hours		18
Second Semester		
BIO 2820 	Associate of Science Capstone	1
SOC 1320	American Cultural Diversity	3
OT36 ARTS AND HUMANITIES ^{2,3}		3
OT36 OR TAG ELECTIVE ⁴		3
OT36 OR TAG ELECTIVE ⁴		3
Term Hours		13
Total Hours		62

 Capstone Course

- ¹ Student may select any Ohio Transfer 36 (OT 36) or Transfer Assurance Guide (TAG) course from Mathematics, Statistics, and Logic, Natural Sciences, Business, Nutrition, Electronic Engineering Technology, Geology, and Mechanical Engineering Technology. (p. 29)
- ² Student may select any Ohio Transfer 36 (OT 36) course from Arts and Humanities. (p. 29)
- ³ Student must complete Arts and Humanities courses from at least two different disciplines. (p. 29)
- ⁴ Student may select any Ohio Transfer 36 (OT 36) or Transfer Assurance Guide (TAG) course. (p. 29)

Course Electives

Social and Behavioral Sciences (12 Credits)

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3
SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (9 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3
HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3
LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (6-10 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3
MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3
MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3
COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4
Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3
Mechanical Engineering Design		
MET 1000	Engineering Graphics with AutoCAD (TAG)	3
Mechanical Engineering Technology		
MET 1020	Material Science (TAG)	3
MET 2210	Strength of Materials (TAG)	3
Marketing		
MKT 1010	Principles of Marketing (TAG)	3
Spanish		
SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
BIO 2820 	Associate of Science Capstone	1
SDE 1010	First Year Experience	1

 Capstone Course

Psychology Concentration

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The Psychology concentration is for the student who intends to either pursue a bachelor's degree in psychology or related mental health or public service discipline at a four-year college or university or to seek entry-level employment in human service settings and mental health facilities. Psychology offers a window into the way people think, feel

and behave. The Psychology curriculum is designed to ensure that students acquire the skills they need to understand human behavior and develop strong writing and critical thinking skills. To complete the concentration, students must complete the Associate of Science distribution requirements and an additional twelve credit hours of courses listed in the concentration.

Program Learning Outcomes

Upon completion, the student will be able to:

1. Demonstrates effective communication in reading and writing.
2. Applies critical thinking across the disciplines.
3. Utilizes technological skills and knowledge to achieve academic and work-related goals.
4. Demonstrates an understanding of the diversity of human culture.
5. Synthesize quantitative data and apply mathematics to solve problems.
6. Demonstrates an understanding of natural science processes and laboratory competence.
7. Integrates competencies 1-6 into a comprehensive research application.
8. Demonstrates abilities that enhance professional values

Psychology Concentration

Associate of Science Degree

Structured Course Sequence (4 Semester Plan)

First Year			Hours
First Semester			
PSY 1010	General Psychology		3
BIO 1210	Biology I		4
or CHM 1110	or Introductory General Chemistry		
COM 1110	English Composition		3
CPT 1250	Computer Applications in the Workplace		3
MTH 1260	Statistics		3
SDE 1010	First Year Experience		1
Term Hours			17
Second Semester			
COM 2400	Composition and Literature		3
MTH 1370	College Algebra		4
HST 1620	American History Since 1877		3
SOC 1010	Sociology		3
OT36 NATURAL SCIENCES 1			3-4
Term Hours			16-17
Second Year			
First Semester			
PSY 1730	Abnormal Psychology		3
PSY 2301	Educational Psychology		3
COM 2213	Verbal Judo		3
or COM 2110	or Public Speaking		

HST 1011	Western Civilization I	3
or HST 1012	or Western Civilization II	
or HST 2300	or Technology and Civilization	
or HST 2510	or History of Latin America	
or HST 2521	or Women in World History	
or LIT 2310	or Literature and the Holocaust	
SOC 1320	American Cultural Diversity	3
Term Hours		15
Second Semester		
PSY 2150	Lifespan Psychology	3
PSY 2200	Social Psychology	3
BIO 2820 	Associate of Science Capstone	1
MUS 1010	Music Appreciation I	3
or LIT 1450	or Introduction to Film	
or THR 1010	or Introduction to Theatre	
OT36 SOCIAL AND BEHAVIORAL SCIENCES ²		3
Term Hours		13
Total Hours		61-62

The Psychology concentration can be taken as an Associate of Arts (AA) or Associate of Science (AS) degree. It depends upon the amount of Mathematics credit taken. Three hours are required for the AA and six are required for the AS. See your advisor for details.

 Capstone Course

¹ Student may select any Ohio Transfer 36 (OT 36) course from Natural Sciences. (p. 29)

² Student may select any Ohio Transfer 36 (OT 36) course from Social and Behavioral Sciences. (p. 29)

Course Electives

Social and Behavioral Sciences (12 Credits)

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3
SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (9 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3

HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3
LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (6-10 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3
MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3
MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3

COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4
Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3
Mechanical Engineering Design		
MET 1000	Engineering Graphics with AutoCAD (TAG)	3
Mechanical Engineering Technology		
MET 1020	Material Science (TAG)	3
MET 2210	Strength of Materials (TAG)	3
Marketing		
MKT 1010	Principles of Marketing (TAG)	3
Spanish		
SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
BIO 2820	 Associate of Science Capstone	1
SDE 1010	First Year Experience	1

 Capstone Course

Sociology Concentration

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The Sociology concentration is for the student who intends to either pursue a bachelor's degree in sociology or related social science discipline at a four-year college or university or to seek entry-level employment working with diverse populations. Sociology is the scientific study of society and human social behavior. Sociologists analyze how groups think and interact while promoting an understanding of the effects of social categories such as sex, gender, class, race, ethnicity, and age on people's daily lives. The Sociology concentration emphasizes the development of critical and analytical thinking and writing skills. The course offerings assure that students learn the foundations of sociology while allowing students to focus their electives in areas that interest them. To complete the concentration, students must complete the

Associate of Arts distribution requirements and an additional six credit hours of courses listed in the concentration.

Program Learning Outcomes

Upon completion, the student will be able to:

- Demonstrate effective communication in reading and writing.
- Apply critical thinking across the disciplines.
- Utilize technological skills and knowledge to achieve academic and work-related goals.
- Demonstrate an understanding of the diversity of human culture.
- Synthesize quantitative data and apply mathematics to solve problems.
- Demonstrate an understanding of natural science processes and laboratory competence.
- Integrate competencies 1-6 into a comprehensive research application.
- Demonstrate abilities that enhance professional values.

Sociology Concentration

Associate of Arts Degree

Structured Course Sequence (4 Semester Plan)

First Year		Hours
Fall		
COM 1110	English Composition	3
CPT 1250	Computer Applications in the Workplace	3
MTH 1260	Statistics	3
SDE 1010	First Year Experience	1
SOC 1010	Sociology	3
Term Hours		13
Spring		
COM 2400	Composition and Literature	3
HST 1620	American History Since 1877	3
PSY 1010	General Psychology	3
SOC 1210	Family Sociology	3
OT36 NATURAL SCIENCES		4
1, 2		
Term Hours		16
Second Year		
Fall		
COM 2213	Verbal Judo	3
or COM 2110	or Public Speaking	
HST 1011	Western Civilization I	3
or HST 1012	or Western Civilization II	
or HST 2300	or Technology and Civilization	
or HST 2510	or History of Latin America	
or HST 2521	or Women in World History	
or LIT 2310	or Literature and the Holocaust	
SOC 1320	American Cultural Diversity	3
SOC 2300	Social Problems	3
OT36 NATURAL SCIENCES		3-4
1, 2		
OT36 SOCIAL AND BEHAVIORAL SCIENCES		3
3		
Term Hours		18-19

Spring

COM 2820	 AA Capstone Course	1
MUS 1010	Music Appreciation I	3
or LIT 1450	or Introduction to Film	
or THR 1010	or Introduction to Theatre	
SOC 1200	Death and Dying	3
SOC 2211	World Religions: History, Belief, and Practice	3
OT36 SOCIAL AND BEHAVIORAL SCIENCES		3
3		
Term Hours		13
Total Hours		60-61

 Capstone Course

- ¹ Student may select any Ohio Transfer 36 (OT 36) course from Natural Sciences. (p. 29)
- ² One Laboratory Natural Science Course is Required.
- ³ Student may select any Ohio Transfer 36 (OT 36) course from Social and Behavioral Sciences. (p. 29)

Course Electives

Social and Behavioral Sciences (12 Credits)

Code	Title	Hours
ANT 2411	Cultural Anthropology (TAG)	3
ECN 1410	Macro Economics (TAG)	3
ECN 1430	Micro Economics (TAG)	3
POL 1010	Introduction to Political Science (OTM/TAG)	3
PSY 1010	General Psychology (OTM/TAG)	3
PSY 1730	Abnormal Psychology (OTM/TAG)	3
PSY 2150	Lifespan Psychology (OTM/TAG)	3
PSY 2200	Social Psychology (OTM/TAG)	3
PSY 2301	Educational Psychology (OTM/TAG)	3
SOC 1010	Sociology (OTM/TAG)	3
SOC 1200	Death and Dying (OTM)	3
SOC 1210	Family Sociology (OTM/TAG)	3
SOC 1320	American Cultural Diversity (OTM/TAG)	3
SOC 2211	World Religions: History, Belief, and Practice (OTM/TAG)	3
SOC 2300	Social Problems (OTM/TAG)	3

Arts and Humanities (12 Credits)

Code	Title	Hours
COM 1801	Creative Writing: Fiction	3
COM 2110	Public Speaking (OTM/TAG)	3
HST 1011	Western Civilization I (OTM/TAG)	3
HST 1012	Western Civilization II (OTM/TAG)	3
HST 1610	American History to 1877 (OTM/TAG)	3
HST 1620	American History Since 1877 (OTM/TAG)	3
HST 2300	Technology and Civilization	3
HST 2510	History of Latin America (TAG)	3
LIT 2210	Introduction to Literature (OTM)	3
LIT 2215	Native American Literature (OTM)	3
LIT 2227	Literature of Graphic Novels (OTM)	3

LIT 2250	The American Short Story (OTM)	3
LIT 2260	Fantasy Literature (OTM/TAG)	3
LIT 2301	British Literature I (OTM)	3
LIT 2305	Introduction to Shakespeare (OTM)	3
LIT 2310	Literature and the Holocaust (OTM)	3
LIT 2450	Themes in Literature and Film (OTM)	3
PHL 1011	Introduction to Philosophy	3
THR 1010	Introduction to Theatre (OTM)	3

Mathematics (3-5 Credits)

Code	Title	Hours
MTH 1190	Finite Mathematics/Business (OTM)	3
MTH 1260	Statistics (OTM)	3
MTH 1370	College Algebra (OTM)	4
MTH 1430	Trigonometry (OTM)	3
MTH 1611	Business Calculus (OTM)	5
MTH 1711	Calculus I (OTM)	5
MTH 1721	Calculus II (OTM)	5
MTH 2660	Calculus III (OTM/TAG)	4
MTH 2670	Differential Equations (OTM/TAG)	4
MTH 2680	Elementary Linear Algebra (OTM/TAG)	4

Information Literacy (3 Credits)

Code	Title	Hours
CPT 1250	Computer Applications in the Workplace	3

Sciences (8 Credits)

Code	Title	Hours
CHM 1110	Introductory General Chemistry (OTM)	4
CHM 1120	Introductory Organic and Biochemistry (OTM)	4
PHY 1120	Physics I (OTM/TAG)	4
PHY 1130	Physics II (OTM/TAG)	4
BIO 1090	Concepts in Biology (OTM)	4
BIO 1110	Anatomy and Physiology I (OTM)	4
BIO 1120	Anatomy and Physiology II (OTM)	4
BIO 1400	Microbiology (OTM)	4
BIO 2121	Introduction to Human Genetics (OTM)	4
GLG 1000	Physical Geology (OTM/TAG)	4

English Composition and Literature (6 Credits)

Code	Title	Hours
COM 1110	English Composition (OTM)	3
COM 1140	Technical Writing (OTM)	3
COM 1160	Business Communications (OTM/TAG)	3
COM 1200	Writing in the Sciences (OTM)	3
COM 2213	Verbal Judo (OTM)	3
COM 2400	Composition and Literature (OTM)	3

Other Approved Course Electives

Code	Title	Hours
Accounting		
ACC 1010	Corporate Accounting Principles (TAG)	4
ACC 1020	Managerial Accounting Principles (TAG)	4

Medical Terminology		
BHS 1390	Medical Terminology (TAG)	2
Business		
BUS 2100	Business Law (TAG)	3
Electronic Engineering Technology		
EET 1110	Circuit Analysis I (TAG)	3
EET 1130	Electronics (TAG)	4
Human Service		
HUM 1111	Introduction to Social Work (TAG)	3
Mechanical Engineering Design		
MET 1000	Engineering Graphics with AutoCAD (TAG)	3
Mechanical Engineering Technology		
MET 1020	Material Science (TAG)	3
MET 2210	Strength of Materials (TAG)	3
Marketing		
MKT 1010	Principles of Marketing (TAG)	3
Spanish		
SPN 1010	Beginning Spanish Language I (TAG)	3
SPN 1020	Beginning Spanish Language II (TAG)	3
SPN 2010	Intermediate Spanish I (TAG)	3
SPN 2020	Intermediate Spanish II (TAG)	3

Other Requirements

Code	Title	Hours
COM 2820	 AA Capstone Course	1
SDE 1010	First Year Experience	1

 Capstone Course

Transferring to a Four-year Institution

Many students who complete the Associate of Applied Business Degree, the Associate of Applied Science Degree, Associate of Arts, Associate of Science or the Associate of Technical Studies Degree at Rhodes State College wish to pursue a bachelor's degree at a four-year institution. Students are urged to plan their academic careers carefully and in close consultation with the College's staff. Currently transfer opportunities for graduates of Rhodes State College are provided by four methods:

- Articulation Completion Agreements
- Course by Course Transfer and Evaluation
- Ohio Transfer 36
- Transfer Assurance Guides (TAG)

Articulation Completion Agreements (Bachelor Completion)

Rhodes State College has entered into agreements with a number of four-year colleges and universities by which graduates can transfer to one of those institutions to complete a baccalaureate degree. These agreements often provide two plus two transfer opportunities in specific programs, that is, the receiving institution accepts the two-year program which the student has completed at Rhodes State College as the first two years of the baccalaureate degree. The student then can complete the baccalaureate degree at the college or university. Students can

receive additional information on these agreements and the participating institutions from the Office of Academic Affairs.

Course-By-Course Transfer and Evaluation

- Students who do not take advantage of one of the Articulation Agreements can always apply for transfer to a four-year institution and have their coursework evaluated for transferability on a course-by-course basis by the receiving institution. Successful transfer of courses using this method requires careful planning on the part of the student. Although this option does not provide assurances of transferability as provided by Ohio Transfer 36 or the Articulation Agreements, it does allow flexibility for a student to select coursework that meet specific admission or program requirements of the receiving institution.
- Students can go to www.transferology.com, an online tool that will help you view program requirements, course equivalencies, and see how courses you have taken or plan to take transfer to another college or university.

University System of Ohio

Rhodes State College is proud to be a part of The University System of Ohio. Transfer Assurance Guides (TAGs) have been created for a large number of courses within the system, allowing for seamless transfer of TAG-designated general education or technical courses.

Transfer Assurance Guides

Transfer Assurance Guides (TAGs) is a statewide transfer initiative that guarantees course equivalency and applicability of pre-major/beginning major courses within the degree pathways. Pre-major or beginning major courses are called TAG courses. A TAG is an advising tool to assist Ohio university and community and technical college students planning specific majors to make course selections that will ensure comparable, compatible, and equivalent learning experiences across the state's higher-education system. Faculty teams have developed a number of area-specific TAG pathways in the arts, humanities, business, communication, education, health, mathematics, science, engineering, engineering technologies, and the social sciences.

TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisors at the institution to which a student wishes to transfer should also be consulted during the transfer process. Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged.

Each TAG approved course is identified in the Course Descriptions (p. 117) section of this catalog with TAG at the end of the course description. Students may also visit the Ohio Department of Higher Education Transfer Assurance Guide website and complete a search for all TAG courses for Rhodes State College.

Ohio Transfer 36 (formerly the Ohio Transfer Module)

While all state-assisted colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the transfer policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice

regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Department of Higher Education established a transfer clearinghouse to receive, annotate, and convey transcripts among state-assisted colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

The Ohio Department of Higher Education's Articulation and Transfer Policy established the Ohio Transfer 36, which may be a subset or the entire set of a public higher education institution's general education curriculum in Associate of Arts (AA), Associate of Science (AS) and baccalaureate degree programs. Students in applied associate degree programs may complete some individual Ohio Transfer 36 courses within their degree program or continue beyond the degree program to complete the entire Ohio Transfer 36. The Ohio Transfer 36 contains 36-40 semester of course credit in English composition (minimum of 3 semester); mathematics, statistics and logic (minimum of 3 semester); arts and humanities (minimum of 6 semester); social and behavioral sciences (minimum of 6 semester); and natural sciences (minimum of 6 semester). Oral communication, Diversity, Equity, and Inclusion (DEI), and interdisciplinary areas may be included as additional options. Additional elective hours from among these areas make up the total hours for a completed Ohio Transfer 36. Courses for the Ohio Transfer 36 should be 100- and 200-level general education courses commonly completed in the first two years of a student's course of study. Each public university and technical and community college is required to establish and maintain an approved Ohio Transfer 36.

Ohio Transfer 36 course(s) or the full module completed at one college or university will automatically meet the requirements of individual Ohio Transfer 36 course(s) or the full Ohio Transfer 36 at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Ohio Transfer 36 at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Ohio Transfer 36 portion of Institution R's general education program. Institution R, however, may have general education courses that go beyond its Ohio Transfer 36. State policy initially required that all courses in the Ohio Transfer 36 be completed to receive its benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual Ohio Transfer 36 courses on a course-by-course basis.

Additional Resources for Students

- The State of Ohio has developed a transfer credit website providing tools to help you learn more about the State's transfer initiatives. Find how your courses, experience, or credentials will transfer with the Credit Transfer Tool.
- Ohio Guaranteed Transfer Pathways (OGTP), provide a clear path to associate degree completion and then to bachelor's degree completion in a related major. By following an OGTP, you can ensure that you are taking coursework that will not only transfer but apply to your desired degree. Use the Ohio Guaranteed Transfer Pathways Search Tool to find your pathway from associate degree to bachelor's degree.

Acceptance of Transfer Credit

Transfer credit will be accepted for all successfully completed college-level courses completed in and after fall 2005 from Ohio state-assisted institutions of higher education. Students who successfully completed

Associate of Arts or Associate of Science degrees prior to fall 2005 with a 2.0 or better overall grade point average would also receive credit for all college-level courses they have passed. (See Ohio Articulation and Transfer Policy, Definition of Passing Grade, Appendix E).

Following the evaluation of an official transcript from another institution, Rhodes State will provide the student with a statement of transfer credit applicability which will include the appeals process. The process includes review of the course description, syllabus, and learning outcomes to determine a match with Rhodes State courses. Responses should be issued within 30 days of the receipt of the transcript.

Pass/fail courses, credit by examination courses, experiential learning courses, and other nontraditional credit courses that meet these conditions will also be accepted and posted to the student record. Other courses may be transferred in consultation with the Dean of the Division.

Conditions for Transfer Admission

Graduates who are considered transfer students, as defined by Integrated Postsecondary Education System (IPEDS), are students who attended a college or university following graduation from high school (or obtained a GED). Transfer students shall be admitted to a public institution of higher education in Ohio if meeting the following criteria:

- Have associate degrees conferred by Ohio public institutions.
 - Completed and approved Ohio Transfer 36.
 - Cumulative grade-point average is at least 2.0 for all previous college-level courses.
 - Met any other institutional admission criteria, such as space availability, adherence to deadlines, payment of fees, and grade-point average that are fairly and equally applied to all undergraduate students.
- a. Qualified transfer students shall be able to compete for admission to specific programs on the same basis as native students of that institution. Transfer students shall have admission priority over graduates with an out-of-state associate degree and other students with transferable and/or articulated college credit.
 - b. Associate degree holders who are considered transfer students and have not completed the Ohio Transfer 36 from an Ohio public institution of higher education are eligible for preferential consideration for admission as transfer students as long as the institution's admission criteria, such as the minimum academic standards, space availability, adherence to deadlines, payment of fees, and grade-point average, are fairly and equally applied to all undergraduate students.
 - c. In order to encourage completion of the baccalaureate degree, students who are not enrolled in or who have not earned an associate degree, but who have earned 60 semester or 90 quarter hours or more of credit toward a baccalaureate degree from an Ohio public institution of higher education with a cumulative grade-point average of at least a 2.0 for all previous college-level courses, are eligible for preferential consideration for admission as transfer students as long as the institution's admissions criteria, such as the minimum academic standards, space availability, adherence to deadlines, payment of fees, and grade-point average, are fairly and equally applied to all undergraduate students.
 - d. Students who have not earned an associate degree or who have not earned 60 semester hours of credit with a grade point average of at

least a 2.0 for all previous college-level courses will be eligible for preferential consideration for admission as transfer students.

- e. Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.

Admission to Rhodes State College does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at the institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

Responsibilities of Students

To maximize a transfer credit application, prospective transfer students must plan for their course of study to meet both the academic and non-academic requirements of the institution they wish to articulate or transfer credit as soon as possible. The student has a responsibility to investigate, collaborate with advisors, and utilize other available resources to develop a course of study plan. Students should actively seek program, degree, and transfer information; and must meet with an advisor from both the current and receiving institutions to assist in preparing a course of study that meets the academic requirements for the program/degree they plan to transfer. Students should use the various electronic course/program transfer and applicability database systems, including Ohio Transfer to Degree Guarantee web resources. The students need to select courses/programs at their current institution that satisfy requirements at the receiving institution to maximize the application of transfer credit. Specifically, students should identify early in their collegiate studies an institution and major they desire to transfer. Furthermore, students should determine if there are special requirements (such as foreign language) or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will better articulate with the receiving institution's major.

Transfer Module

Transfer Module

Ohio Transfer 36 (transfer module) is a subset or complete set of courses that students can complete to satisfy a portion of or all of the general education requirements at Ohio public colleges and universities. Transfer 36 consists of 36-40 credit hours that represent a common body of knowledge and academic skills. Students pursuing transfer should complete the required minimum hours:

- English/Oral Communication (3)
- Mathematics/Statistics/Logic (3)
- Arts & Humanities from two different disciplines (6)
- Social Sciences from two different disciplines (3)
- Natural Sciences including one lab course (6)

Students who know their interests should consult the Ohio Guaranteed Pathways.

I. English/Oral Communication (Minimum 3 Semester Hours)

Code	Title	Hours
COM 1110	English Composition	3
Select one of the following from Category II:		
COM 1140	Technical Writing	3
COM 1160	Business Communications	3
COM 1200	Writing in the Sciences	3
COM 2400	Composition and Literature	3
COM 2110	Public Speaking	3
COM 2213	Verbal Judo	3

For the AA or AS Degrees, COM 2400 Composition and Literature must be taken.

II. Mathematics, Statistics or Formal Logic (Minimum 3 Semester Hours)

Code	Title	Hours
Select one of the following:		
MTH 1190	Finite Mathematics/Business	3
MTH 1260	Statistics	3
MTH 1370	College Algebra	4
MTH 1430	Trigonometry	3
MTH 1611	Business Calculus	5
MTH 1711	Calculus I	5
MTH 1721	Calculus II	5
MTH 2660	Calculus III	4
MTH 2670	Differential Equations	4
MTH 2680	Elementary Linear Algebra	4

Additional courses may be taken from the Mathematics area to fulfill the additional hours.

III. Arts/Humanities ¹ (Minimum 6 Semester Hours)

Code	Title	Hours
Select two courses with a minimum of one course from each category below:		
Category I:		
LIT 2210	Introduction to Literature	3
LIT 2215	Native American Literature	3
LIT 2227	Literature of Graphic Novels	3
LIT 2250	The American Short Story	3
LIT 2260	Fantasy Literature	3
LIT 2301	British Literature I	3
LIT 2310	Literature and the Holocaust	3
LIT 2450	Themes in Literature and Film	3
LIT 2228	African-American Literature	3
LIT 2241	World Literature I	3
LIT 2242	World Literature II	3
MUS 1010	Music Appreciation I	3
THR 1010	Introduction to Theatre	3
Category II:		
HST 1011	Western Civilization I	3
HST 1012	Western Civilization II	3

HST 1610	American History to 1877	3
HST 1620	American History Since 1877	3
HST 2521	Women in World History	3

Additional courses may be taken from the Arts/Humanities area to fulfill the additional hours.

IV. Social Science¹ (Minimum 6 Semester Hours)

Code Title Hours

Select two courses with a minimum of one course from each category below:

Category I:		
HST 2510	History of Latin America	3
POL 1010	Introduction to Political Science	3
SOC 1010	Sociology	3
SOC 1200	Death and Dying	3
SOC 1210	Family Sociology	3
SOC 1320	American Cultural Diversity	3
SOC 2211	World Religions: History, Belief, and Practice	3
SOC 2300	Social Problems	3
Category II:		
PSY 1010	General Psychology	3
PSY 1730	Abnormal Psychology	3
PSY 2150	Lifespan Psychology	3
PSY 2200	Social Psychology	3
PSY 2301	Educational Psychology	3

Additional courses may be taken from the Social Science area to fulfill the additional hours.

V. Natural Science (Minimum 6 Semester Hours, One Lab course required)

Code	Title	Hours
Select two courses, with at least one course having a lab component:		
BIO 1090	Concepts in Biology	4
BIO 1110	Anatomy and Physiology I	4
BIO 1120	Anatomy and Physiology II	4
BIO 1210	Biology I	4
BIO 1220	Biology II	4
BIO 1400	Microbiology	4
BIO 2121	Introduction to Human Genetics	4
BIO 1000	Basic Human Structure and Function	3
CHM 1110	Introductory General Chemistry	4
CHM 1120	Introductory Organic and Biochemistry	4
PHY 1120	Physics I	4
PHY 1130	Physics II	4

Additional courses may be taken from the Natural Science area to fulfill the additional hours.

¹ Courses in Areas III and IV must be from two different disciplines.

Transferring To Rhodes State

Students transferring from another college must have official transcripts from each college attended sent to the Rhodes State College Office

of Transfer for evaluation. Faxed transcripts or transcripts sent to an individual's email will not be considered official.

According to The Ohio Articulation and Transfer Policy, transfer students shall be subject to the catalog in force at the time of their admission to the receiving institution and to any revisions that occur after its publication and prior to their enrollment. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges (e.g., financial aid, housing, registration, parking privileges, etc.) as native students based on the number of credits earned. Exceptions to this regulation may be found in the Ohio Transfer & Articulation Policy, Section III. C located on the Ohio Department of Higher Education's web site, <https://transfercredit.ohio.gov/initiatives-upd/articulation-and-transfer-policy/ohio-articulation-transfer-policy-policy>.

Transfer credit is determined by analysis of course subject content and credit hours. For any coursework completed prior to fall 2005, no course will be transferable if the letter grade is less than "C" or if the course does not apply to the curriculum of Rhodes State College. For coursework completed fall 2005 and after, no course will be transferable if the letter grade is less than "D" or if the course does not apply to the curriculum of Rhodes State College. Coursework in which the grade of "C" or higher was earned will be awarded the transfer grade of "K." Coursework in which the grade of "C-," "D+," or "D" was earned will be awarded the transfer grade of "KX." Coursework receiving the transfer grade of "KX" will not fulfill any graduation requirement or prerequisite in which the "C Grade Policy" applies. Coursework in which the grade of "D-" was earned will not transfer. Credit hours only will be accepted in transfer (no grades). Quarter hours will be accepted based on 1 quarter hour equals .66 semester hours of credit.

Residential Requirements

To earn a degree from Rhodes State College, students seeking an Associate of Applied Science (AAS), Associate of Applied Business (AAB), Associate of Arts (AA), Associate of Science (AS) or Associate of Technical Studies degree must successfully complete a minimum of 20 semester hours of applicable credit earned at Rhodes State College. (For more information on these requirements, see Graduation Requirements (p. 224).)

If transferring from an out-of-state college, please also see Ohio Residency Requirements (p. 13).

Military Students

College credit will be granted to students with military training, experience, or coursework that is recognized by the American Council of Education (ACE) and is applicable to the student's degree program at Rhodes State College. For consideration of military credits, a student must have their official United States Armed Forces transcript sent to Rhodes State College, Office of Transfer. Credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average.

- College credit will be granted to students with military training, experience, or coursework that is recognized by the American Council on Education (ACE).
- All public institutions of higher education in Ohio will use ACE Guide to the Evaluation of Educational Experiences in the Armed Services

in evaluating and awarding academic credit for military training, experience, and coursework.

- c. If the course to which the military training, experience, or coursework is equivalent fulfills a general education, major course or degree program requirement at the receiving institution, the credit should count towards graduation and meet a requirement accordingly. Otherwise, appropriate course credit, including free elective course credit, will be granted.
- d. Each public institution of higher education in Ohio will provide information on awarding of college credit for military training, experience, and coursework, which should include the number of credits awarded and the course equivalents.
- e. Credits earned via military training, experience, and coursework are transferable with public institutions of higher education in Ohio, according to the state's Transfer Module, Transfer Assurance Guides, Career-Technical Credit Transfer, and transfer policy. (See Credit System (p. 220))

Transferring from Rhodes State

It is not unusual for students to transfer to a four-year college or university once they have achieved their educational goals at Rhodes State. There are established transfer articulation agreements that allow smooth transfer for students. If a Bachelor's degree (or beyond) is a student's ultimate goal, communication with the student's academic advisor is critical. Students planning on transferring should become familiar with Transferology, a useful tool for all students planning to transfer once they have finished their program at Rhodes.

WORKFORCE DEVELOPMENT AND INNOVATION

Barb Brdicka, BS, Sr. Director, Workforce Development and Innovation
Phone: (419) 995-8426

Office: JJC 179

Rhodes State's Workforce Development and Innovation Division (WDI) provides non-credit and credit training for individuals, employers looking to upskill incumbent workers, and organizations through in-person and online courses and programs.

Training Solutions

The WDI team of workforce specialists works with employers to customize and deliver training solutions to effectively meet the challenges faced in today's fast-paced and ever-changing workforce environment. Many of the offerings prepare participants for industry-recognized credential/certification examinations. The WDI team also offers training open to all individuals. WDI's experience in developing and directing training programs for business, industry, government, and non-profit agencies makes it the single point of contact for workplace training needs.

Experiential Learning Programs: Earn and Learn, Internship, and Apprenticeship/Pre-Apprenticeship

WDI assists companies in the creation and support of Earn and Learn, Internship and Department of Labor Registered Apprenticeship programs. Rhodes State College is recognized by the Department of Labor and the State of Ohio Office of Apprenticeship as a Registered Sponsor and an Apprenticeship Ambassador. WDI works with companies to design and simplify the start-up and ongoing maintenance of all experiential learning programs.

Career Services

WDI assists workforce partners with employment needs by connecting them with Rhodes State College students. In turn, WDI assists students in finding workforce career opportunities upon graduation. WDI, in conjunction with workforce partners, assists students with interview and other skills needed for success in the hiring process.

Mitsubishi Training Center

Rhodes State College has partnered with Mitsubishi Electric Automation Inc. to establish the "Mitsubishi Training Center at Rhodes State College." The Center provides training on Mitsubishi Programmable Logical Controllers (PLCs) and Human Machine Interface (HMI) utilizing standardized Mitsubishi curriculum. Classes are taught by Mitsubishi-certified instructors. The Center brings nationally-recognized training locally.

Small Business Development Center

The Rhodes State College Small Business Development Center (SBDC) provides individual, confidential counseling and training programs for the small business person. The no-cost, confidential services link resources of higher education with resources of federal, state and local governments and the private sector.

The SBDC at Rhodes State operates in cooperation with the U.S. Small Business Administration and the Ohio Development Services Agency. The

service area includes Allen, Auglaize, Hancock, Hardin, Mercer, Paulding, Putnam and Van Wert counties.

This unique public/private partnership offers clients one-stop access to federal, state and local small business assistance programs and provides counseling and training to new and existing businesses.

Northwest Ohio Procurement Technical Assistance Center

The Rhodes State College Northwest Ohio Procurement Technical Assistant Center (PTAC) helps area businesses compete for federal, state, and local government contracts. PTAC matches local business with contract opportunities, help clients prepare bids, navigate requirements and assist clients after winning contracts at no cost to the business.

The PTAC at the College is in cooperation with the U.S. Department of Defense Logistics Agency and the Ohio Development Services Agency. The service area includes Allen, Defiance, Fulton, Hancock, Henry, Lucas, Ottawa, Paulding, Putnam, Sandusky, Van Wert, Williams, and Wood Counties.

Youth Program

WDI offers a wide range of in-person camp opportunities for youth both during the academic year and in the summer. These programs provide opportunities for youth to utilize and explore STEAM technology through project work and tours of local workforce partners' facilities. Campers learn how these STEAM disciplines can lead to careers in manufacturing, digital media, and healthcare.

Community Program

To learn about a new topic for enjoyment, WDI offers a myriad of non-credit class offerings both on-line and in-person. In-person enrichment course offerings focus on hobbies and topics that inspire life-long learning.

Courses

WDI 1000 – Lean Essentials, the Basics **4-10 Contact hours**

Introduces the definitions and objectives of lean thinking, the role of the customer, the role of leadership, discusses and offers examples of lean tools and principles.

WDI 1040 – Certified Quality Improvement Associate **30 Contact hours**

Introduces and provides practice with basic quality concepts including philosophies, teams, continuous improvement and customer relations. Prepares participants for the ASQ examination. (Cost does not include ASQ exam).

WDI 1045 – Lean Six Sigma Green Belt **30 Contact hours**

Introduces and provides practice with an overview of six sigma goals and lean concepts and tools including defining the program, defining processes Project management, collecting data, team dynamics and performance, business results for projects, measurements, analysis of data, hypothesis testing, design of experiments, implementation strategies and control strategies. (Cost does not include ASQ exam).

WDI 1060 – ISO 9001: 2015 Internal Auditor Training

16 Contact hours

Introduces the requirements of the ISO 9001: 2015 standard. Details practices and techniques to plan, conduct, report and follow-up an internal audit. An audit is completed within the class time, and an assessment and certificate are provided to participants at the end of the course.

WDI 1075 – Improving Customer Service**4 Contact hours**

Uncovers the secrets of customer services hidden within your product, service and you that unleash potential growth for your business.

WDI 1080 – Process Technology Instrumentation**15 Contact hours**

Prepares future process operators to observe, read, interpret data provided by instrumentation typically found on an operating unit and make decisions to maintain safe and economical operation of the process unit based on data.

WDI 1085 – Process Technology Equipment**10 Contact hours**

Covers many types of equipment commonly found at process industries, emphasizing equipment such as storage tanks, valves, turbines and pumps.

WDI 1090 – Basic AutoCAD**10 Contact hours**

Introduces students to basic skills, concepts and principles of engineering drawing in a hands-on format. Students use the latest version of AutoCAD to generating them and will define AutoCAD terminology, list and identify CAD applications, draw and dimension orthographic views on AutoCAD, plot orthographic views and properly format, save and move drawings via the Windows system.

WDI 1100 – Supervisor Leadership**4 Contact Hours per Session**

Promotes leadership skills in managing, motivating, communicating, resolving conflicts, prioritizing tasks, and coaching personnel. Monthly sessions cover aspects of these and other skill sets, often engaging students in interactive exercises.

WDI 1105 – Basic Manufacturing Pathway**60 Contact Hours**

Prepares students interested in pursuing a career in manufacturing or upgrading their current skill set by addressing workplace skills, applied math and continuous improvement. Recent addition of the Manufacturing Skills Standards Council (MSSC) and the Skill Boss® trainer provides hands-on training in Manufacturing Production & Processes, Quality Practices & Measurement, Workplace Safety and Maintenance Awareness. Upon completion of this course, students take tests in each of these four modules to earn nationally-recognized credentials. Students earning the West Central Ohio Manufacturing Consortium's Basic Certification receive job referrals, regular information on job openings, job fairs and other events that enhance student's opportunities for employment.

WDI 1110 – Cyber Security**4 Contact hours**

Creates and updates company IT policy, addresses IT security issues including phishing, spam and other deceptive practices. Understands how to transfer company data outside your company safely and securely. Learns to secure company IT access points.

WDI 1115 – Mitsubishi PLC Basics GX Works2**8 Contact hours**

Provides the opportunity to learn about the basics of Programmable Logic Controllers. This class is a prerequisite to the GX Works2 Programming class. PLC Hardware, Numeric Data Handling, System Addressing, Programming Software, Ladder Logic Basics are covered in this course.

WDI 1120 – Mitsubishi GX Works2 Programming**24 Contact hours**

Covers the GX Works2 Programming software and programming in ladder logic. It covers the concepts of ladder programming, as well as the features of the GX Works software. The material covered includes concepts applicable to the FX Series and Q series programmable controller families.

WDI 1125 – Mitsubishi GOT 1000 and GT Works3**24 Contact hours**

Intends to familiarize the attendee with the GOT1000 family of operator interface products and the software needed to create, configure and modify screens which can be used with PLC systems. This class will be taught using GT15 or GT16 operator interfaces, Q series or L series PLCs, and GT Works3 software suite. Because PLC Programming is not covered in this course, a working knowledge of PLC Programming prior to this class is required.

WDI 1126 – Mitsubishi GOT 2000 and GT Works3**24 Contact Hours**

Intends to familiarize the attendee with the GOT2000 family of operator interface products and the software needed to create, configure and modify screens which can be used with PLC systems. This class will be taught using GT15 or GT16 operator interfaces, Q series or L series PLCs, and GT Works3 software suite. Because PLC Programming is not covered in this course, a working knowledge of PLC Programming prior to this class is required.

WDI 1135 – Introduction to Variable Frequency Drives**16 Contact hours**

Describes the overview of the operation, the setup and the troubleshooting of a VFD using an Allen Bradley PowerFlex 70.

WDI 1140 – Ethernet for Controllogix Networks**8 Contact hours**

Examines the overview of setup, operation, maintenance and troubleshooting of an Ethernet network in a ControlLogix 5000 PLC system.

WDI 1145 – Allen Bradley PLC CONTROLLOGIX 5000 Level I**16 Contact hours**

Makes participants more effective troubleshooters on automated production equipment. The trainees will learn installation and

replacement and how to troubleshoot the PLC hardware. A focus will also be on how to diagnose processor and I/O failures, as well as how to go online to a unit.

WDI 1150 — Allen Bradley PLC CONTROLLOGIX 5000 Level II
16 Contact hours

Offers more advanced topics, such as Tags, Arrays, Data Types, I/O Forcing, PLC Project Search and additional Analog I/O and RSLinx set up. This program has limited presentation time, allowing more hands-on programming and more troubleshooting.

WDI 1155 — OSHA 30 Hour
30 Contact hours

Certifies a student for a 30-hr OSHA General Industry card. This comprehensive safety program designed for anyone involved in general industry. OSHA recommends Training Program courses as an orientation to occupational safety and health for workers covered by OSHA 29 CFR 1910.

WDI 1160 — OSHA 10 Hour
10 Contact hours

Certifies a student to obtain an OSHA 10-hour General Industry card. The program is intended to provide an entry-level worker general awareness in recognizing and preventing hazards in an industrial setting. OSHA recommends Training Program courses as an orientation to occupational safety and health for workers covered by OSHA 29 CFR 1910.

WDI 1165 — Fundamentals of Refrigeration and HVAC
62 Contact hours

Review the fundamentals of refrigeration in commercial, institutional and industrial applications. Topics include science of refrigeration, heat gain/loss, thermodynamics, refrigeration cycle, system performance, refrigerants and recycling.

WDI 1166 — Advanced Refrigeration and HVAC

62 Contact Hours

Explains cooling systems used in commercial, institutional and industrial applications. Types of equipment include reciprocating and centrifugal chillers, absorption systems, cooling towers, fans and air handlers. Topics include psychometrics, pressure-enthalpy diagrams and commercial load calculation. This course is a continuation of WDCE 1165

WDI 1167 — Fundamentals of Plumbing and Pipefitting

32 Contact Hours

Provides discussion of the specifications, applications and maintenance of pipes, fittings and valves; simple pipe calculations and template development; tools used in piping; proper valve installations and maintenance and consideration of safe working pressures for pipes and valves.

WDI 1170 — 8-Hour NFPA 70E: Electrical Safety
8 Contact hours

Explores electrical shock. Analyze shock hazard process and Arc Flash hazards. Review injuries caused by arc flash. Review lockout/tagout procedures.

WDI 1175 — 2018 National Electric Code and Application

32 Contact hours

Explores the National Electrical Code® including understanding of the many 2018 code changes. Explore ways to answer your toughest electrical code questions.

WDI 1185 — QuickBooks - Introduction
12 Contact hours

Explores the basics to get started using QuickBooks. Some topics include creating companies, using Chart of Accounts, creating lists and setting up and coordinating inventory.

WDI 1190 — QuickBooks - Intermediate
12 Contact hours

Continued progress deeper into QuickBooks. Some topics include customizing forms, working with fixed assets, credit card transactions and other account types. You also learn how to create, modify, export and print various reports and how to create graphs.

WDI 1195 — Microsoft Word Basic
9 Contact hours

Explores how to enter and edit text; save and browse documents; enhance document appearance and use various formatting options. You also create tables, insert headers and footers, proof and print documents and insert graphics in this beginner's course.

WDI 1200 — Microsoft Word Intermediate
9 Contact hours

Delves into more advanced skills in this next level of Word. Some topics include working with styles, sections and columns. You also learn how to format tables, print labels and envelopes and work with graphics, as well as templates and Web features.

WDI 1205 — Microsoft Excel Basic
12 Contact hours

Explores Excel's window components, how to use Help, to navigate worksheets and workbooks and to enter and edit text, values, formulas and pictures. You also move and copy data, learn absolute and relative references and work with ranges, rows and columns.

WDI 1210 — Microsoft Excel Intermediate
12 Contact hours

Delves deeper into Excel to work with multiple worksheets and workbooks, advanced formatting and charting techniques. You also learn worksheet auditing and protection, file sharing, merging and workbook templates.

WDI 1240 — Industrial Maintenance Program
132 Contact hours

Exposes a student courseware to online coursework in fundamental and advanced levels of electrical/electronic, industrial controls, fluid power and pneumatics and mechanical power transmission and drives. Knowledge is assessed after completion of the online coursework through a selection of hands-on labs. Participants can choose to complete select modules only or the full selection of modules available. Online coursework is self-paced. Hands-on labs are scheduled on demand.

WDI 1245 — Special Topics

120 Contact hours

Explores various special interest topics in quality, engineering technologies, health technologies, manufacturing, IT, small business development and critical incident response and prevention.

WDI 1250 – Customized Training
120 Contact hours

Request a quote for contracted training or services in the areas of quality, engineering technologies, health technologies, manufacturing, IT, small business development and critical incident response and prevention. Training and services can be customized to fit specific learning objectives, and can be delivered on-site or on our campus.

WDI 1310 – Personal Computer Basics
8 Contact hours

Discovers what makes a computer work in this workshop designed for individuals who have never turned on a computer, have little or no experience using a mouse and/or have little or no overall knowledge of computers. We teach you how to use a mouse; open and close programs; use folders and files in Windows; find saved data; use Help, Start menu, gadgets and change settings; lock and log off of the computer; and do basic Internet browsing.

WDI 1315 – Microsoft PowerPoint Basics
6 Contact hours

Learns to create new PowerPoint presentations including text, graphics, drawing tools, WordArt, tables, charts and diagrams. You also edit and format slide content and apply transition effects.

WDI 1320 – Microsoft PowerPoint Advanced
6 Contact hours

Customizes PowerPoint by modifying Quick Access Toolbar and creating macros in this basics follow-up workshop. Learn to apply themes and templates, and work with SmartArt graphics and tables. Add multimedia content and interactive elements to slides and learn about presentation distribution options, such as PDF and HTML. Lastly, learn to integrate PowerPoint with Word and Excel.

WDI 1325 – Machining Training
68 Contact hours

Learns advanced machining skills, including milling and lathing in hybrid format. Computer based training modules prepare student for labs. Labs also include drill pressing, sawing, deburring and use of hand tools. Create a Computer Numerical Control (CNC) program and implement it on a CNC mill.

WDI 1330 – Microsoft Excel Advanced
12 Contact hours

Builds on skills taught in Excel Intermediate. You will work with advanced formulas, as well as lookup functions, such as VLOOKUP, MATCH and INDEX. In addition, you will learn about data validation and database functions, such as DSUM. Participants will learn how to import and export data, and how to query external databases. Finally, learn about the analytical features of Excel, such as Goal Seek and Solver, running and recording macros, SmartArt graphics and conditional formatting with graphics.

WDI 1335 – Microsoft Word Advanced
9 Contact hours

Builds on skills taught in Word Intermediate. You will perform mail merges, create and use forms and create master documents that include a table of contents, a table of figures, footnotes, endnotes, an index, bookmarks, cross-references and web frames. Participants will also create macros, customize the ribbon and Quick Access toolbar, and work with XML documents.

WDI 1345 – Advanced Continuous Improvement
40 Contact hours

Explores an in-depth improvement process that combines Deming's Plan-Do-Check-Act cycle with a step-by-step improvement process. Quality tools are introduced for each step, practice exercises are completed and a full team improvement problem is completed during the training.

WDI 1350 – Six Sigma Black Belt
48 Contact hours

Introduces and provides practice with an overview of six sigma goals and lean concepts and tools including enterprise-wide deployment, team management, Voice of the customer, process characteristics, data collection, probability, relationships between variables, hypothesis testing, FMEA, Design of Experiments, Kaizen, Theory of Constraints, Risk analysis, sustaining improvements and Design for Six Sigma. (Cost does not include ASQ exam).

WDI 1355 – On-Line Leadership Series
9 Contact hours

Introduces the essential concepts and tools to sharpen and develop ones leadership skill set. All on-line for your convenience.

WDI 1360 – Intro to Conflict Management, Part One
1 Contact hour

Explores the types and causes of conflict, analyze the cost and expose barriers to effective conflict resolution. On-Line content.

WDI 1365 – Conflict Management Tools, Part Two
1 Contact hour

Explore barriers to effective conflict resolution, understand cooperative approaches to handling conflict, and explore strategies to minimize the costs.

WDI 1370 – Understanding Change
1 Contact Hour

Understand and evaluate the driving forces, examine psychological and emotional responses, identify sources of resistance, identify attributes that help teams cope.

WDI 1375 – Managing Change
1 Contact Hour

Understand strategies and methods to facilitate change. Learn how to develop a continuous improvement culture.

WDI 1380 – Emotional Intelligence

1 Contact hour

Understand how to use and manage your emotions, show positive influence methods, and explore the use of intrinsic motivators.

WDI 1385 - Active Listening

1 Contact hour

Understand how to effectively communicate, fully engage in the conversation and learn how to interpret what you hear.

WDI 1390 – Effective Communication

1 Contact hour

Understand communication styles and channels. Learn to recognize and manage verbal and non-verbal behaviors and how to be assertive without offending.

WDI 1395 – Diversity and Inclusion

1 Contact hour

Understand the layers of diversity and the impact of conscious and unconscious bias. Explore our perceptions and the impact on others. Learn to recognize the potential conflict in the workplace and how to foster diversity and inclusion.

WDI 1400 – Managing Generations

1 Contact hour

Understand how to recognize generational gaps, explore harmony in a multi-generational workforce and understand the needs of a telecommuting workforce.

WDI 1405 – IATF 16949:2016 Internal Auditor Training

Introduces the requirements of the IATF 16949 Automotive standard. Details and practices with examples the planning, conducting, reporting and following-up of an actual audit. A skill assessment and certificate are provided upon the completion of the course.

WDI 1410 Integrated Systems I

8 Contact Hours

Introduction to Integrated Manufacturing Systems and the related technology. Troubleshooting using a methodology that can be used on any sequencing machine. Developed for Maintenance Technicians to provide a basic understanding of how the PLC is used to control the operation of a machine.

WDI 1500 Welding Bootcamp

Coursework can be learned at your own pace and level. The course outlines the following areas: safety, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), welding symbols according to the American Welding Society, and related welding quality inspection and criteria for acceptance. This is a competency based course, meaning your performance will not be compared to other students and you will move through the course at your own pace.

West Central Ohio Manufacturing Consortium

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The West Central Ohio Manufacturing Consortium (WCOMC) is a recognized asset for area manufacturers to address their skill training needs and for area residents to develop their skills for employment in manufacturing. For manufacturers, membership in the WCOMC provides access to the records of the students who successfully complete a Manufacturing Skills Standards Council (MSSC) basic course or one of the specified certificates or degrees at Rhodes State College, assuring a skilled employee prospect for hiring. Access to this pool of students reduces a manufacturer's costs associated with hiring and training workers.

Rhodes State College and the WCOMC are currently partners with the Northwest Ohio Manufacturing Extension Partnership, which provides the products, services, and assistance that are dedicated to the productivity, growth, and global competitiveness of Ohio manufacturers. This partnership broadens the access of training and service programs to manufacturers in the region.

DIRECTORY

The directory lists current administration, faculty, and staff of the College. In addition, it includes Advisory Committee members who provide input into curriculum development and are able to help faculty and administration keep abreast of recent changes in the marketplace.

Board of Trustees

Jane Krites, Chair
Douglass Degen, Vice Chair
Sam Bassitt
Wilfred G. Ellis, M.D.
Everett "Butch" Kirk III
Ann Pohl, DNP, RN

Faculty and Staff

Please see the website for the Faculty and Staff Directory.

Advisory Committees

Advisory committees are an integral component in technical education since all programs are designed to lead directly toward employment. Drawn from fields in which our graduates are likely to work, committee members have input into curriculum development and can help the faculty and administration keep abreast of the marketplace.

Admissions

Lisa Ciminillo, Lima Senior High School
Kesha Drake, Bradfield Community Center
Toby Prinsen, Apollo Career Center
Chad Teman, Rhodes State College

Advanced Manufacturing Technology and Electronic Engineering Technology

Dr. Mert Bal, Miami University - Hamilton
Randy Caudill, Stolle Machinery Sidney Ohio Division
Dr. David Haus, Rhodes State College
Dean Kales, GROB Systems, Inc.
Timothy McNett, Ford Motor Company - Lima Engine Plant
Jason Neumeier, Telephone Service Company
Shawn Nutt, Buckeye Pipe Line Company, LP.
Evan Steiner, GROB Systems, Inc.
Dave Wadsworth, Honda Transmission Mfg of America, Inc.

Agriculture Technology

Eric Barnes, Farmers Alliance
William Bateson, Hancock County
Tony Bornhorst, Shelby County
Kenny Dammeyer, Sunrise Farmers Cooperative
Ron Digby, Legacy Farmers Cooperative
Paige Fitzwater, Legacy Farmers Cooperative

Shawn Gerdeman, Unverferth Manufacturing
Angela Heaton, Rhodes State College
Austin Heil, Homestead Precision
Chad Huelskamp, Koenig Equipment
Stephanie Jolliff, Ridgemont High School
Matt Karhoff, Becks Hybrids
Daniel Kirk, Sunrise Farmers Cooperative
Dustin Knapke, New Knoxville High School
Bill Lehmkuhl, Precision Agri Services
Maverick Liles, Allen East High School
Tom Marquart, Findlay Implement Company
Ryan McMichael, Spencerville High School
Beth Seibert, Allen County
Kurtis Shipp, Koenig Equipment
Jill Smith, Ohio Farm Bureau Auglaize County
Ryan Spiegel, Findlay Implement Company
Dr. James Uphaus, Rhodes State College
Wesley Woltz, Sunrise Farmers Cooperative

Business

Jan Acerro, (Retired)
Steve Boroff, Superior Credit Union
Craig Brown, Rhodes State College
Mark Edelbrock, The Fort Jennings State Bank
Andy Farley, The State Bank and Trust Company
Dr. David Haus, Rhodes State College
Brenda Honigford, HCF Management
Cara Hurd, Rhodes State College
Margaret Lawrence, Coleman Behavioral Services
Debora Lee, Edward Jones
Heather Oatman, The Union Bank Company
Joe Patton, OhioMeansJobs – Allen County
Cindy Scott, Citizens National Bank
Nicole Scott, Lima/Allen County Chamber of Commerce
Rhonda Zimmerly, Ohio Department of Education

Concrete Engineering Technology

Jason Barhorst, Spring Creek Building Supplies, Inc.
Gregory Colvin, Ohio Concrete
Brad Core, Materials Testing, Inc.
Scott Duff, Ohio Ready Mix, Inc.
Dr. David Haus, Rhodes State College
Pat Jacomet, Ohio Aggregates & Minerals Industrial Association
Carrie Lewis, OSU Wexner Medical Center
Jeff Riddell, Consumers Builders Supply
J. Erik Robey, Rhodes State College
Jeff Stocker, Aggregate and Concrete Testing Services
Jeffrey Young, Buckeye Ready Mix

Dental Hygiene

Alaina Altman, Logan Dental Center Champaign Dental Group
Barb Blass, Allen County Board of Developmental Disabilities
Jill Hay, Rhodes State College
Angela Heaton, Rhodes State College

Dr. Thomas Heckler, *Rhodes State College*
Shelli Johnson, *NWODHA Representative*
Madelynn Jordan, *Student Chapter President-Rhodes State College*
Dr. Daniel Makuh, *General Practice Dentistry*
Dr. Gordon Rauch, *Gordon Rauch, DDS*
Nancy Shuffle, *Jackson Center Dental Associates*

Christel Keller, *Crossroads Crisis Center*
Heather Koontz, *Allen East High School*
Dr. Walter Paquin, *Bluffton University*
Dr. Robin Walters-Powell, *University of Findlay*
Marjean Warren, *Lima Municipal Court*
Tiffany Wright, *Allen County Metropolitan Housing Authority*

E-Campus

Traci Bitler, *Rhodes State College*
Lynn Child, *CentraComm*
Tawanna Davis, *Paramount Consulting Group, LLC*
Bradley Kunz, *Rhodes State College*
Lewis Modic, *Rhodes State College*
Nickolas Rackley, *Bluffton Exempted Village Schools*
Nick Rider, *Esports Ohio*
Jean Wisuri, *Rhodes State College*

Emergency Medical Services

Brian Anderson, *Mercy Health-St. Rita's Medical Center*
David Belton, *Shawnee Township Board of Trustees*
Kris Browning, *Shawnee Alliance Church*
Donnie Chiles, *Allen County Sheriff's Office*
Douglas Corwin, *Challenge Electric*
David Coulter, *Rhodes State College*
Nancy Erhart, *Putnam County Office of Public Safety*
Casey Garay, *Rhodes State College*
Dr. Patricia Hampshire, *Rhodes State College*
Angela Heaton, *Rhodes State College*
Brooke Hedges, *Perry Township Fire Department*
Courtney Honcell, *Rhodes State College*
Josh Kennedy, *Shawnee Alliance Church*
Douglas LaRue, *Lima Memorial Health System*
Dr. Valerie Lint, *University of Toledo*
Chadwick Massie, *Rhodes State College*
Matt Myers, *Shawnee Township Fire Department*
Jeffrey Orphal, *Apollo Career Center*
Robert Rowland, *Rhodes State College*
Kara Smith, *Mercer County EMS*
Brenda Snyder, *Cridersville EMS*
Robert Souder, *Rhodes State College*
Brian Stewart, *Lima Fire Department*
Brock Yingling, *Apollo Career Center*

Human Service

Paula Allen, *Community Member*
Deana Basinger, *Allen County Job & Family Services*
Gina Brun, *Crime Victim Services*
Marilyn Cipollone, *(Retired)*
Diane Haller, *Rhodes State College*
Cora Hamman, *(Retired)*
Dr. Patricia Hampshire, *Rhodes State College*
Angela Heaton, *Rhodes State College*
Chuck Honigford, *The WORTH Center*
Dr. Tom Hull, *Allen County Juvenile Detention & Treatment Center*

Information Technology

Todd Bailey, *Rudolph Foods*
Scott Buettner, *Mutal of Omaha*
Paul Burkholder, *Lima Memorial Health System*
Cherie Drees, *Honda of America Mfg., Inc.*
Wayne Duling, *Unverferth Manufacturing*
Michael Eilerman, *Tri-Star*
Dr. David Haus, *Rhodes State College*
Katy Jordan, *Central Mutual Insurance*
Jeffrey Meyer, *PRO-TEC Coating Company*
Jason Neumeier, *Telephone Service Company*
Gary Shank, *(Retired)*
Brad Wilkerson, *Bath High School*

K-12 Partnerships

Chad Brinkman, *Delphos City Schools*
James Fay, *Bath High School*
Tracie Herr, *Liberty Benton High School*
Kitt Horn, *Rhodes State College*
Amy Kaiser, *Ft. Recovery High School*
Jeff Price, *Hardin Northern High School*
Mel Rentschler, *Allen East High School*
Stephanie Williams, *Lima Central Catholic High School*

Manufacturing Engineering Technology and Mechanical Engineering Technology

Michael Davisson, *Ada Technologies, Inc.*
Dr. David Haus, *Rhodes State College*
Mike Hawk, *GROB Systems, Inc.*
Jim Hefner, *Spallinger Millwright Services*
Dean Kales, *GROB Systems, Inc.*
Bob Kirkpatrick, *Celina Aluminum Precision Technology, Inc.*
Bob Kunk, *Randall Bearings, Inc.*
Ethan Parsons, *Randall Bearings, Inc.*
Brent Rees, *Ford Lima Engine Plant*
Mark Siefker, *Whirlpool Corporation*
Evan Steiner, *GROB Systems, Inc.*

Medical Assisting

Enga Allen, *Rhodes State College Student*
Dawn Bell, *Rhodes State College*
Renee Benedum, *Northwest Ohio OB/GYN*
Angela Heaton, *Rhodes State College*
Cheryl Kuck, *Rhodes State College*

Nan Luedeke, *Grand Lake Neurology & Peds*
Beni Menker, *Grand Lakes Primary Care*
Tina Myers, *New Vision Medical Laboratories*
Faith Oglesbee, *West Central Ohio Podiatry*
Taylor Schuh, *Mercy Health-St. Rita's Medical Center*
Bob Seymour, *Community Member*
Brenda Speck, *Tri Star Career Compact*
Jordan Sutton, *Rhodes State College*
Dr. Michael Wieser, *Orthopaedic Institute of Ohio*
Jennifer Young, *Ear, Nose, Throat, and Sinus Associates*

Nursing

Nikki Ballinger, *Blanchard Valley Hospital*
April Bates, *Rhodes State College*
Lisa Brackney, *Apollo School of Practical Nursing*
Brandi Bye, *Joint Township District Memorial Hospital*
Heidi DeSota, *Defiance College*
Alys Fleckenstein, *Wilson Memorial Hospital*
Dr. Melissa Harvey, *Rhodes State College*
Angela Heaton, *Rhodes State College*
Marjorie Hoying, *BSMH St. Rita's Medical Center*
Megan Jeffries, *Joint Township District Memorial Hospital*
Petra Linnon, *Rhodes State College*
Dr. Anne Loochtan, *Rhodes State College*
Brittney Moore, *Lima Memorial Health System*
Deb Point, *Van Wert County Hospital*
Kimberly Reinhard, *Mercer Health-Mercer Co. Community Hospital*
Timothy Ricker, *Mercy Health-St. Rita's Medical Center*
Debra Roberts, *Allen County Health Department*
Ashlee Robinson, *Springview Manor*
Ashley Rozell, *Apollo Career Center*
Carol Schmidt, *Rhodes State College*
Tammy Segovia, *Rhodes State College*
Beth Suever, *Shawnee Manor*
Dr. Sherri Winegardner, *Bluffton University*

Occupational Therapy Assistant

Bailey Arthur, *Lima Memorial Health Systems*
Ann Best, *Rhodes State College*
Joyce Bockey, *Mercy Health-St. Rita's Medical Center*
Nichole Dearth, *Midwest Regional Educational Service Center*
Jennifer Drees, *Dayton Children's Hospital*
Marsha Dresbach, *Mercy Health-St. Rita's Medical Center*
Kara Fulford, *Mercy Health-St. Rita's Medical Center*
Jayden Hahn, *Orthopaedic Institute of Ohio*
Chelsea Hanjora, *Allen Educational Service Center*
Krystal Hannouz, *Rhodes State College*
Angela Heaton, *Rhodes State College*
Dawn Hinkle, *Encompass Care*
Roberta Keenan, *Lima Memorial Health System*
Chris Moscato, *(Retired)*
Mike Murphy, *Brehon Technology & Vocational Support, LLC*
Brittany Patterson, *Mercy Health-St. Rita's Medical Center*
Judith Poeppelman, *Community Sports & Therapy*
Cris Ramsey, *Rhodes State College*

Cori Schroeder, *Lima Memorial Health System*
Brenda Stose, *Rhodes State College*

Physical Therapist Assistant

Jody Benda, *Apollo Career Center*
Donna Berger, *Northwest Physical Therapy*
Cindy Brandehoff, *Rhodes State College*
Matthew Cross, *Defiance Clinic Pro Rehab*
Matt Dwenger, *Joint Township District Memorial Hospital*
Erin Foxhoven, *Mercy Health-St. Rita's Medical Center*
Angela Heaton, *Rhodes State College*
Amy Hoyng, *IOS*
Brian Ison, *IU Health Jay Hospital*
Carol Jackson, *(Retired)*
Keri Lammers, *Mercy Health-St. Rita's Medical Center*
Andrea Liles, *Rhodes State College*
Lena Moore, *NW Physical Therapy-Bluffton Family Recreation Center*
Diana Rammel, *PTA, Rhodes State College*
April Wannemacher, *PTA, Therapy Solutions, LLC*
Christopher Will, *Mercy Health-St. Rita's Medical Center*

Radiographic Imaging

Caroline Cox, *Mercy Health-St. Rita's Medical Center*
Brock Faulkner, *Rhodes State College*
Vince Fried, *Rhodes State College*
Diane Gayer, *Joint Township District Memorial Hospital*
Zoe Gigax, *Community Memorial Hospital*
Angela Heaton, *Rhodes State College*
Sean Lause, *Rhodes State College*
Angela Lee, *Rhodes State College*
Jillian Lieurance, *Mercy Health-St. Rita's Medical Center*
Andrew Shappell, *Rhodes State College*
Cindy Wolfcale, *Mercy Health-St. Rita's Medical Center*

Respiratory Care

James Coolman, *Community Hospital & Wellness Center*
Angela Deal, *Ohio Health Mansfield & Shelby*
Bethany Dean, *University of Findlay*
Melissa Elmquist, *Lincare*
Zack Godsey, *Rhodes State College*
Chris Grissom, *Wilson Memorial Hospital*
Pamela Halfhill, *Rhodes State College*
Joel Harris, *Rhodes State College*
Angela Heaton, *Rhodes State College*
Teresa Iames, *Rhodes State College*
Ken Justice, *Licking Memorial Hospital*
Melissa Komarek, *Joint Twp District Memorial Hospital*
Mary Marker, *Mercy Health-St. Rita's Medical Center*
Jordan Martin, *Lima Memorial Health Systems*
Cindy Mefferd
Charles Mulholland, *Rhodes State College*
Denise Owens, *Genesis Healthcare System*
Connie Pieper, *Rhodes State College*
Kelly Rammel, *Dayton Children's Hospital*

Brenda Stechschulte, *Mercy Health-St. Rita's Medical Center*

Michelle Taylor, *Mary Rutan Hospital*

Nicole Thomas, *Mary Rutan Hospital*

Dr. Rick Watson, *Blanchard Valley Medical Associates*

Beth White, *Rhodes State College*

Meagan Zoladz, *Rhodes State College*

Surgical Technology

Stacy Graymire, *Lima Memorial Health Systems*

Pamela Halfhill, *Rhodes State College*

Angela Heaton, *Rhodes State College*

Jeff Heist, *IOS*

Majorie Hoying, *Mercy Health-St. Rita's*

Lisa Mosier, *Mercy Health-St. Rita's*

Tiffany Nelly, *Lima Memorial Health Systems*

Jay Stettler, *Lima Memorial Health Systems*

Bri Wilkinson, *Van Wert Hospital*

STUDENT HANDBOOK

The Student Handbook provides academic information related to registration, grades, graduation, and student services. A comprehensive listing of College Policies and Procedures is available on the website.

College Policies

For a full list of College Policies and Procedures please see the website.

Anti-Hazing Policy

The College holds students, staff, and faculty accountable for their behavior on and off campus and addresses behavior that violates the Student Code of Conduct (4.01) and the Disciplinary Action and Due Process (5.5). This Anti-Hazing Policy applies to all staff, faculty, students, student organizations, and student groups and is effective from matriculation to commencement, including breaks in the academic year. This Policy applies to conduct on or off-campus between two or more people affiliated with the College or any student or other organization associated with the College. This Policy also applies to volunteers acting in an official capacity that advises or coaches student organizations and/or student groups and who have direct contact with students.

Freedom of Speech Policy

Rhodes State College is dedicated to protecting the fundamental constitutional right to free speech. The College is committed to maintaining a campus as a marketplace of ideas for all students, student groups, and faculty. Any faculty member, student, or student group who believes their freedom of speech has been violated, may file a grievance by following the Free Speech Procedure. In addition, the College complies with Ohio R.C. 3345.0212. Additional information can be found on the Freedom of Expression webpage.

Student Code of Conduct

The Code applies to the conduct of students, with or without accommodations. College student organizations, clubs, athletic teams, and student members or participants are also expected to abide by the Student Code of Conduct. Disciplinary action may be taken against the organization as a whole, individual members of the organization, or both.

Nondiscrimination Policy

James A Rhodes State College has a strong commitment to the principles of anti-harassment and nondiscrimination in all its forms, in its admission, educational, extra-curricular and employment practices, athletics, social programs, and activities. The College prohibits harassment, that is unwelcome conduct that is sufficiently severe, pervasive and objectively offensive that it effectively denies an individual equal access to the institution's education or employment programs or activities. The College does not discriminate on the basis of race, national origin, ethnicity, color, sex (including pregnancy and parenting status), gender, gender identity or manifestation, genetic information, sexual orientation, religion, age, marital status, disability, veteran status, or any other basis prohibited by the Civil Rights Act of 1964, Title IX, 504 of the Rehabilitation Act, Title II of the Americans with Disability Act, and applicable federal, state, or local laws and college policy. All inquiries can be directed to the Executive Director of Human Resources at Andrea Goings, Executive Director, Human Resources/Title IX Coordinator, Rhodes State College, 4240 Campus Drive – Public Service Building, Lima, OH 45804, 419-995-8302, goings.a@Rhodes.State.edu

Catalog Changes

The information contained in this catalog is current at the time of publication. Rhodes State College reserves the right to make changes in policy, curricula, and fees as circumstances dictate subsequent to publication. The College expects its students to have knowledge of the information contained herein.

Registration

Students should meet with their advisor before registration each semester. Registration dates are posted throughout campus and online.

Classes are scheduled to accommodate both full- and part-time students. The class schedule generally operates between 7:00 a.m. and 10:30 p.m. The fall and spring operate on a 16-week semester with a first 8-week and a second 8-week term. The summer may be offered in an 8- or 10-week format.

Maximum Credit Hours

The maximum hours for which a student may register during any term are:

Fall Semester	21
Spring Semester	21
Summer Term	15

If, at any point during the semester or term, the total registered credit hours exceed the maximum, then the student must receive written approval from the chair of the specified program. For students who are in General Education, General Prep, or Undeclared programs, the approval of the Dean of Student Affairs is required.

Leaving the College after Registering

A student who registers for classes, but decides not to attend the College, must officially withdraw by dropping their classes via STARS or by completing an add/drop form with their advisor. **Failure to officially withdraw may result in being awarded a failing grade in all courses and the requirement to pay all assessed tuition and fees, even though the student has actually left the College.**

Advising

Students, upon acceptance into the College, are assigned an advisor based on their major. On or after the 15th day of their first semester, students will receive an email with their advisor's name and contact information. The advisor assists students in understanding their program requirements, identifying course prerequisites, selecting appropriate coursework, learning about school policies and procedures, and introducing other student supports. Staff Advisors provide assistance to undecided students, students being reinstated after academic dismissal, and other special populations.

Auditing

A student may register for and attend courses as an audit. The student will pay the regular tuition rate per semester hour and will be held responsible for the classroom assignments and/or for attendance but will not be required to take examinations. Students who satisfactorily complete audited courses will receive an "R" on their transcript. If

classroom assignments and/or attendance do not meet the approval of the instructor, the student will receive a grade of "U".

No credit is received for an audit, and therefore the course will not apply toward the fulfillment of graduation requirements. Students may change from credit to audit by completing a petition, available from their faculty advisor prior to the 11th Friday of the semester.

Students wishing to audit a course may enroll on a space-available basis, with priority of entrance given to credit students.

Note: Students must meet with the Financial Aid Office prior to auditing a course as there may be financial implications to auditing a class.

Credit for Prior Learning

Students may have acquired learning outside the traditional college classroom through past work, independent reading and study, training programs or in-service courses, volunteer service, cultural or artistic pursuits, hobbies, and recreational pastimes, community or religious activities, organizational memberships, adult education, non-credit courses, study abroad, military training not evaluated for credit by ACE, or other experiences. Credit for Prior Learning allows a student to demonstrate this knowledge and potentially earn academic credit for it. Methods for evaluating prior learning include Credit by Examination; Credit for Experience; and Credit for Non-Academic Learning. Students interested in credit for prior learning should work with their faculty advisor or Division Dean.

Credit by Examination

Credit by examination enables students with previous education or self-study to receive credit for courses. Credit for a maximum of ten (10) semester hours may be earned in this way. A fee of \$25 per credit hour is assessed for each examination taken. Credit shall be counted as hours earned only and shall not be considered in determining the grade point average. Students may not receive credit by examination for courses they have failed, and these examinations cannot be taken during the semester of the student's graduation.

The examinations will be comprehensive enough to represent the content of a course just as it is presented to a regular student. Upon completion of the exam, the results will be reviewed by the Division Dean. If the results indicate sufficient mastery of the course material, the Division Dean will recommend that credits earned by examination become part of the student's permanent record. Students may submit standardized examination scores for CLEP, PEP, and Advanced Placement Program from the College Examination Board for evaluation of credit. Other national or standardized examinations may also be considered.

Transfer credit may be awarded for equivalent general studies courses accepted for credit by examination by an accredited institution of higher education. At the discretion of the Division Dean, transfer credit may be awarded for technical and basic-related studies courses accepted for credit by examination by an accredited institution of higher education.

Credit for Experience

Credit for experience enables students with previous experience in a subject matter in a non-traditional matter to receive credit. The Division Dean or Chair evaluates the documentation provided by the student, which demonstrates competency in the subject. Credit shall be counted as hours earned only and shall not be considered in determining the grade point average. No more than ten (10) semester hours may be earned in this way. A fee of \$25 per credit hour is assessed for each credit

hour awarded. Students may not receive credit for experience during the semester of the student's graduation.

Credit for Non-Academic Learning

Credit for non-academic learning enables students with previous experience in a subject matter through a non-academic training program to receive credit. The Division Dean or Chair evaluates the documentation provided by the student, which demonstrates competency in the subject.

Credit shall be counted as hours earned only and shall not be considered in determining the grade point average. No more than ten (10) semester hours may be earned in this way. A fee of \$25 per credit hour is assessed for each credit hour awarded. Students may not receive credit for experience during the semester of the student's graduation.

Information Changes

Any changes of name (resulting from marriage or court action), address, or phone information must be promptly reported to the College. Address and phone information may be updated via STARS Online. Name changes require appropriate legal documentation. Failure to report a change in this information may result in the cancellation of registration or financial aid.

Adding/Dropping Courses

Students who wish to drop/withdraw from a course must discuss doing so with their advisor and are encouraged to meet with financial aid. If, after these conferences, students still wish to drop/withdraw, they should proceed based on the following schedule. (This schedule may vary depending on the length of the term selected.):

- a. Students who desire to withdraw from one or more of their courses will process an Add/Drop form with their advisor or success navigator. **Please note that withdrawing from a course does not guarantee a refund of tuition and fees.**
- b. Before 5 p.m. on the 6th Friday of a semester, students may withdraw from one or more courses or from all courses, and no grade will be entered on their official permanent record.
- c. Before 5 p.m. on the 6th Friday of a semester, students may withdraw from one or more courses or from all courses, and no grade will be entered on their official permanent record.
- d. Students normally are not permitted to withdraw after the 11th Friday of a semester. If a student finds it necessary to withdraw from one or more courses after 5 p.m. on the 11th Friday because of extenuating and documented circumstances (illness or some other unavoidable event), he/she must file a Petition to Withdraw. The required forms may be obtained from the Office of Advising. Students will remain enrolled in courses until the withdrawal petition is signed by the Senior Vice President for Academic Affairs and recorded by the Records Office. Therefore, the student should continue attending any course(s) in which he/she is enrolled until such time that the petition is approved or denied by the Senior Vice President of Academic Affairs. **A faculty member's signature does not constitute approval of the petition.** Without extenuating circumstances, the petition may be denied by the Senior Vice President for Academic Affairs. Upon approval of the petition, the Records Office will enter the grade of "WP" (withdrew passing) or "WF" (withdrew failing) as indicated by the course instructor on the student's official permanent record.
- e. Withdrawing from a course during final examination week is not permitted. Students should discuss their circumstances with the instructor who may elect to issue an incomplete "I" grade. An "I" indicates that the work of the student in the course is qualitatively

satisfactory, but that for legitimate reasons, a small fraction remains to be completed. For more information on incomplete grades, please see the section titled "Grading and Credit System." (p. 220) Students continue to be enrolled in the course and are expected to complete the remaining assignments until such time the instructor agrees to issue an incomplete grade of "I." Only under the most extenuating and documented circumstances will the Senior Vice President for Academic Affairs approve a withdrawal petition once the semester has ended and grades have been posted to the student's permanent record.

- f. Withdraw petitions submitted after a semester has ended will not be considered unless extenuating and documented circumstances are present, and the petition is received no later than the Friday of the 9th week of the following term.
- g. A student who ceases to attend a course without following the withdrawal procedure prescribed may receive a failing grade for the course and may forfeit all fees paid.

Readmission to the College Following Academic Dismissal

Students who have been academically dismissed from the College may, after one semester of separation, petition to be readmitted to the College. Petitions must be received in the Office of Academic Advising at least three weeks before the start of the expected semester of return.

Students wishing to be readmitted must meet with an advisor in the Office of Advising to determine the best course of action.

Getting Started & Next Steps:

- a. Meet with the Office of Financial Aid and the Business Office to discuss how you will pay for your first two semesters if readmitted.
 - i. FinAid@RhodesState.edu or 419-995-8802
 - ii. Cashier@RhodesState.edu or 419-995-8473
- b. Schedule an appointment with a staff advisor to discuss an Academic Recovery Plan, Degree Plan, and the Academic Readmission process.
 - i. Advising@RhodesState.edu or 419-995-8400
- c. Be prepared to discuss the below questions in the advising appointment.
 - i. Why do you feel you were unsuccessful in the past?
 - ii. If approved to return to Rhodes State, how do you plan to be successful in the pursuit of your degree or certificate?
 - iii. What steps will you take to ensure this?

Fresh Start Grade Point Average (GPA) Adjustment

After an absence of six semesters (2 years), readmission to the College, and successfully completing six credit hours with a 2.0 or higher GPA, a student may apply for a Fresh Start GPA Adjustment. The Fresh Start option is designed to help students return to good academic standing by excluding the grades of C-, D+, D, and E from their cumulative GPA. Students who have been academically dismissed or have left the College with a cumulative GPA below 2.0 are eligible.

To petition for Fresh Start, a student must:

- a. have not enrolled at the College for two or more years (6 academic terms, including summer).
- b. have a poor academic record demonstrated by a cumulative GPA of less than 2.0, be on academic warning/probation, or have been academically readmitted after dismissal.

- c. have earned a semester GPA of 2.0 or higher in six or more credit hours completed after their return to the College.
- d. be enrolled at the College during the semester in which the petition is filed.
- e. be paid in full for any outstanding balance of tuition and fees.

Guidelines

- a. This adjustment does not apply to courses counted toward a previous degree/certificate.
- b. The original record of each course, including the associated grade, remains on the official transcript.
- c. Students may only petition for a GPA adjustment once during their enrollment at Rhodes State College. A student receiving a GPA Adjustment with Major Change (p. 219) is ineligible for a Fresh Start GPA Adjustment.
- d. Students must complete a Fresh Start GPA Adjustment petition and a degree plan with the assistance of a Staff Advisor.
- e. A student receiving a Fresh Start GPA Adjustment is ineligible for a GPA Adjustment with Major Change.
- f. The Fresh Start GPA Adjustment is independent of financial aid regulations. Federal, state, and institutional financial aid requirements will apply. Billing and debt requirements associated with previous enrollment are not intended to be resolved by granting a Fresh Start GPA Adjustment. Therefore, a Fresh Start GPA Adjustment applicant should consult the Office of Financial Aid for guidance regarding federal, state, and institutional financial aid programs and the Business Office for the outstanding balance, billing, and payment plan information.

Change of Program

A student may change a major or program by working with a staff advisor to complete a Major Revision form.

- a. Changes in major/program should begin with a staff advisor-student conference.
- b. The student should meet with a staff advisor to review their plans and determine if any prior coursework will apply toward graduation in the new major or program. The advisor will complete the Major Revision form and submit it to the Records Office.
- c. Graduation requirements for the new major/program are those listed in the catalog when the change in major was made. Graduation requirements listed in a separate section of this catalog may supersede these requirements.
- d. Students with transfer credit should request another transcript evaluation based on their new major.

Grade Point Average (GPA) Adjustment after Major Change

The GPA Adjustment After Major Change is designed to help students who may have selected a major that is not suited to their goals, and this recognition may have come after experiencing academic difficulty. By excluding the grades of C-, D+, D, and E from courses not required in the new major, the student's cumulative Grade Point Average (GPA) will increase.

To be eligible for the GPA Adjustment After Major Change, a student must:

- a. be in academic difficulty, demonstrated by a cumulative GPA of less than 2.0 or below the required threshold for entry into a selective program.
- b. have not previously exercised a GPA Adjustment After Major Change or a Fresh Start GPA Adjustment.
- c. have a conference with a staff advisor to review to determine eligibility.
- d. have earned a semester GPA of 2.0 or higher in six or more credit hours completed after the major change.
- e. be enrolled at the College during the semester in which the petition is filed.

Additional Guidelines:

- a. This adjustment does not apply to:
 - i. Developmental courses.
 - ii. General Education or Basic Related courses that will apply to the new program.
 - iii. Courses counted toward a previous degree/certificate.
- b. Rhodes State College courses that are no longer available (and/or courses that are elective in nature) are eligible for consideration, as are courses with an OSU designation.
- c. The original record of each course, including the associated grade, remains on the official transcript.
- d. Students may only petition for a GPA adjustment once during their enrollment at Rhodes State College.
- e. A student receiving a Fresh Start GPA Adjustment is ineligible for a GPA Adjustment after Major Change.
- f. GPA Adjustment after Major Change is independent of financial aid regulations. Federal, state, and institutional financial aid requirements will apply. Billing and debt requirements associated with previous enrollment are not intended to be resolved by granting a GPA Adjustment after Major Change or Fresh Start GPA Adjustment. Therefore, a Fresh Start applicant should consult the Office of Financial Aid for guidance regarding federal, state, and institutional financial aid programs and the Business Office for an outstanding balance, billing, and payment plan information.

Grading System

One indication of a student's achievement is a letter grade assigned to student performance. Each letter grade, in turn, carries "credit points" which are used in computing the student's "cumulative grade point average." Academic achievement in regular letter grades will be recorded at the end of each semester for all course work for which credit is granted. The credit hours attempted and credit points attained will enter into the computation of the student's cumulative grade point average. The College reserves the right to determine its grading scale and uses the following as the official grades of the institution. All students will be issued one of the following as a result of their work in any given course.

A, A-

The instructor judged the student to have satisfied the stated objectives of the course in an excellent manner. The student's performance was judged to be in this range of high quality based upon a comparison with other students in the course, and/or with students who had taken the course previously, and/or the instructor's personal expectations relative to the stated objectives of the course, based on experience and expertise.

B+, B, B-

The instructor judged the student to have satisfied the stated objectives of the course in an above-average manner. The student's performance was judged to be in this range of above-average quality based upon a comparison with other students in the course, and/or with students who have taken the course previously, and/or the instructor's personal expectations relative to the stated objectives of the course, based on experience and expertise.

C+, C, C-

The instructor judged the student to have satisfied the stated objectives of the course in an average manner. The student's performance was judged to be in this range of average quality based upon a comparison with other students in the course, and/or students who have taken the course previously, and/or the instructor's personal expectations relative to the stated objectives of the course, based on experience and expertise.

D+, D

The instructor judged the student to have satisfied the stated objectives of the course in a low but acceptable manner. The student's performance was judged to be in this range of below average but acceptable quality based upon a comparison with other students in the course, and/or the instructor's personal expectations relative to the stated objectives of the course, based on experience and expertise.

E

Failure. The instructor judged the student not to have satisfied the stated objectives of the course. Credit for the course in which the grade "E" has been received can be obtained only by repeating and passing the course.

NR

Grade not reported by the instructor.

W

Withdrew. This grade is used for students who have officially withdrawn from the course between 5 p.m. of the 6th Friday and 5 p.m. of the 11th Friday of the semester. No credit shall be given for this grade, and it shall not be considered in determining a student's grade point average, but will be considered as attempted hours in determining Financial Aid Status.

WF

Withdrew Failing. This grade is used for students who have petitioned to withdraw after the 11th week of a semester and who were failing the course at the time of the withdrawal. This grade is applied to students who have not been attending classes for which they are scheduled or have not actively participated in online, or blended courses. No credit shall be given for this grade, and it shall not be considered in determining a student's grade point average, but will be considered as attempted hours in determining Financial Aid Status.

WP

Withdrew Passing. This grade is used for students who have petitioned to withdraw after the 11th week of a semester and who were passing the courses at the time of the withdrawal. No credit shall be given for this grade, and it shall not be considered in determining a student's grade point average, but will be considered as attempted hours in determining Financial Aid Status.

I

Incomplete. An "I" indicates that the work of the student in the course is satisfactory but that for legitimate reasons a small portion of the course remains to be completed.

The grade "I" shall be temporarily recorded on the student's grade report. The student must complete and submit the coursework no later than the sixth Friday following the start of the semester or term subsequent to the one in which the "I" was received. Upon the request of the student to the instructor, within the six-week period, the Vice President for Academic Affairs may allow a student additional time in which to complete the work. Generally, this shall not be longer than the end of the semester following the semester in which the "I" was received.

Until such time as the final grade is recorded, the credit hours in the incomplete courses shall not be counted or considered for any purpose. In no case shall a student who has received the grade "I" be permitted to repeat the course in which such grade was received until such time as the "I" has been removed. If the student fails to complete the coursework, the final grade will be determined by giving the student a zero on all remaining and unfinished work. These zeros will be used to calculate the final course grade. Students who are unsuccessful in a required competency (as defined in the syllabus) will receive an "E/U" grade.

Note: A student's Financial Aid Status and/or Academic Standing may be affected by the Incomplete.

R

Audit. This grade indicates that the student registered to audit the course. No credit hours shall be awarded for this grade (Normal tuition and fees will be charged).

S

Satisfactory. This grade may be used to record satisfactory completion of work, provided the course has been approved for this grade. "S" credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average.

U

Unsatisfactory. This grade shall be used for unsatisfactory work in courses in which a student would be entitled to the grade of "S" if his/her work had been satisfactory. No credit shall be given for work graded "U." This grade shall not be considered in determining a student's grade point average.

Credit System

EM

Examination. This grade indicates credit given to registered students on the basis of examinations taken prior to or after admission to the College. The department in which the course is taught will determine the score the student must earn to receive "EM" credit. A maximum of ten (10) semester credit hours may be earned in this manner. "EM" credit cannot be processed during the semester of the student's graduation. A fee of \$25 per credit hour is assessed.

Examination credit shall not be given to a student for a course in which he or she has received a grade at this college. Credit shall be counted as hours only and shall not be considered in determining a student's grade point average.

AP

Advanced Placement. This grade indicates credits awarded to a registered student for appropriate courses for scores between 3-5 on Advanced Placement examinations. Students must submit the official results to the Office of Transfer at Rhodes State, upon application to the College, for evaluation of AP credit. Students who submit the official results after beginning their course work at Rhodes State may jeopardize their placement in the appropriate course.

In accordance with recognized national standards for the awarding of college credit, scores of 1-2 on AP exams are not viewed as indicative of sufficient mastery of the subject matter to warrant the awarding of college credit.

Formal review of the AP scores will be done by the Division Dean of the content area. Credit shall be counted as hours only and shall not be considered in determining a student's grade point average.

AS

Advanced Standing. This grade indicates credits awarded to a registered student as a result of meeting the requirements of an articulation agreement between recognized educational entities and Rhodes State. Credit shall be counted as hours only and shall not be considered in determining a student's grade point average.

CL

College Level Examination Program (CLEP). This grade indicates credit awarded to a registered student for appropriate courses in which a student has earned the recommended credit granting score established by Ohio faculty review panels.

See the ODHE website for a listing of the state-approved credit granting score for individual examinations and alignment with Rhodes State College courses.

Students must submit an official CLEP transcript to the Office of Transfer at Rhodes State upon application to the College for evaluation of CL credit. Students who submit the official results after beginning their course work at Rhodes State may jeopardize their placement in the appropriate course.

Formal review of the CLEP scores will be done by the division dean of the content area. Credit shall be counted as hours only and shall not be considered in determining a student's grade point average.

CR

Credit for Experience. This grade indicates credit awarded to a registered student as a result of the knowledge of the subject matter in a non-traditional manner. The Division Dean or Chair evaluate the documentation provided by the student which demonstrates competency in the subject matter. Credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average. No more than ten (10) hours of "CR" credit may be counted toward graduation. This credit cannot be obtained during the semester of a student's graduation. A fee of \$25 per credit hour is assessed.

CT

Career-Technical Credit. Career-Technical Assurance Guides (CTAG) Credit is awarded to registered students for technical courses completed at an Ohio Career Technical Center (that adhere to recognized industry standards) and have been aligned with a Career Technical Articulation Number (CTAN) by Ohio faculty review panels. Student must have their

official transcript sent directly from the educational institution and have the Career Technical Center send a completed State (CT)² Verification Form directly to the College. The student must also submit any additional credentials needed for credit. Documentation will be reviewed by the appropriate Division Dean or Chair. Credit shall be counted as hours only and shall not be considered in determining a student's grade point average. Additional information can be found here.

DN

DANTES Subject Standardized Tests (DSST). This grade indicates credits awarded to a registered student as a result of receiving the American Council on Education (ACE) recommended credit granting score on DSST examinations. Students must submit the official results to the Office of Transfer at Rhodes State upon application to the College for evaluation of DN credit. Students who submit the official results after beginning their course work at Rhodes State may jeopardize their placement in the appropriate course. In accordance with recognized national standards for the awarding of college credit, scores lower than the American Council on Education (ACE) recommended credit granting score are not viewed as indicative of sufficient mastery of the subject matter to warrant the awarding of college credit. Formal review of the DSST scores will be done by the division dean of the content area.

IT

Industry-Recognized Credential Credit. Industry-Recognized Credential (ITAG) Credit is a statewide transfer initiative that guarantees the award of college-level credit to students earning agreed upon industry-recognized credentials. The award of credit is based upon the knowledge, skills, and competencies gained through credential attainment regardless of where the learning to prepare for the credential took place. Student must provide documentation of having earned the approved credential. Documentation will be reviewed by the appropriate Division Dean or Chair.

Credit shall be counted as hours only and shall not be considered in determining a student's grade point average. Additional information can be found here.

K

Transfer Credit. This grade indicates credit awarded to a registered student for completed course work from other institutions and service schools, where a grade "C" or better was received. Transfer credit is only awarded after approval by the Office of Transfer. "K" credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average. This credit cannot be obtained during the semester of a student's graduation.

KN

Credit for Non-Academic Learning. This grade indicates credits awarded to a registered student as a result of knowledge of the subject matter through a non-academic training program. The Division Dean or Chair will evaluate the documentation provided by the student. Credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average. No more than ten (10) hours of "KN" credit may be counted toward graduation. This credit cannot be obtained during the semester of a student's graduation. A fee of \$25 per credit hour is assessed.

KX

Transfer Credit with grade less than a "C". As of Fall 2005, this grade indicates credits awarded to a registered student for completed coursework from other institutions and service schools where a grade of "C-", "D+", or "D" was received. KX credit is only awarded after approval

of the Office of Transfer. "KX" credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average. "KX" credit will not fulfill any graduation requirement or prerequisite in which the "C" Grade Policy applies. This credit cannot be obtained during the semester of a student's graduation.

ML

Military Credit. This grade indicates credits awarded to a registered student as a result of knowledge of a subject matter of a course through training and experience in the United States Armed Forces or National Guard. The Division Dean or Chair will evaluate a United States Armed Forces transcript and use the documentation by the American Council on Education (ACE) to determine the applicability to the student's degree program at Rhodes State. Credit shall be counted as hours earned only and shall not be considered in determining a student's grade point average.

MT

Military Transfer. Military Transfer Assurance Guides (MTAGs) provide a statewide guarantee that certain types of military training, experience, and/or coursework align to existing college and university courses and will be awarded appropriate credit. State faculty review panels have reviewed certain types of military training, experience and/or course work and have aligned them to a Ohio Articulation Number (OAN). Student must submit their official United States Armed Forces transcript. Credit shall be counted as hour earned only and shall not be considered in determining a student's grade point average.

OM

One-Year Option block credit awarded toward an Associate of Technical Study in Building and Industrial Technology.

ON

One-Year Option block credit awarded toward an Associate of Technical Study in Business Technology.

OO

One-Year Option block credit awarded toward an Associate of Technical Study in Health and Allied Health Technology.

OP

One-Year Option block credit awarded toward an Associate of Technical Study in Information Technology.

OQ

One-Year Option block credit awarded toward an Associate of Technical Study in Services Technology.

Credit Points

Credit points shall be assigned on the following basis:

- For each credit hour of A, 4.0 credit points shall be allowed.
- For each credit hour of A-, 3.7 credit points shall be allowed.
- For each credit hour of B+, 3.3 credit points shall be allowed.
- For each credit hour of B, 3.0 credit points shall be allowed.
- For each credit hour of B-, 2.7 credit points shall be allowed.
- For each credit hour of C+, 2.3 credit points shall be allowed.
- For each credit hour of C, 2.0 credit points shall be allowed.

- h. For each credit hour of C-, 1.7 credit points shall be allowed.
- i. For each credit hour of D+, 1.3 credit points shall be allowed.
- j. For each credit hour of D, 1.0 credit points shall be allowed.
- k. For each credit hour of E, 0.0 credit points shall be allowed.

All other marks carry no credit points.

Grade Point Average

The grade point average of a student shall be computed by dividing the sum of the applicable number of credit hours (in which the grades A,B,C,D, or E have been given) into the sum of credit points assigned for such hours.

Academic Honors

The College honors outstanding achievement during a special awards ceremony each year. Students are not only recognized for academic achievement but may be singled out for recognition as a result of community and campus service. To be eligible to attend the awards ceremony, a student must have an overall GPA of 3.5 or higher as of the end of the Fall semester prior to the ceremony.

Dean's List

Recognition will be made of those students who have achieved academic excellence carrying a 3.5 or higher grade point average after each academic term. The full-time Dean's List recognizes students carrying 12 or more credit hours for a term; the part-time Dean's List recognizes students carrying 6 to 11 credit hours for a term. This achievement will be released on a regular basis to local newspapers if the student has indicated that the College may publish this information (see Educational Rights and Privacy Act).

Graduation with Honors

Outstanding academic achievement will be recognized for students achieving a cumulative grade point average of 3.5 or higher at the time of graduation. Graduation with honors is based on the following selection: 3.50-3.69; 3.70-3.95; and 3.95 and above.

Honor Societies

Students may also be recognized through induction into an honor society. Contact the office of the Vice President for Academic Affairs for information about Phi Theta Kappa or the program chairs for more information on departmental honoraries.

- Alpha Beta Gamma, the national two-year Business honorary;
- Alpha Delta Nu, the national two-year Nursing honorary;
- Lambda Beta, the national Respiratory Care honorary;
- Lambda Nu, the national Radiological Sciences honorary;
- Phi Theta Kappa, the two-year college national honorary and the largest honor society in American higher education. The Alpha Tau Mu chapter of Phi Theta Kappa honors outstanding students and inducts new members each spring;
- Sigma Phi Alpha, the national Dental Hygiene honorary;
- Tau Alpha Pi, the Engineering Technologies honorary;
- Tau Upsilon Alpha, the national Human Service honorary.

Academic Standing

Academic Standing is computed using a student's cumulative Grade Point Average (GPA) Divisor Hours and cumulative GPA based on grade

processing at the end of the term. A student is considered to be in good standing if his/her cumulative grade point average is 2.0 or higher. A student is placed on academic warning or probation based upon the following credit and grade point average (GPA) ranges:

Cumulative GPA Divisor Hours	Warning GPA	Probation GPA
1 to 15	0.0 to 1.99	- - -
16 to 30	1.4 to 1.99	0.00 to 1.39
31 to 45	1.6 to 1.99	0.00 to 1.59
46 to 59	1.8 to 1.99	0.00 to 1.79
60+	1.9 to 1.99	0.00 to 1.89

While students may remain on warning in succeeding semesters, they are no longer in good standing and are alerted to the fact that they must improve their GPA to meet graduation requirements.

Students may remain on probation provided they earn a minimum of 2.0 Term GPA each succeeding term of attendance until a status of warning or good standing is achieved.

Dismissal occurs when a student who is on probation fails to earn a 2.0 Term GPA or higher his/her next semester of attendance.

The Dean of Student Affairs reviews the progress of students on warning and probation and recommends retention activities that will assist students in achieving academic success.

Appeal of Grades

Students who feel that they were not assigned a fair grade for a course should consult the instructor who taught the course. Then, if not satisfied, they should discuss the matter with the Division Dean or Department Chair. Finally, students have the option of taking their appeal to the Senior Vice President for Academic Affairs. Any appeal of a grade must be initiated before the end of the semester immediately following the semester in which the grade was received.

Failure in a Required Course

At his/her first opportunity, a Rhodes State student who has not been dismissed from the College must repeat, in class, a required course which he/she has failed. A substitute course may be taken if authorized by the Senior Vice President for Academic Affairs upon the recommendation of the Division Dean or Chair of the department involved. When a substitute course is granted for a required course, the failing grade will not be expunged from the student's permanent record. Failing grades may only be expunged in accordance with the procedure as described under "repetition of courses" in this catalog.

Repetition of Courses

Students may repeat courses taken by audit or credit at Rhodes State College. Each course and each grade earned by the student will be indicated on the student's official transcript; however, only the first repetition will be used in determining the student's cumulative grade point average even if the grade is lower than the first attempt. All subsequent repetitions will be used in the cumulative grade point average.

Classroom Attendance Policy

Regular attendance is needed to gain an understanding of the course's content and to satisfactorily demonstrate required competencies. Lack

of attendance may negatively impact the earned grade; and, may result in a grade of "E". Furthermore, lack of regular attendance may negatively impact a student's financial aid eligibility. See the Financial Aid (p. 21) section of the Catalog for further information.

Withdrawal for Non-Attendance

The United States Department of Education (DoE) enacted legislation that requires institutions of higher education to know when students are attending classes and to be able to prove how long students have attended before withdrawing from classes. Although not all students are receiving federal financial aid, the College is required to be consistent in how it tracks or determines attendance for all students. To comply with these regulations, Rhodes State College takes attendance for all students and in all classes. Student attendance and active participation will ensure success as they pursue their academic goals.

Students are responsible to officially drop/withdraw from all registered courses if they decide to no longer attend. If a student does not initiate an official drop/withdraw with the Office of Advising, the institution will identify a date of drop/withdraw. Students identified as not attending will be withdrawn failing "WF" by the College beginning the sixth week of the semester and the student may be responsible for all tuition and fees associated with that course or course(s). Students will be notified of the action by U.S. mail if they are withdrawn for non-attendance. If attendance is a required element of the course and is stated in the course materials, lack of attendance may result in a grade of "E" rather than "WF."

Withdrawal from Coursework

Unfortunately, it may become necessary for students to interrupt the pursuit of an academic program at Rhodes State. The student should work through their advisor in order to permit any future readmission as a student in good standing. A form used for withdrawal purposes should be completed through the procedure outlined under Adding/Dropping Courses (p. 217).

Students who have withdrawn from the College previously must reactivate their file by contacting the Office of Advising.

Students who have dropped out of a limited enrollment program and wish to be readmitted at a later date should contact the Division Dean or Department Chair of the program to arrange a conference. The Division Dean or Department Chair makes the decision and communicates the necessary readmission procedures to the Office of Advising.

Graduation Requirements

- a. Students may choose a curriculum not more than two academic years prior to their graduation. Students must satisfy all academic requirements within their curriculum. The College reserves the right to change and amend curricula in order to offer relevant technical content. Division Deans may grant appropriate course substitutions to accommodate students in unusual situations. Students who leave the college and then return may be subject to different requirements.
- b. Transfer credit, proficiency credit, and credit for experience should be processed before the term of the student's graduation.
- c. Students must meet the following requirements:
 - i. Final cumulative grade point average of 2.0 or higher. (In some cases additional requirements may exist such as division-specific "C" grade policies. See individual programs).
 - ii. Satisfaction of all financial obligations and resolution of all account holds.

- iii. At least 20 applicable credits earned at Rhodes State College.
- iv. Completion of a Graduation Application by the deadline (see chart). Filing the Graduation Application will initiate a review of the student's records and identification of any missing requirements. Upon completion of requirements, the student will receive information about commencement. Students who petitioned but did not meet all graduation requirements must submit a new petition for graduation for the term in which they fulfill all their graduation requirements successfully.

Commencement

Attendance at commencement is an opportunity for students to celebrate their accomplishments with family, friends, and the College community. The commencement ceremony is held at the end of the Spring term. Students graduating at any point in the academic year are encouraged to return to participate.

Students who have not met all graduation requirements may request to walk during the commencement ceremony. No diploma will be awarded until all graduation requirements are met. The student's official transcript will not reflect graduation or degree completion until all requirements are met. All requests to walk prior to degree completion must meet the guidelines below and are approved by the Division Dean.

Students in the Division of Health Sciences and Public Service

In accordance with the progression accreditation requirement within the Division of Health Sciences, a student must have all graduation requirements in process as of the Spring term to participate in commencement.

Students in the Division of Technology and Liberal Studies

- a. No more than two courses to meet the degree requirements remain.
- b. The student must have a minimum 2.0 GPA, as required for graduation, at the time of the commencement ceremony.
- c. The student is registered for the remaining course(s) needed to complete the degree requirements in the subsequent Summer term **AND** has made payment arrangements for the course(s) either with Financial Aid or the Business Office.

Graduation Application Deadlines are as Follows:

Summer Graduation (August)	February 15
Fall Graduation (December)	June 15
Spring Graduation (May)	September 15

If the date falls on Saturday/Sunday, the deadline is the next working day.

Dates are subject to change.

Certificates

Students may earn one of the many certificates appearing in the catalog if 30% of the courses listed in the certificate are taken from Rhodes State. Course work leading to the certificate may be transferred from other institutions as long as credits do not exceed 30% of the courses in the certificate. Students must receive a grade of "C" or better for all courses required for the certificate. Exceptions may be granted at the discretion of the Division Dean. Students should work with their academic advisor for awarding and receiving any certificates.

Transcripts

Rhodes State College and the National Student Clearinghouse have partnered allowing students to order their transcripts from the College's website for a processing fee for each transcript requested. Students can choose to receive an electronic PDF or printed via USPS.

Student Services

Accommodative Services

The Office of Accommodative Services provides equal access, support, resources, and advocacy to students who have documented disabilities. In addition, Accommodative Services work in an advisory capacity with faculty and staff in an effort to develop reasonable accommodations that allow students with disabilities to fully participate in all programs and services offered at the College.

The Testing Center and Accommodative Services Director functions as a liaison with faculty and staff, as well as with community agencies. The primary goal of Accommodative Services is to implement classroom accommodations based on individual needs, to provide student support, and to enable students with disabilities to have equal access to Rhodes State programs and services. Rhodes State buildings comply with Federal regulations for individuals with disabilities by providing access through external ramps, automatic doors, elevators, designated parking areas close to the buildings, and restroom facilities. TTY services are located in the Public Service Building Lobby.

There are many types of accommodations available to students, and all decisions are made on a case-by-case basis. The most common accommodations include (but are not limited to) extended time on tests, reduced distraction testing, enlarged print materials, use of an audio recorder or C-Pen in the classroom, and use of audio textbooks. For more information, call (419) 995-8476 or visit Technical Education Laboratory Building, Room 132.

Bookstore

The Barnes & Noble bookstore is located on the first floor of the Public Service Building. The bookstore stocks all textbooks and supplies necessary for each course. In addition, there are a variety of gift items, such as sweatshirts, t-shirts, and novelty items. Bookstore hours vary throughout the year.

The bookstore sells and buys new and used books. Refunds and exchanges will be made only at specific times for specified items. Please check the store for refund and buy-back policies. Students can purchase their books from the Bookstore website.

Career Development

Rhodes State College Career Development has many resources for each step of your career journey including academic major and career exploration, cover letters and resumes, job searching, and interviews. Resources are also available to help you prepare for transfer to a four-year institution to earn your bachelor's degree.

Student employment, co-op, internship, part-time, full-time, temporary, and volunteer opportunities are posted via the College Central Network. Students are encouraged to research employers, apply for positions, arrange interviews, upload résumés to participate in our résumé referral service, view career events, review resources, and conduct research. Students should contact Career Development if they have specific

questions on how to set up their account, search for positions, or upload their résumé and/or other career documents.

Additional Career Development information and resources are located here. To schedule an appointment for assistance selecting a major, customizing your resume, developing your job search strategy, and reviewing potential interview questions, contact (419) 995-8352 or CareerDevelopment@RhodesState.edu.

Child Care

The Rhodes State College Early Learning Center at the Lima YMCA is available for students and staff with small children six weeks to six years at a reduced rate. All staff have their Child Development Associate (CDA) or degree in Early Childhood Education. The Center has been awarded the "Step Up to Quality" rating and strives to provide a program that includes a loving, nurturing environment, professional staff, and a developmentally appropriate curriculum that enables every child to grow and learn. Contact the Child Care Center at (419) 223-1044 or visit the Rhodes State College website for additional information.

Computer Resources

Computer labs are available for student use in various locations around campus. Students' username and password to use computers and email services are available 24 to 48 hours after acceptance to the College. Students with disabilities should contact Accommodative Services if adaptive equipment is needed. Operating hours are posted outside each lab.

Dental Hygiene Clinic

The Rhodes State College Dental Hygiene Clinic provides preventive dental hygiene treatment to include: an oral exam, radiographs (x-rays), oral prophylaxis (cleaning), fluoride treatment, dental sealants, and oral health instruction. The majority of these services are available without charge to the Rhodes State College students and employees. The Dr. Kenneth and Jean Clemens Clinic is located in Cook Hall; the hours vary from semester to semester.

Developmental Education

Rhodes State College evaluates students' academic preparedness by administering an assessment of reading, writing, and math skills upon admission. The information obtained during this assessment process is critical to proper course selection. To provide appropriate educational experiences aimed at strengthening a student's academic skills, taking developmental courses in reading, writing, math, or science is sometimes necessary. Developmental courses are designed to preserve and make possible educational opportunities for each student. They help to develop the skills, attitudes, and competencies necessary for success in college courses. Developmental courses do not count toward a student's graduation requirements. However, final grades in these courses do count in the grade point average.

The developmental courses normally offered and their credit hour values include:

Code	Title	Hours
BIO 0900	Introductory Anatomy and Physiology	3
CHM 0960	Introductory Science	3
COM 0990	Integrated Reading and Writing	3
CPT 0980	Developmental Computer Skills	2
MTH 0900	Mathematics Foundations	4

MTH 0926	Statistics Companion Course	3
MTH 0937	College Algebra Companion Course	3
MTH 0951	Quantitative Reasoning Companion Course	2
MTH 0953	Foundations for College Algebra	5

Food Services

Limited food services are available in the OSU-Lima Perry Webb Student Life Building. Hours for food services are posted each semester. Vending machines offering snacks and beverages are located in all buildings.

Housing Information Service

Although most students commute daily from their homes, the College recognizes the group of students who need local housing. A listing of rental property management companies and a local residence hall-style housing unit is available in Public Service Building, Room 216. This listing is provided as information only. Rhodes State is NOT responsible for a student's choice of housing. The College does not inspect, approve, supervise, or maintain any properties for off-campus housing.

Internships and Experiential Learning

Internships and experiential learning are the connections that bridge academic coursework with program-related workforce experience while still in school. Here at Rhodes State College, most students must complete an experiential learning experience to graduate. These experiences will help students complete required credits, amplify skills, add to their career profiles, and heighten potential interest with future employers. Common names for required experiential learning experiences include work-based learning, internships, field experiences, practicums, clinicals, and externships. Some programs of study find employers for these experiences while other programs require students to secure their own. Students who must secure their own experience can begin their job search as soon as their first semester. The Internships and Experiential Learning Coordinator assists students with understanding experiential learning requirements, the processes in securing a position for credit, and position searches.

Student employment, co-op, internship, part-time, full-time, temporary, and volunteer opportunities are posted via the College Central Network.

Students are encouraged to research employers, apply for positions, upload résumés to participate in our résumé referral service, view career events, review resources, and conduct research. Students should contact the Internship and Experiential Learning Coordinator if they have specific questions on how to set up their account, search for positions, upload their résumé, and/or other career documents.

Additional Internships and Experiential Learning information and resources are located here. To schedule an appointment for internships and experiential learning assistance, contact (419) 995-8218 or Miller.A16@RhodesState.edu.

Library

With Rhodes' membership in OhioLINK, a statewide network of 89 academic libraries and the State Library of Ohio, students, faculty, and staff can access a wealth of information, including over 12,000 online journals with millions of full-text articles, 244,000 ebooks, 46 million books and printed materials, and over 100 databases. The Lima Campus Library, shared with The Ohio State University at Lima, has approximately 70,000 items in its collection. Items that are not available locally or via OhioLINK can be requested via interlibrary services.

There is ample study space in the library, in addition to a video recording studio and a reservable conference room. Please consult the library website for hours. To find out more about the library, visit its website.

Testing Center

The Testing Center, located in the Technical Education Laboratory Building, Room 132 offers services that include the administration of the following exams: Accuplacer placement, instructional make-up, ATI TEAS, accommodated testing, non-Rhodes State College proctored, graduation, and certification/licensure tests. The Testing Center is a certified National Testing Network (NTN) and Pearson VUE Testing Center. The Testing Center is a member of the National College Testing Association (NCTA).

Users of the Testing Center are to note that:

- Appointments are required for all testing.
- Rhodes State students have the responsibility of reminding the instructor to send tests to the Testing Center at least two business days before the exam is to be administered.
- A picture ID is required to use any of the Testing Center services. All Rhodes State students must present their Rhodes State ID. Students who are scheduling placement tests and non-Rhodes State College students may present their driver's license or other government-issued picture ID. Please call for more information regarding what forms of identification are acceptable.

For more information on the Testing Center, call (419) 995-8476.

Tutoring Center

The Tutoring Center, located in the Science Building, Room 240, provides academic support services and resources to all Rhodes State students free of charge. The Center is committed to providing student-centered opportunities for learning and intellectual competence in universal access environment. Tutors and staff engage students in achieving their personal and educational goals by developing academic skills and critical thinking abilities.

Appointments are recommended, and online tutoring is available through the Ohio eTutoring Consortium and Tutor.com. More information regarding online tutoring is available on the Tutoring Center webpage. The goal of tutoring is to aid students in developing the skills, strategies, and attitudes necessary to reach their academic goals. Tutors help with specific course material and integrate study and learning strategies to promote independent learning.

For more information, contact (419) 995-8039.

Student Activities & Athletics

Rhodes State College recognizes the value in taking a holistic approach to the development of the whole student.

Student Engagement, First Year Programs and Recreational Sports offers programming that is diverse in nature and aims to contribute to overall student development outside of the classroom. These programs are designed to keep different learning styles in mind by offering various methods of engagement. These activities vary each semester depending on scheduling, student feedback, and current events.

Student Engagement & First Year Programs

The Office of Student Engagement & First Year Programs offers a variety of social, cultural, philanthropic, and informational events each semester including concerts, crafts, novelty items, and free food giveaways. These events vary in on-campus, virtual, and make-or-take settings. Major events to look forward to include Welcome Day, Spring Fling, Break the Silence Week, and Cultural Food Tours. Activities and events are included in the Student Scoop newsletter delivered twice a month through student email, social media, or Canvas.

Student Clubs and Organizations

Students are invited to explore opportunities to participate in clubs and organizations offered at Rhodes State College. Student organizations exist to meet the interests of students whether through educational associations such as the Student Dental Hygiene Association or through special interests such as the Creative Writing Club.

First Year Programs

The Office of First Year Programs (FYP) is all about new student success holding a strict “no silly questions” attitude and are here to help new students find their way at Rhodes State. FYP runs Orientation to ensure new students are prepared for the start of their first semester and plans additional workshops and events to assist in navigating college life. The Peer Mentors also work out of FYP and are fellow Rhodes State students who are available to talk with new students about their college experience. Students can stay up to date by checking out the FYP Corner of the Student Scoop newsletter or by visiting First Year Programs in PS Building 141.

For more information about activities available at Rhodes State College, visit the Office of Student Engagement & First Year Programs in the Public Service Building, Room 140.

Recreational Sports

Students interested in athletic and recreational programs in a leisure setting are encouraged to get involved with intramural activities. The Recreational Sports Office is located on the first floor of Cook Hall. The College offers several intramural activities including volleyball, basketball, dodgeball, kickball, bowling, whiffle ball, soccer, and flag football. Each sport has a regular season and a tournament for the championship. Campus recreation also provides outdoor adventure programming including ski/snowboarding, kayaking/paddleboarding, hiking and backpacking.

Safety & Security Emergencies

In case of an emergency, a staff/faculty member should be contacted immediately. If a rescue squad is needed, call 9-1-1. Campus Safety & Security Department should also be contacted; dial 8499 from any campus phone or call (419) 995-8499 from any cell phone. There are also outside Emergency Call Box Phones that are located throughout campus.

These are easily identifiable at night because they have a blue location light. Simply press the call button and you'll be connected to the Campus Safety & Security Department. If the fire alarm sounds while on campus, students should walk calmly and silently to the nearest exit and leave the building. Do not use the elevators. Remain outside the building until the all-clear sounds. The College utilizes the Rhodes Alert Emergency Notification System to notify people of emergencies via text, phone, and email. Students may sign up for Rhodes Alert by clicking here.

School Closing/Delays

The College will remain open except under extreme weather conditions or emergency situations. School closings and delays will be communicated via Rhodes Alert, posted on the College's homepage, reported to local television and radio stations. Students may sign up for Rhodes Alert to receive this information via text, email, or phone.

Lost or Stolen Articles

Do not leave books or other personal articles unattended. The College is not responsible for any personal articles which are lost or stolen. Lost articles should be turned in to the Campus Safety & Security Department, located in 140 Technology Education Lab. Any thefts should be reported immediately to the Campus Safety & Security Department at (419) 995-8499.

Campus Parking Rules and Regulations

Parking is permitted in all paved and gravel parking lots designated for student parking. Parking is not permitted in fire lanes; within 10 feet of a fire hydrant; along yellow-painted curbs; within 20 feet of a crosswalk; within 30 feet of an intersection, stop sign or other traffic control device; alongside or opposite any street excavation or obstruction, outside designated parking lanes or any place where signs prohibit parking.

Students are not permitted to park vehicles in visitor parking areas. Only vehicles displaying a state of Ohio handicap placard shall be parked in handicap parking areas. Illegal parking in handicap zones, whether on public or private property, is a minor misdemeanor punishable under state law.

Vehicle registration is mandatory. No vehicle shall be parked on campus which does not display a campus parking decal, except for visitors to the campus. Vehicles may be registered at the Campus Safety & Security Department, 140 Technology Education Lab or the Office of Admissions, 148 Public Service Bldg.

Campus traffic and parking regulations are derived from Ohio Traffic Laws and were developed for the safety of all persons on campus and to ensure the orderly flow of traffic and uncongested parking. Parking violations may result in a fine and/or the vehicle being towed and impounded with the owner having to pay all costs associated therewith. Unpaid fines may result in registration for future classes being withheld. Fines can be paid online via CashNet or by credit card, cash or cashiers check at the Business Office, 222 Public Service Building.

For more information, contact the Campus Safety & Security Director at 140 Technology Education Lab: (419) 995-8499.

Campus Environment

Students have the right to a campus and classroom environment that is safe, secure, and conducive to learning. In support of this, the student has the right to express his/her concerns if it negatively affects his/her environment. For classroom issues, the student should first contact the course instructor. If the student is not satisfied with the outcome of this discussion, then he/she has the right to contact the program chair of the department in which this course is housed. For student services issues, the student should first contact the department chair or the Office of Student Affairs. If there is a reason to believe there is immediate danger, the student should contact the Campus Safety & Security Department either in person (140 Technology Education Lab), by campus phone

(8499) or cell phone (419) 995-8499. More information can be found on the Security webpage.

Tobacco-Free

Rhodes State College is a tobacco-free campus. The Tobacco-Free Policy at Rhodes State College requires that all faculty, students, staff, visitors, and contractors not use tobacco products on campus, either inside or out. The College strives to enhance the general health and well-being of its faculty, staff, students, and visitors. The College desires to support individuals to be tobacco-free, to achieve their highest state of health, and to launch students into their careers at a high level of health and wellbeing. To support this commitment, smoking and the use of tobacco and tobacco products are prohibited in or on all college-owned or leased property including vehicles.

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