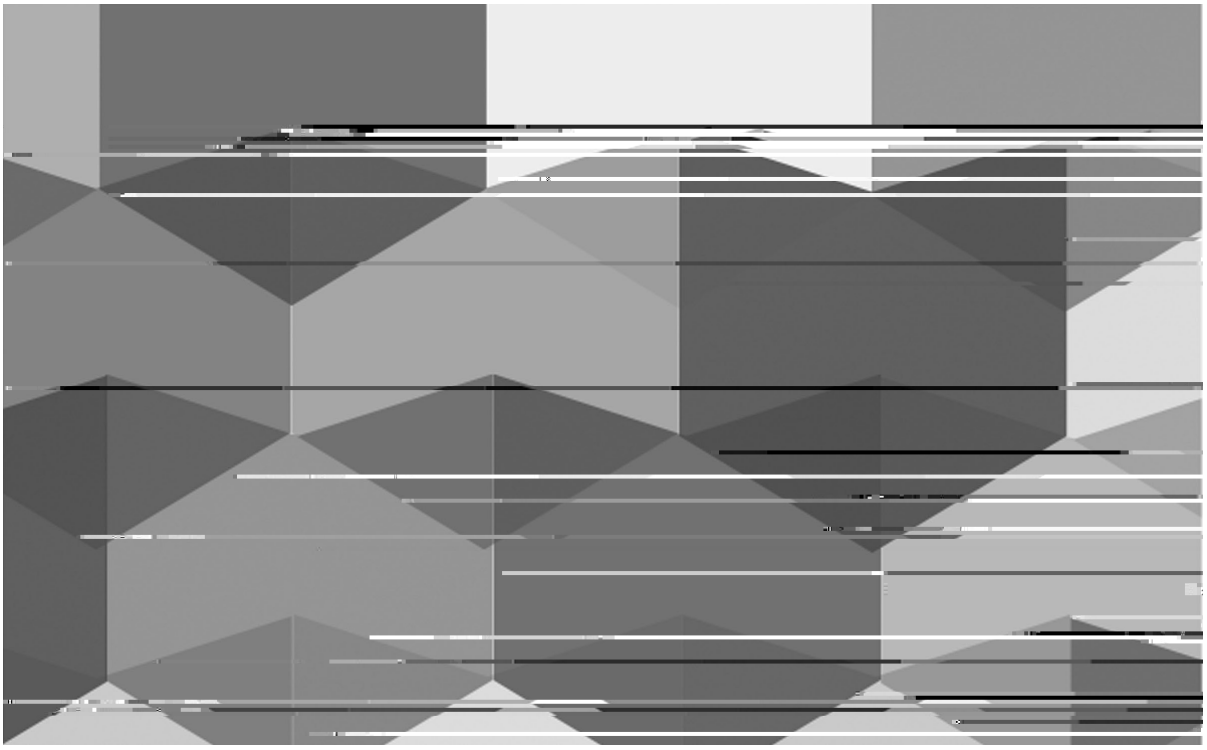
Course Descriptions



ACCT 2299 Seminar *1-6 credits*
This course will be a discussion of particular problems related to the student's chosen program and areas of interest.

ADVANCED MANUFACTURING - ADMF

ADMF 1101 Introduction to Manufacturing *3 credits*
In this course, students will be introduced to print reading and part visualization from drawings, including analyzing and interpreting Multiview drawings and three-dimensional models, location of key features and dimensioning specifications. Students introduced to beginning concepts in geometric dimensioning and tolerances. Instruction in using precision measurement tools including, but not limited to scales, calipers, micrometers, dial indicators, coordinate measurement machines. Students will incorporate the use of computer interfaces in metrology and basic statistical process control and topics in lean manufacturing.

ADMF 1102 Semiconductor 101 *3 credits*
In this course, a student will explore career opportunities within the semiconductor industry and learn how people effectively work in a cleanroom environment and adhere to chemical safety best practices. Students will be introduced to how semiconductor wafers are manufactured and processed to become an integrated circuit used in a variety of industries. Students will demonstrate problem-solving, critical thinking and communication skills while learning how the microelectronic manufacturing environment focuses on punctual delivery of products and tasks, according to the Standard Operating Procedure (SOP)/checklist.

ADMF 1103 Introduction to Vacuum Systems Technology *3 credits*
In this course, students will be introduced to the operational mechanisms and process use of vacuum pumps used in the semiconductor industry. Students will explain the operational methodology and process use of equipment that requires vacuum pumps used in the semiconductor industry. Students will demonstrate problem-solving, critical thinking and communication skills while learning how to perform maintenance on a vacuum system.

AGRICULTURE - AGRI

AGRI 1101 Agriculture Economics *3 credits*
An introduction to the field of agricultural economics as it relates to production, consumption, marketing, prices, supply and demand, records, and finance.

AGRI 1106 Principles of Crop Science *4 credits*
Students will gain an understanding of the general principles involved in crop production, including soil, nutrients, plant breeding, planting techniques, tillage systems, pests, budgets, and environmental factors. Students will also learn the advantages and disadvantages of conventional, organic, and sustainable production systems.

AGRI 1107 Principles of Animal } stanmeqs, sum

systems.

]Ð e я ¢ v̈ ъ

syste א ᵀ .

BIOL 1320 Principles of Biology II *5 credits*
Prerequisite: BIOL 1101 or BIOL 1310/1311
The major focus in this course is on the organism through biosphere levels of life. Topics include: diversity of plants, fungi, and animals; plant structure and function; the biology of animal systems; fundamentals of ecology and the biosphere. This course is for Associate of Science or pre-professional students wishing to transfer as biology majors.

BIOL 1510 Anatomy and Physiology I *4 credits*
This course introduces major topics in anatomy and physiology for allied health students. After an introduction to the complete structural hierarchy of the human body as well as the basic physiology of homeostasis, there is focus on the chemical, cellular, and tissue levels of organization. The course is then organized to examine the structure and function of organ systems including the integumentary system, skeletal system and articulations, muscular system, and the nervous system including general and special senses. The laboratory part of the course introduces students to techniques and equipment used to study human anatomy and physiology. The early labs address laboratory safety, the basic structure and functions of the human body, principles of scientific method, and the use of the metric system to make measurements useful in the study of anatomy and physiology. The next few labs focus on cells from chemical composition to membrane function, including microscopic examination of cell structures, mitosis, and tissues. The course then shifts to examine the structure and function of organ systems including the integumentary system, skeletal system and articulations, muscular system, and the nervous system including general and special senses.

BIOL 1520 Anatomy and Physiology II *4 credits*
Prerequisite: BIOL 2205 or BIOL 1510
This course is a continuation of the study of major topics in anatomy and physiology begun in Biol 1510 Anatomy and Physiology I. The course begins with the structures and functions of the endocrine system that provide relatively slow and long-term hormonal controls. The reproductive system, development, and genetics of humans are also covered. The structure and function of the cardiovascular and lymphatic systems including immunity are included in the middle of the course. The final part of the course covers the respiratory, digestive, and urinary systems along with nutrition and body balances. The laboratory component of this course introduces students to techniques and equipment used to study human anatomy and physiology. The first lab is an examination of endocrine system anatomy as well as the major hormones and their functions. The next labs focus on the relationship between structure and function of the reproductive system, the process of human development, and pregnancye thcl par

BTNL 1120 Intermediate

genetic use restriction technology (GURT). Economic issues associated with the stock market and patents will be examined. Biotechnology and laboratory science plays an important role in popular culture. Books, movies, and television shows based on laboratory science and biotechnology will be reviewed.

Career skills and workplace ethics will be discussed. Students will prepare a resume and examine opportunities for employment.

A trip to Europe to visit sites associated with the discovery of the structure of DNA and other important related places will be an option. Visits to the University of London-Kings College where X-ray crystallographic images of DNA were made by Rosalind Franklin, the Cambridge area and The Eagle Pub where the announcement of the discovery of DNA structure was made, and many important sites associated with molecular biology and the history of science in general will be an option.

BTNL 2280 Biotechnology and Laboratory Science Work Experience *1-8 credits*

Prerequisite: The student must have completed Introduction to Biotechnology (BTNL 1110).
Biotechnology and Laboratory Science Work Experience is a paid or unpaid work activity which relates to an individual studentŠs occupational or learning objectives.

BUSINESS ADMINISTRATION - BADM

BADM 1199 Seminar *1-6 credits*

Discussion of particular problems related to chosen program and areas of interest.

BADM 2204 Principles of Marketing *3 credits*

Corequisite: ECON 2205
An introduction to marketing activities, analysis, strategies, and decision making. Topics include: integration of product, price, promotion, and distribution activities; research and anticul] M ticularčtic ‘ ÔQa m

3 cred54s

& R pW H€6 7 Đ 0 P 0 p D B u @ O ð 0 R S 3 cred887003000300

BADM 2252 Business Law II (The Formation & Regulation of Business) *3 credits*
This course is an introduction to the numerous legal topics including contracts, agreements, contractual capacity, consideration, form of contract, third persons, and genuineness of assent, legality, discharge and breach of contract. This course also covers sales and leases, negotiability, bank/customer relations, secured transactions and bankruptcy.

BADM 2272 Business Communications *3 credits*
A practical introduction to interpersonal communication as it applies to the modern workplace. Students will create a variety of business documents and communications using current, industry relevant, technology. Special emphasis will be placed upon strategies for communicating in a team setting. This course will assist students in developing the written, oral, and collaborative skills necessary for future business courses, internships, and professional positions.

BADM 2290 Problems in Business *3 credits*
Prerequisites: ACCT 1102 OR ACCT 2230, BADM 2251, CSCI 2218, ECON 2205
A comprehensive survey course designed to test the student's mastery of the core courses required for the Associate Degree. The overall subject matter deals with business planning. The course is a series of projects: market research, case studies in management, a presentation, labor negotiations, a complete business plan, and a comprehensive final. Successful completion of the course requires a portfolio of reports covering the assigned projects.

BADM 2299 Seminar *1-6 credits*
Prerequisites: second year in Business Management program and permission of instructor and full-time discipline faculty.
This course will be a discussion of particular problems related to the student's chosen program and areas of interest.

CHEMISTRY - CHEM

CHEM 1120 Introduction to Chemistry *5 credits*
Prerequisite: One of the following:
Å 2 years of college preparatory math with a grade of òCó or higher
Å Appropriate score on college placement exam
Å MATH 101 or MATH 106 or MATH 1106
A beginning chemistry course designed for students in the health science programs or those desiring to fulfill a non-science general education requirement. Topics covered include measurement, atomic theory, bonding and chemical formulas, chemical reactions, stoichiometry, kinetic molecular theory, gas laws, solutions, acid-base chemistry, reaction rates, and oxidation/reduction. Laboratory exercises are designed to complement the lecture.

CHEM 1124 Principles of Organic and Biolm *5 credits*

of alkanes, cycloalkanes, alkenes, alkynes, alcohols, alkyl halides, conjugated alkadienes, allylic systems and arenes. Addition, elimination, nucleophilic substitution, and electrophilic aromatic substitution reactions are covered including their mechanisms. Spectroscopy of organic compounds is introduced.

CHEM 2202 Organic Chemistry II *4 credits*
Prerequisite: CHEM 2201
Corequisite: CHEM 2212
This course is designed to give the student extensive background in bonding, nomenclature, and reactions of organometallics, alcohols, diols, ethers, epoxides, aldehydes and ketones. Reactions of these types of compounds or leading to their formation will be covered, including electrophilic aromatic substitutions and nucleophilic additions to the carbonyl group to enolates and organometallics. Spectroscopy of organic compounds will be introduced. The course is also designed to give the student extensive background in bonding, nomenclature, and reactions of carboxylic acids and their derivatives, amines, aryl halides and phenols. Reactions of these types of compounds or leading to their formation will be covered. Basic biomolecules such as carbohydrates, lipids, amino acids, and proteins and nucleic acids will be introduced with an emphasis on their basic primary, secondary and tertiary structures, as appropriate, and certain simple properties and reactions from an organic chemical perspective.

CHEM 2211 Organic Chemistry I Lab *1 credit*
Prerequisite: CHEM 1151, CHEM 1152, CHEM 1161 and CHEM 1162
Corequisite: CHEM 2201CHEM 1152 , a b]ĮMti&y ‘

CSCI 2260	Microcontroller Programming	*3 credits*

guidelines mandated by the Ohio Peace Officer Training Commission and the Ohio Attorney Generalís Office.

CJUS 1103 Basic Law Enforcement II *9 credits*
Prerequisite: CJUS 1102
This course covers the second half of 728 + hour Ohio Basic Peace Officer Training Academy. Basic Law Enforcement I and II provide the student with the fundamentals of entry-level peace officer training for employment as a law enforcement officer. The student will learn the technical and social skills needed to perform in the area of law enforcement. There is an increasing demand for better educated law enforcement personnel so the successful student can expect job opportunities as a peace officer. This program is offered in conjunction with the Greenfield Police Department. This is a state certifying academy and is conducted under the guidelines mandated by the Ohio Peace Officer Training Commission and the Ohio Attorney Generalís Office.

CJUS 1104 Private Security Training Course *6 credits*
This 157 hour training academy is designed to meet the requirements of the Ohio Revised Code and the Ohio Administrative Code for armed private security officer certification and will address all academic and skill areas of basic private security duties.

CJUS 1105 Asset Protection & Loss Prevention *3 credits*
The course focuses on administration and management issues related to corporate security functions, including strategic and operational management, risk management, contract security services, management of emergen] ж ж Tk
l ˛ p T ж cm
ı ҽ M ‘ ` ҕ

EDUC 1101 Introduction to Education *3 credits*
This introductory course is designed to acquaint students with the field of education. Student will examine technology and its impact on schools, ethical and legal issues facing teachers, effective teaching strategies, diversity in the classroom, social problems and how they relate to schools, standard-based education, professionalism in education and current curricula. Students will complete a variety of activities including writing reflective essays for inclusion in the student portfolio.

EDUC 1102 Foundations of Education *3 credits*
Prerequisite: EDUC 1101
This course is an examination of the relationship between school and society through the lens of current issues in education. A variety of perspectives will be examined, including historical, philosophical, ethical, and legal. Through classroom observations and journal entries, students will develop an understanding what it means to be reflective practitioner. Students will also submit final portfolios for review. A forty-hour field component in public school classroom is required; consequently, students will be required to pass a background check. Observations will be evenly distributed among early childhood, middle school, high school, and special education programs.

EDUC 1110 Creative Arts for the Young Child *3 credits*
Prerequisite: EDUC 1140
This course is designed to prepare those in early childhood education with basic music and art activities for the young child. An exploration of art and music instructional methods, learning sequences and teaching strategies will be emphasized. Eight hours of classroom observation of young children involved in art and/or music are required.

EDUC 1118 Guiding Children's Behavior & Learning *3 credits*
Prerequisite: EDUC 1101 or EDUC 1140 6055>-9.3 20044005504C004F0047004B00520052004700030048004700104051

summarized as ò21st Century Skillsó and the òISTE Standards for Educators and Students.ó Students will learn how digital tools and technologies can engage teachers and students while expanding their understanding of academic material across the grade levels.

EDUC 2238 Young Adult Literature *3 credits*
Prerequisite: EDUC 1102 and ENGL 1101
Students will learn what constitutes quality young adult literature and will be introduced to a wide range of young adult novels. Students will examine young adult literature through a literary context and develop age-appropriate lesson plans. This course does not satisfy the general education requirements in English and humanities. Students can not receive credit for both ENGL 2238 and EDUC 2238.

EDUC 2240 Early Childhood Practicum *3 credits*
Corequisite: EDUC 2241
This course is designed to provide students with opportunities to plan, implement, and evaluate developmentally appropriate lessons and activities in a licensed inclusive early childhood setting. Students will work on-site under the direct supervision of a qualified cooperating teacher for 16 hours per week for a total of 240 clock hours. Students will be assigned two sites (120 hours each location) for the semester. Students will also be videotaped and critiqued while teaching young children.

EDUC 2241 Early Childhood Seminar *3 credits*
Corequisite: EDUC 2240
This seminar accompanies EDUC 2240 and will enable students to discuss a variety of topics relevant to their student teaching. Topics may include but shall not be limited to behavior guidance, children with special needs, working with parents, professionalism, current teaching strategies, etc. Students will study the role of the teacher, the student teacher, and the children. Weekly time sheets and journal will be submitted. Regarding the portfolio, students will also be expected to create their resumes and provide additional documentation to demonstrate their professional development.

EDUC 2243 Individuals with Exceptionalities *3 credits*
Prerequisites: EDUC 1101 OR EDUC 1140.
This course is designed as an introduction to the field of special education and is appropriate as a first course for students intending to pursue certification in special education as well as for students planning to pursue other teacher careers. Topics covered in the course include the history of the field; social and legal issues affecting the field; examinations of various areas of exceptionality; and discussion of educational responses for students with exceptionalities.

EDUC 2260 Teaching in a Diverse Society *3 credits*
Prerequisite: EDUC 1101
This course is designed to prepare the prospective teacher to effectively teach the range of students found in the typical classroom. Students will become familiar with various individual differences that characterize today's school population including children with special needs, talented and gifted learners, culturally and linguistically diverse individuals, students with low-incidence disabilities, etc. Practical strategies for adapting instruction to meet the learning styles of all students in inclusive classrooms will be addressed. Working with families of diverse backgrounds will be addressed. Ten hours of public school classroom observation in an approved diverse setting are also required.

ELECTRICAL ENGINEERING - EENG

EENG 1105 DC Circuits & Devices *3 credits*
Prerequisite: MATH 1118 or equivalent
An examination of the behavior of passive devices in transient and steady state DC circuits. Topics include device construction and packaging ohmic and non-ohmic conduction, voltage, current, power and resistance calculations in series, parallel and series-parallel circuits. Laboratory consists of development of prototyping skills and verification of circuit operation.

EENG 1115 AC Circuits & Devices *3 credits*
Prerequisite: EENG 1105 or equivalent
An examination of the frequency response of reactive circuits. Topics include AC voltage waveforms & frequency, current and power calculations in series, parallel and series-parallel circuits. Applications of resonance and filtering are discussed.

EENG 1150 Operating Systems *3 credits*

EENG 1199 Seminar *1-6 credits*
This course will be a discussion of particular problems related to the student's chosen program and areas of interest.

EENG 2205 Digital Electronics *3 credits*
P ɹ ˙ ıP MM MʹO ᵀ n H ʹO ᵀ

E] e M ˢ ɣ

ENDS 2221 Machine Design *3 credits*
Prerequisites: ENDS 2201
This course covers the analysis and design of machine components and assemblies such as couplings, bearings, springs, frames, gears, belts, etc. utilizing the principles of mechanics, kinematics, drafting and strength of materials.

ENDS 2230 Advanced Concepts in 2D AutoCAD *3 credits*
Prerequisites: ENDS 1140
An intermediate course which dives into advanced concepts in computer assisted design techniques. The student will learn how to make the software work for them while gaining experience in solving drafting problems utilizing an interactive CAD system. Students will extend their CAD competency by solving sophisticated drafting problems utilizing an interactive CAD system, applications, course description and lecture with an opportunity to test for third party credentials via Autodesk.

ENDS 2231 Introduction to 3D AutoCAD *3 credits*
Prerequisite: ENDS 1140 or ENDS 2230
An introduction into 3D modeling, this course continues to build on the student's 2D knowledge. This course will take the student from the very basic introduction to AutoDesk AutoCAD 3D all the way through to the creation of realistic looking 3D models and renderings. The student will develop the ability to create 3D models and presentations suitable to sell the design or concept to others.

ENDS 2232 Introduction to SolidWorks *3 credits*
Prerequisite: ENDS 1140
An introduction course which dives into the 3D and solid modeling design concepts in computer assisted design techniques. The student will learn how to make the software work for them while gaining experience in solving drafting problems utilizing an interactive CAD system. Students will extend their CAD competency by solving sophisticated drafting problems utilizing an interactive CAD system, applications, course description and lecture with an opportunit. "

ENDS 2280 Engineering Internship II *1-3 credits*
Prerequisite: ENDS 1180
Career-related activities encountered in the student's area of specialization offered through an individualized agreement, paid or unpaid, among the College, employer, and student. Under the supervision of the College and the employer, the student combines classroom learning rim l M viencte l p D ' ق l ar ب

aeg

ENGL 2217 Readings in Early British Literature *3 credits*
Prerequisites: ENGL 1101
This is a survey course that examines representative works of literature from the Anglo-Saxon period to the late 18th century. A variety of authors, genres, and trends will be studied.

ENGL 2218 Readings in Later British Literature *3 credits*
Prerequisites: ENGL 1101
This is a survey course that examines representative works of literature from the late 18th century to the present. A variety of authors, genres, and trends will be studied.

ENGL 2219 Creative Writing (Fiction & Poetry) *3 credits*
Prerequisites: ENGL 1101
This course is an introduction to creative writing, focusing on both fiction and poetry. Discussions of fiction writing will emphasize the technical elements of fiction, assigned readings, and works written by class members. Discussions of poetry will emphasize the technical elements of poetry, assigned readings, and works written by class members.

ENGL 2220 Introduction to Travel Writing *3 credits*
Prerequisites: ENGL 1101
Study of the history, critical theories surrounding, and the process of creating travel writing.

End

ENGL 2230 American Literature to 1865 *3 credits*
Prerequisites: ENGL 1101
This course explores major works in American literature through the mid-19th century. Readings are drawn from the Puritan Age, Colonial Period, Romantic Age, and the Age of Realism.

ENGL 2235 American Literature after 1865 *3 credits*
Prerequisites: ENGL 1101
This course explores major works and literary trends in American literature from 1865 to the present.

ENGL 2236 Contemporary World Literature: The Novel (1945-present) *3 credits*
Prerequisites: ENGL 1101 or ENGL 101
This course is a survey of world literature from postwar to present that focuses on novels and novellas. Student will read and discuss great works from around the world, effectively establishing a global view of how literature has evolved since the Second World War. Areas covered include Africa, Asia, The Caribbean, Europe, The Far East, The Middle East, North America, and South America. In addition to readings, discussions, and exams, students will write two research papers and give two presentations that demonstrate their ability to explain the importance of specific works both verbally and in writing.

ENGL 2238 Young Adult Literature *3 credits*
Prerequisites: ENGL 1101 (or ENGL 101)
Students will learn what constitutes quality young adult literature, and will study a wide range of young adult novels and authors. Students will examine young adult literature through a literary context while they read and analyze culturally diverse novels. In addition to readings, discussions, and exams, students will write at least one paper with sources and complete at least one project or presentation. These assignments will demonstrate their ability to explain the importance of specific works both verbally and in writing.

ENGL 2240 Introduction to Film *3 credits*
Prerequisites: ENGL 1101
This course is designed to introduce students to the vocabulary and artistic elements of film. It will focus on the elements of cinematic language (including narrative, mise-enscene, cinematography, acting, editing, and sound). Students will view films to gain an understanding of cinematic form and learn techniques for analyzing and interpreting film.

ENGL 2241 Film History

ENGL 2247 Critical and Cultural Approaches to the Fairytale *3 credits*

Prerequisite: ENGL 1101

This course will examine the cultural history of an examine critical approaches to fairy tales, with particular attention paid to the fairy tales of Germany and the Brothers Grimm. The course examines the cultural significance of the original texts, works to develop critical responses to the texts, and actively examines the connections between the original tales and the forms of fairytales being told and created today.

FINE ART - FNAR

FNAR 1104 Introduction to the Fine Arts *3 credits*

Creators of art, regardless of the chosen form, share many concepts. In this course, the student will explore these similarities and experience the creative process in each of the artistic disciplines thereby enhancing personal interest in and understanding of the literary, musical, theatrical, and visual arts.

FNAR 1105 Basic Drawing I *3 credits*

An intensive studio drawing course on the observation and interpretation of form with concern for space, line, volume, texture, and composition. Varied stylistic approaches and subject matter will be studied in the pencil and charcoal mediums.

FNAR 1106 Basic Drawing II *3 credits*

Prerequisite: FNAR 1105

An intensive studio drawing course on the observation and interpretation of form with concern for space, line, volume, texture, and composition. Varied stylistic approaches and subject matter will be studied in the pencil and charcoal mediums. This course is a continuation of FNAR 1105.

FNAR 1108 Art Appreciation *3 credits*

Art Appreciation is the study and understanding of the visual arts, including painting, sculpture, architecture, and other forms of two- and three- dimensional expression. It involves learning basic concepts, terminol-

FOREIGN LANGUAGE - FLNG

FLNG 1104 Elementary French I *3 credits*
This course is based on the integration of learning outcomes across Interpersonal, Interpretive, and Presentational Modes of Communication. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with products, practices, and perspectives of the target culture(s). Students learn grammar, vocabulary, and structures to enable them to meet functional performance goals at this level and to build a foundation for continued language learning. During this course, students generally perform in the Novice range, although a few abilities may emerge in the Intermediate range.

FLNG 1105 Elementary French II *3 credits*
Prerequisite: FLNG 1104 Elementary French I
This course builds upon the foundation laid in FLNG 1104, and uses the same text. It is the second phase in the two-course sequence which comprises elementary French at SSCC. This course is based on the integration of learning outcomes across Interpersonal, Interpretive, and Presentational Modes of Communication. Students accomplish real-world communicative tasks in culturally appropriate ways as they gain familiarity with products, practices, and perspectives of the target culture(s). Students learn grammar, vocabulary, and structures to enable them to meet functional performance goals at this level and to build a foundation for continued language learning. During this course, students perform better and stronger in the Novice range while some abilities emerge in the Intermediate range.

FLNG 1107 Elementary Spanish I *3 credits*
Prerequisite: It is required that students with less than two years of high school Spanish begin at this level! . During this course! d-e® ъ ʌ ıı 2 ‘ ‘ vel!

Thematic units will include:
Å The World of Work and Future Trends
Å Art, Music and Literature
Å News and Current Affairs
Å Legends
Å Human Migration

Through exploration of unit themes, studentsË grasp of acquired grammar structures will be reinforced by review and active use of the present, preterite and imperfect tenses, the present and past perfect tenses and the present and present perfect subjunctive. In addition, new grammar structures will include the future and future perfect tenses, the conditional and conditional perfect tenses, the past perfect and imperfect subjunctive as well as si clause sentences.

interviewing theories studied in HSSR 2210, with emphasis on learning basic counseling skills that are appropriate to the counseling process in generalist practice and chemical dependency settings. Topics include techniques related to attending skills, facilitating growth, active listening, nonverbal behavior, action responses, motivational interviewing, and determining personal style. Special needs of diverse populations will also be featured.

HSSR 2215 Social Gerontology *2 credits*
Prerequisite: HSSR 1101 and PSYC 1110
This class takes a multidisciplinary approach to examining the issues facing people in late adulthood. Students will explore the demographic, sociocultural, and mental health aspects of aging. Problem solving techniques will be covered, along with future trends necessary with the approach of an aging population. Physical, cognitive, and psychosocial aspects of aging will be discussed.

HSSR 2216 Prevention, Diagnosis & Treatment of Chemical Dependency *3 credits*
Prerequisite: HSSR 1105
This course systematically studies chemical dependency as well as the theory and practice modalities related to treatment. The course will cover skills needed to recognize the enormity of this problem, how to assess and diagnose it and how to treat individuals and f R" MM! s an n! is e ɹ ɕ
an mm ᵀ ɔ ơ T discusse . ˌ P] l M ʊˌ
v ii T e

¥ ξ ﻉ v agv
T ou ώ se wi ṅ ɕ o ṅ ṅ
T

MATH 1119 College Algebra *2 credits*
Corequisite
Prerequisite: Any of the following:
Å Grade of C in Math 1118 Intermediate Algebra.
Å This course is recommended when repeating Math 1141 College Algebra.
Å Three High school STEM or Core Math courses with grades of B or higher
(typically Algebra I, Geometry and Algebra II).
Å Score of 20 or 21 on the math portion of the ACT
Å QAS placement test score of 261 or 262.
Å EA placement score of 80 ð 89.
Corequisite: Math 1141 College Algebra
This developmental level course is designed to be taken concurrently with Math 1141 College Algebra by students who need some extra support to be successful in Math 1141. This course will closely follow the topics being covered in the concurrent Math 1141 class and will include, as necessary, review topics from Math 1118 Intermediate Algebra. The student should expect intense review or practice and collaboration with other students.

MATH 1120 Technical Mathematics *3 credits*
Prerequisite: A student must meet one of the following criteria to register for this course:
- Math 1118
- Three High school STEM or Core Math courses with grades of C or higher
- Accuplacer QAS with a score of 253 or higher
This course contains skills and applications related to the engineering technologies. Emphasis is on formulas, graphing, trigonometry, vectors, exponential and logarithmic functions.

MATH 1123 Finite Math Co-Requisite *2 credits*
Prerequisite: Any of the following:
- Grade of C in Math 1116 Beginning Algebra
- This course is recommended when repeating Math 1124 Finite Math
- Three High school STEM or Core Math courses with grades of B or higher (typically Algebra I, Geometry and Algebra II)
- Score of 20 or 21 on the math portion of the ACT
- QAS placement test score of 261 or 262
- EA placement score of 80 ð 89
Corequisite: Math 1124 Finite Math
This developmental level course is designed to be taken concurrently with Math 1124 Finite Math by students who need some extra support to be successful in Math 1124. This course will closel| YM ҏ l ŧ rad ˚ ↑ ڃ

P 0 PO€• T

MATH 1141 College Algebra *4 credits*
Prerequisite: MATH 1118 with a B or higher; Students with a C in MATH 1118 must meet with an advisor before registering; Three High school STEM or Core Math courses with grades A, A, B or higher; ACT Math Score of 22 or higher; SAT Math Score of 530 or higher; QAS Placement Test with a score of 263 or higher and Algebra 2 with a B or higher; AAF Placement Test with a score of 263 or higher.
This course emphasizes the use of algebra and functions in problem solving and modeling. Appropriate use of technology and applying mathematics to real-world situations is emphasized. Topics include linear, quadratic, polynomial, rational, radical, exponential, logarithmic, and piece wise equations and functions. Students whose programs recommend a college algebra course or who need to prepare for calculus should take this course.

MATH 1142 College Trigonometry *4 credits*
Prerequisite: One of the following:
- Four High school STEM or Core Math courses with grades A, A, B, B or higher.
- MATH 1141
- ACT Math Score of 26 or higher
This course includes a study of trigonometric functions and their applications. Topics include circular functions, trigonometric functions, trigonometric identities, trigonometric equations, vectors, the complex plane, polar coordinates, conic sections, and applications of these concepts.

MATH 1150 Precalculus *3 credits*
Prerequisites: A student must meet one of the following criteria to register for this course:
- ACT Math score of 24 or higher.
- SAT Math score of 570 or higher.
- Accuplacer AAF score of 263 or higher.
- Four High School Math courses with grades of AABB or higher.
- A in Math 1118.
- Students with a B in Math 1118 must speak to an advisor before registering.

This is an accelerated course designed to prepare students for Calculus. It includes a study of polynomial, rational, exponential, logarithmic, and trigonometric functions, systems of linear equations, trigonometric identities, non-right triangles, vectors, conic sections, an introduction to sequences and series, and an introduction to Calculus. This course emphasizes the use of algebra and trigonometry in problem solving and modeling. Appropriate use of technology is emphasized.

MATH 2230 Differential Equations *4 credits*
Prerequisite: MATH 2222, MATH 223, or the equivalent of two semesters of Calculus
This course is an introduction to ordinary differential equations. Topics include first-order and higher order differential equations, power series solutions, polynomial operators, Laplace transforms, and numerical methods for solving ordinary differential equations. Applications to physical problems will be emphasized.

MATH 2237 Math for the Elementary Teacher I *4 credits*
Prerequisite: MATH 118 or MATH 1118, or 3 years of college preparatory math with a minimum grade of òCó.
This course includes math topics that are fundamental to elementary education. Topics include a review of problem solving, set theory, numeration systems, whole numbers, decimals, fractions, signed numbers, and the basic binary operations, with an emphasis on the use of manipulatives and visual representations to teach elementary mathematics.

MATH 2238 Math for the Elementary Teacher II *4 credits*
Prerequisite: MATH 118 or MATH 1118, or 3 years of college preparatory math with a minimum grade of òCó
This course includes math topics that are fundamental to elementary education. Topics include a review of statistics, probability, Euclidean geometry, measurement, and transformations, with an emphasis on the use of manipulatives and visual representations to teach elementary mathematics.

MATH 2241 Calculus for Business, Social and Life Sciences *5 credits*
Prerequisite: Math 141 or Math 1141, or 4 years of college preparatory math
This course is designed for business majors or other majors who will need a calculus based applications course. Topics will include limits, rates of change, optimization and other applications involving derivatives, exponential and logarithmic functions, and applications of integrals. Students who have earned credit for MATH 2221 may not earn credit for this course.

MATH 2250 Linear Algebra *4 credits*
Prerequisite: MATH 223 or MATH 2222, or the equivalent
This course serves as a standard introduction to linear algebra. Topics include matrix, operations, vector spaces, inner product spaces, linear transformations, determinants, eigenvalues and eigenvectors.

MATH 2281 Introductory Statistics *4 credits*
Prerequisite: A student must meet one of the following criteria to register for this course:
- Finite Math 1124 or College Algebra 1141
- MATH 1118 with a grade of C or higher or -
MATH 1125 with a grade of C or higher
- Three High school STEM or Core Math courses with grades of B or higher
- ACT Math Score of 22 or higher
- SAT Math Score of 530 or higher
- Accuplacer QAS score of 263 or higher
This course is designed for students needing a non-calculus-based introduction to statistics. It covers sampling methods, experimental design, descriptive analysis and presentation of data, probability, binomial

and administrative competency based examinations are included.

MAST 1115 Medical Terminology *2 credits*
This course is designed for the health science student and includes the principles of building a medical vocabulary. Emphasis is placed on the use of word parts including prefixes, suffixes, and root words used with a combining form to establish medical terms. The course provides an overview of body systems, their anatomy and physiology, diseases, conditions, current medical and diagnostic procedures, treatments, and pharmaceutical agents, used in conjunction with terminology. Authentic medical records with activities to enhance the application of medical terminology to the òreal world of medicineó are included. Correct spelling, definition, and pronunciation of medical terms is stressed. Communication both written and verbally between health care professionals, and between the health professional and patient, is emphasized.

MAST 1118 Human Diseases *2 credits*
Prerequisites: MAST 1115
This course includes basic information about common medical conditions, diseases, and the disease process. Emphasis will be placed on documentation of symptoms, patient assessment, case management - including diagnostic tests indicated, treatment indicated, client teaching required and ways to validate a patientís understanding of their disease and treatment. Course content includes major conditions organized by body system and a nine-part format consisting of description, etiology, signs and symptoms, diagnostic procedures, treatment, complimentary therapy, client communication, prognosis and treatment. Current ICD-10-CM coding systems are discussed and codes are listed for each disease reinforcing the importance of proper coding for reimbursement and research.

MAST 1126 Clinical Practicum I *1 credit*
Prerequisites: ALTH 1160, MAST 1101, MAST 1111, MAST 1115, MAST 2218, MAST 2240
Corequisites: MAST 1118, MAST 2205, MAST 2215, MAST 2230, MAST 2226 MAST 2297
The Medical Assistant Practicum Program is an unpaid practicum, under professional supervision, in an ambulatory healthcare setting. The practicum program allows students to continue hands on learning for safe and effective performance of patient care in the medical office. Students will demonstrate knowledge gained and the psychomotor skills and affective behaviors acquired, from previous learning performances of core curriculum in the administrative and clinical duties of a medical assistant.

MAST 1199 Seminar patient care Ā J M ṅ

Corequisites: BIOL 1520, BIOL 1521, ENGL 1101, NRSG 1300, PSYC 1111
This course promotes the development of holistic, therapeutic nursing care, with an emphasis on development of critical thinking and clinical judgment to provide safe and high-quality care to adults.

NRSG 2200 LPN to RN Bridge *3 credits*
Prerequisite: Acceptance into the Nursing Transition Pathway
Corequisites: NRSG 2300, BIOL 2300, BIOL 2301
This course is designed to enable the student to explore integrative concepts in nursing and to assist the student in the transition from licensed practical nurse to registered nurse.

NRSG 2300 Concepts of Maternal Care *2 credits*
Prerequisite: BIOL 1510, BIOL 1511, BIOL 1520 BIOL 1521, ENGL 1101, MATH 1135, NRSG 1200, NRSG 1300, NRSG 1500, NRSG 1600, and PSYC 1111
Corequisites: BIOL 2300 and BIOL 2301
This course promotes the development of holistic, patient centered care with an emphasis on utilizing clinical judgment to provide safe care for the mother and newborn baby.

NRSG 2400 Mental Health Nursing *2 credits*
Prerequisite: BIOL 1510, BIOL 1511, BIOL 1520, BIOL 1521, BIOL 2300, BIOL 2301, ENGL 1101, ENGL 1102, MATH 1135, NRSG 1200, NRSG 1300, NRSG 1500, NRSG 1600, NRSG 2300, NRSG 2500, NRSG 2700, PSYC 1111, and SOCI 1170
This course will provide guidance in the formation of clinical judgment that can be applied to the nursing care of those with mental illness. Topics such as effective communication and the use of the therapeutic nurse-patient relationship are covered.

NRSG 2500 Nursing Concepts III: Acute and Chronic Conditions *5 credits*
Prerequisite: BIOL 1510, BIOL 1511, BIOL 1520, BIOL 1521, BIOL 2300, BIOL 2301, ENGL 1101, MATH 1135, NRSG 1200, NRSG 1300, NRSG 1500, NRSG 1600, NRSG 2300, and PSYC 1111
This course is designed to promote the development of clinical judgment in the beginning nurse that can then be applied to the nursing care of those with acute and chronic health conditions in an acute care setting. Assignments are provided to foster the ability of the learner to recognize priorities of patient care for each individual patient.

NRSG 2600 Nursing Concepts IV: *4 credits*

PRACTICAL NURSING - PRAC

PRAC 1200 Pathophysiology *2 credits*
Prerequisite: Acceptance into the Practical Nursing Program.
Corequisite: BIOL 1510, BIOL 1511, MATH 1135, and PRAC 1500
This course addresses the pathophysiology of selected disorders across the lifespan and the nursing implications of this knowledge.

PRAC 1300 Pharmacology *2 credits*
Prerequisite: BIOL 1510, BIOL 1511, MATH 1135, PRAC 1200 and PRAC 1500
Corequisite: BIOL 2206 and PRAC 1600
This course introduces the nursing student to the pharmacologic practice of the licensed practical nurse.

PRAC 1500 Practical Nursing Concepts I *5 credits*
Prerequisite: Acceptance into the Practical Nursing Program.
Corequisite: BIOL 1510, BIOL 1511, MATH 1135, and PRAC 1200
This course introduces the Practical Nursing student to nursing care of the patient with normal findings.

PRAC 1600 Practical Nursing Concepts II *5 credits*
Prerequisite: PRAC 1200
and PRAC 1200

PSYC 2241 Educational Psychology *3 credits*
Prerequisite: PSYC 1110 & EDUC 1000
This course deals with the major theories of human development and learning, motivation, instructional strategies, assessment, and examines similarities and differences in learners. The role of factors in the studentsô learning and development are considered.

PSYC 2275 Abnormal Psychology *3 credits*
Prerequisite: PSYC 1110 or equivalent
This course is an overview of the current theories and research concerning the causes, symptoms, and treatment of various mental and behavioral disorders. Current mental health resources are examined and evaluated as to their effectiveness.

REAL ESTATE - REST

REST 1171 Principles of Real Estate *3 credits*
Principles of Real Estate is an introductory course for the pre-licensing requirements of the Ohio Real Estate Salesperson Exam. It provides an overview of the real estate industry and a study of sales agent principles and practices. It introduces basic real estate concepts, terminology and operations. This course is required for the Ohio licensing exams. Your Ohio Real Estate License test encompasses 80% of this material.

REST 1173 Real Estate Law *3 credits*
Real Estate Law teaches students the basics of Ohio and federal laws as they it relate to the real estate transactions. This course is required for the Ohio Real Estate Salesperson License exams.

REST 2275 Real Estate Finance & Appraisal *3 credits*
Real Estate Finance and Appraisal is a study of the role of financing in the real estate industry, ranging from nation-wide cycles of the finance market to the particularities of PMI, Fannie Mae, and FHA loans. REST 2275 also focuses on the theory and methodology of real estate appraisal. Contextual materials, such as market analysis and mathematical study, and a detailed study of the three basic appraisal techniques are included. This course is required for the Ohio licensing exams.

SOCI 1120 Cultural Anthropology *3 credits*

SOCI 2231 Juvenile Delinquency *2 credits*
This course will examine and comparatively analyze a number of theories in the study of juvenile delinquency and also explore a range of criminogenic social factors associated with delinquent behavior. This course will also offer a survey into the nature and extent of juvenile delinquency and provide an extensive overview of the juvenile justice system and its stages of operation.

SOCI 2232 The Criminal Justice System *3 credits*
This course will provide an overview of the criminal justice system by examining legal and political institutions as well as the behavioral nature of crime. The role of law enforcement, the courts, and corrections will be analyzed through the development of case law and practical application.

THEATER - THEA

THEA 1101 Acting Studio *3 credits*
Students will participate as actors in a Southern State Community College theatre production. An audition is required.

THEA 1104 Technical Studio *3 credits*
Students will participate as stage managers or crew members (set, properties, costumes, lighting, sound, house, dramaturgy, etc.) in a Southern State Community College theatre production. An application/interview is required.

THEA 1121 Introduction to Theatre *3 credits*
This course is a broad overview of the theater. It includes a basic view of the art form itself, audience and criticism, the play, the history and development of theater as well as an overview of the processes involved in production. Trends in theatre today will also be explored.

THEA 1131 Acting I *3 credits*
This course is an introductory study of acting and the actor. Emphasis will be placed on developing the actor's instrument (voice and body), ensemble work, improvisation, pantomime, and monologue/scene performance. Various acting techniques and styles will be explored. Students will also learn and utilize basic acting terminology.

THEA 1132 Acting II *3 credits*
Prerequisite: THEA 1131 or Permission of Instructor
This course is a continuation of the study of acting and the actor. Emphasis will be placed on develop-ing the actor's instrument (voice and body), ensemble work, improvisation, pantomime, monologue and scene performance. Students will also explore different acting techniques and styles. Acting and stage vocabulary will be reinforced.

Makeup supplies will be studied