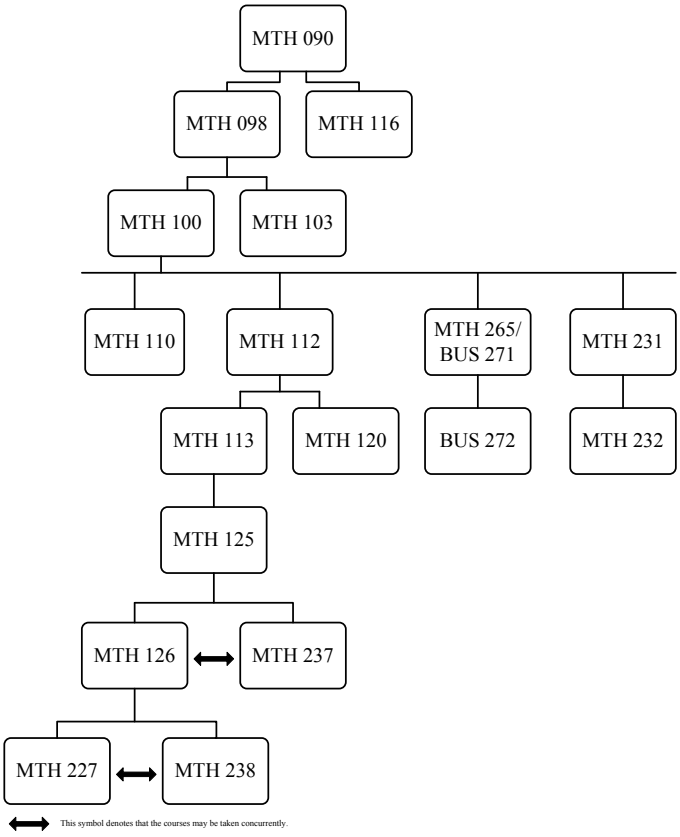
MATHEMATICS (MTH)

⟷ This symbol denotes that the courses may be taken concurrently.



MTH 090. BASIC MATHEMATICS. – 3 hours.

The purpose of this course is to provide students with skills in basic mathematics. Minimum content includes whole numbers, integers, fractions, decimals, ratio and proportions, percents, and an introduction to algebra. Additional topics may include systems of measurement and basic geometry. At the conclusion of this course students are expected to be able to perform basic mathematical operations. The student who places via the college placement test to take MTH 090 must finish the course with a minimum grade of 70% or a C before taking MTH 098 or MTH 116.

MTH 098. ELEMENTARY ALGEBRA. – 3 hours.

PREREQUISITE: MTH 090 or MTH 091 or appropriate mathematics placement score.

This course provides a study of the fundamentals of algebra. Topics include the real number system, linear equations and inequalities, graphing linear equations in two variables, laws of exponents, polynomial operations, and factoring polynomials. The student who places via the college placement test to take MTH 098 must finish the course with a minimum grade of 70% or a C before taking MTH 100.

MTH 100. INTERMEDIATE COLLEGE ALGEBRA. – 3 hours. B

PREREQUISITE: MTH 098 or appropriate mathematics placement score.

This course provides a study of algebraic concepts such as linear equations and inequalities in two variables, quadratic equations, systems of equations, radical and rational expressions and equations. Functions and relations are introduced and graphed. This course does not apply toward the general core requirement for mathematics in the AA or AS degree programs. MTH 100 may apply toward the general core requirement for AAS degree programs at Northeast. The student who places via the college placement test to take MTH 100 must finish the course with a minimum grade of 70% or a C before taking MTH 110 or MTH 112.

MTH 103. INTRODUCTION TO TECHNICAL MATHEMATICS. – 3 hours. C

PREREQUISITE: MTH 098 or appropriate mathematics placement score.

This course is designed for the student in technology needing simple arithmetic, algebraic, and right triangle trigonometric skills. This is a terminal course designed for students seeking an AAS degree and does not meet the general core requirements for mathematics.

MTH 110. FINITE MATHEMATICS. – 3 hours. A

PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a C or higher Intermediate College Algebra.

This course is intended to give an overview of topics in finite mathematics together with their applications, and is taken primarily by students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take Calculus). This course will draw on and significantly enhance the student's arithmetic and algebraic skills. The course includes sets, counting, permutations, combinations, basic probability (including Baye's Theorem), and introduction to statistics (including work with Binomial Distributions and Normal Distributions) matrices and their applications to Markov chains and decision theory. Additional topics may include symbolic logic, linear models, linear programming, the simplex method and applications.

MTH 112. PRECALCULUS ALGEBRA. – 3 hours. A

PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with C or higher Intermediate College Algebra (MTH 100).

This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer's Rule, and mathematical induction.

MTH 113. PRECALCULUS TRIGONOMETRY. – 3 hours. A

PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a C or higher MTH 112.

This course includes the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre's Theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems.

MTH 116. MATHEMATICAL APPLICATIONS. – 3 hours. C

PREREQUISITE: MTH 090 or MTH 091 or appropriate mathematics placement score.

This course provides practical applications of mathematics and includes selected topics from consumer math and algebra. Some topics included are integers, percent, interest, ratio and proportion, metric system, probability, linear equations, and problem solving. This is a terminal course designed for students seeking an AAS degree and does not meet the general core requirements for mathematics in the AA or AS degree programs. MTH 116 may apply toward the general core requirement for AAS degree programs at Northeast.

MTH 120. CALCULUS AND ITS APPLICATIONS. – 3 hours. A

PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a C or higher MTH 112.

This course is intended to give a broad overview of calculus and is taken primarily by students majoring in Commerce and Business Administration. It includes differentiation and integration of algebraic, exponential, and logarithmic functions and applications to business and economics. The course should include functions of several variables, partial derivatives (including applications), Lagrange Multipliers, L'Hopital's Rule, and multiple integration (including applications).

MTH 125. CALCULUS I. – 4 hours. A

PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a C or higher MTH 113 or MTH 115.

This is the first of three courses in the basic calculus sequence taken primarily by students in science, engineering, and mathematics. Topics include the limit of a function; the derivative of algebraic, trigonometric, exponential, and logarithmic functions; and the definite integral and its basic applications to area problems. Applications of the derivative are covered in detail, including approximations of error using differentials, maximum and minimum problems, and curve sketching using calculus.

MTH 126. CALCULUS II. – 4 hours. A

PREREQUISITE: MTH 125.

This is the second of three courses in the basic calculus sequence. Topics include vectors in the plane and in space, lines and planes in space, applications of integration (such as volume, arc length, work and average value), techniques of integration, infinite series, polar coordinates, and parametric equations.

MTH 227. CALCULUS III. – 4 hours. A

PREREQUISITE: MTH 126.

This is the third of three courses in the basic calculus sequence. Topics include vector functions, functions of two or more variables, partial derivatives (including applications), quadric surfaces, multiple integration, and vector calculus (including Green's Theorem, Curl and Divergence, surface integrals, and Stokes' Theorem).

MTH 231. MATH FOR THE ELEMENTARY TEACHER I. – 3 hours. B

PREREQUISITE: MTH 100.

This course is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more than proficient at performing basic arithmetic operations. Topics include logic, sets and functions, operations and properties of whole numbers and integers including number theory; use of manipulatives by teachers to demonstrate abstract concepts; and by students while learning these abstract concepts as emphasized in the class. Upon completion, students are required to demonstrate proficiency in each topic studied as well as to learn teaching techniques that are grade level and subject matter appropriate, and test for mathematical proficiency and the learning of teaching concepts.

MTH 232. MATH FOR THE ELEMENTARY TEACHER II. – 3 hours. B

PREREQUISITE: MTH 231.

This course is the second of a three-course sequence and is designed to provide appropriate insights into mathematics for students majoring in elementary education and to ensure that students going into elementary education are more proficient at performing basic arithmetic operations. Topics include numeration skills with fractions, decimals and percentages, elementary concepts of probability and statistics, and analytic geometry concepts associated with linear equations and inequalities. The use of manipulatives and calculators in the teaching and learning process is stressed. Upon completion, students will test for mathematical proficiency and the learning of teaching concepts. Students also will demonstrate an appropriate teaching technique by preparing a lesson and teaching it to the class for their final exam grade.

MTH 237. LINEAR ALGEBRA. – 3 hours. A

PREREQUISITE: MTH 126.

This course introduces the basic theory of linear equations and matrices, real vector spaces, bases and dimension, linear transformations and matrices, determinants, eigenvalues and eigenvectors, inner product spaces, and the diagonalization of symmetric matrices. Additional topics may include quadratic forms and the use of matrix methods to solve systems of linear differential equations.

MTH 238. APPLIED DIFFERENTIAL EQUATIONS I. – 3 hours. A

COREQUISITE: MTH 227.

An introduction to numerical methods, qualitative behavior of first order differential equations, techniques for solving separable and linear equations analytically, and applications to various models (e.g. populations, motion, chemical mixtures, etc.); techniques for solving higher order linear differential equations with constant coefficients (general theory, undetermined coefficients, reduction of order and the method of variation of parameters), with emphasis on interpreting the behavior of the solutions, and applications to physical models whose governing equations are of higher order; the Laplace transform as a tool for the solution of initial value problems whose in inhomogeneous terms are discontinuous.

MTH 265. ELEMENTARY STATISTICS. – 3 hours. B

PREREQUISITE: MTH 100 or appropriate mathematics placement score.

This course provides an introduction to methods of statistics, including the following topics: sampling, frequency distributions, measures of central tendency, graphic representation, reliability,

hypothesis testing, confidence intervals, analysis, regression, estimation, and applications. Probability, permutations, combinations, binomial theorem, random variables, and distributions may be included.

MECHANICAL DESIGN TECHNOLOGY (MDT)

MDT 147. INVENTOR CADD. – 3 hours.

In this course students will use the beginning and intermediate techniques of Inventor computer-aided drafting/design software to develop and render 3-D solids. Topics include sketching, 3-D modeling commands, specialized software applications, development of 2-D drawings from the 3-D models, rendering and plotting. The student will be able to develop the sketches necessary to create 3-D solids and turn them into 2-D drawings for fabrication.

MDT 187. ADVANCED INVENTOR CADD. – 3 hours.

PREREQUISITE: MDT 147.

In this course students will use advanced techniques of Inventor computer-aided drafting/design software to develop and render 3-D solid model assemblies. Topics include advanced sketching and 3D-modeling commands, animation software applications and stress analysis applications. The student will be able to develop the sketches necessary to create 3-D solids, assemblies, animation and perform stress analysis on parts and assemblies.

MDT 202. SOLIDWORKS CADD. – 3 hours.

This course introduces the student to parametric, feature-based solid modeling using the 3-D concepts of SolidWorks computer-aided design software. This course covers the commands, concepts, views, dimensioning, and techniques to design solid-model parts quicker than 2-D software. The student will be able to use SolidWorks computer-aided design software to properly draw the views necessary to manufacture a part.

MDT 252. ADVANCED SOLIDWORKS CADD. – 3 hours.

PREREQUISITE: MDT 202.

This course broadens the student's concepts of parametric, feature-based, solid modeling using the 3-D concepts of parts. The student will be able to use SolidWorks computer-aided design software to properly draw the views necessary to manufacture advanced, designed parts.

MEDICAL ASSISTING TECHNOLOGY (MAT)

MAT 101. MEDICAL TERMINOLOGY. – 3 hours.

This course is designed for medical assistants, student nurses, and others in medically related fields. The course will focus on the more common prefixes, roots, and suffixes used to construct the language of medicine with these word parts to determine the meanings of new or unfamiliar terms. The student will learn a system of word building which will enable them to interpret medical terms. CORE

MAT 102. MEDICAL ASSISTING THEORY I. – 3 hours.

This course provides students with an overview of the structural organization of the human body. Specific topics include anatomical descriptors, body planes, directional terms, body cavities, specified major organs, normal functions of body systems and common related pathology, analysis of pathology as related to interaction of body systems, implication of disease and disability when homeostasis is not maintained, and implications of treatment of related pathology. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems. CORE

MAT 103. MEDICAL ASSISTING THEORY II. – 3 hours.

This course provides students with information of select systems of the human body. Specific topics include specified major organs, normal functions of body systems and common related pathology, analysis of pathology as related to interaction of body systems, implication of disease and disability when homeostasis is not maintained, and implications of treatment of related pathology. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems. CORE

MAT 111. CLINICAL PROCEDURES I FOR THE MEDICAL ASSISTANT. – 3 hours.

This course includes instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with examination, and patient education. Upon completion, students will be able to demonstrate competence in exam room procedures. CORE

MAT 120. MEDICAL ADMINISTRATIVE PROCEDURES I. – 3 hours.

This course introduces medical office administrative procedures. Topics include appointment scheduling, telephone techniques, managing the physician's schedule, handling mail, preparing and maintaining medical records, and patient orientation. Upon completion, students should be able to perform basic medical administrative skills. CORE

MAT 121. MEDICAL ADMINISTRATIVE PROCEDURES II. – 3 hours.

This course introduces medical office administrative procedures not covered in Medical Administrative Procedures I. Topics include fees, credit, and collections, banking, bookkeeping, Payroll, and computerized finance applications. Upon completion students should be able to manage financial aspects of medical offices. CORE

MAT 125. LABORATORY PROCEDURES I FOR THE MEDICAL ASSISTANT. – 3 hours.

This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective diagnostic tests, such as a CBC, screening and follow-up of test results and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics. CORE

MAT 128. MEDICAL LAW AND ETHICS FOR THE MEDICAL ASSISTANT. – 3 hours.

This course provides basic information related to the legal relationship of patient and physician. Topics to be covered include creation and termination of contracts, implied and informed consent, professional liability, invasion of privacy, malpractice, tort, liability, breach of contract, and the Medical Practice Act. Upon completion, students should be able to recognize ethical and legal implications of these topics as they relate to the medical assistant. CORE

MAT 200. MANAGEMENT OF OFFICE EMERGENCIES. – 2 hours.

This course is designed to instruct students in handling emergencies in the medical office. Emergencies presented will include cardiovascular emergencies, diabetic emergencies, seizures, syncope,

hyperthermia and hypothermia, shock, musculoskeletal emergencies, and poisoning. Upon completion, students should be able to recognize emergency situations and take appropriate actions. CORE

MAT 211. CLINICAL PROCEDURES II FOR THE MEDICAL ASSISTANT. – 3 hours.

This course includes instruction in vital signs and special examination procedures. Emphasis is placed on interviewing skills, appropriate triage and preparing patients for diagnostic procedures. Upon completion, students should be able to assist with special procedures. CORE

MAT 215. LABORATORY PROCEDURES II FOR THE MEDICAL ASSISTANT. – 3 hours.

This course instructs the student in the fundamental theory and lab application for the medical office. Microbiology, urinalysis, serology, blood chemistry, and venipuncture theory as well as venipuncture collection procedures are discussed and performed. Upon completion, students should be able to perform basic lab tests/skills on course topics. Instruction from this course is based on the Educational Competencies for the Medical Assistant, For CAAHEP Accredited Medical Assisting Educational Programs, 2008 standards. CORE

MAT 216. MEDICAL PHARMACOLOGY FOR THE MEDICAL OFFICE. – 4 hours.

This course teaches the commonly administered drugs used in the medical field including their classifications, actions, indications, contraindications, and side effects on the body. Correct demonstration of drug calculation, preparation, administration, and documentation are also taught. Upon completion, students should be able to demonstrate safe drug administration and recognize common medical classifications and their patient implications. CORE

MAT 218. EKG TECHNICIAN. – 3 hours.

This course provides the student with an overview of cardiovascular electrophysiology and its role in health care delivery. Topics include cardiovascular anatomy, physiology and electrophysiology, interpretation of rhythm strips and diagnostic electrocardiography. The student should be able to secure an EKG tracing, troubleshoot problems with acquisition of an EKG tracing, and interpret simple EKG rhythm strips.

MAT 220. MEDICAL OFFICE INSURANCE. – 3 hours.

In this course emphasis is placed on insurance procedures with advanced diagnostic and procedural coding in the outpatient facility. Study will include correct completion of insurance forms and coding. Upon completion, students should be able to demonstrate proficiency in coding for reimbursements. CORE

MAT 222. MEDICAL TRANSCRIPTION I. – 2 hours.

This course introduces dictating equipment and typical medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to transcribe physician's dictation. PREREQUISITE: College level computer course, acceptable keyboarding speed, MAT 101, MAT 120, MAT 121 and/or as required by program.

MAT 228. MEDICAL ASSISTANT REVIEW COURSE. – 1 hour.

This course includes a general review of administrative and clinical functions performed in a medical office. The course will assist the student or graduate in preparing for national credentialing examination.

MAT 229. MEDICAL ASSISTING PRACTICUM. – 3 hours.

PREREQUISITE: As required by program.

This course is designed to provide the opportunity to apply clinical, laboratory, and administrative skills in a physician's office, clinic or outpatient facility. The student will gain experience in applying knowledge learned in the classroom in enhancing competence, in strengthening professional communications and interactions. Upon completion, students should be able to perform as an entry-level Medical Assistant. Content of this course is aligned with standards and guidelines from the American Association of Medical Assisting. CORE

MAT 239. PHLEBOTOMY PRECEPTORSHIP. – 3 hours.

PREREQUISITE: As required by college.

This course is designed to provide the opportunity to apply phlebotomy techniques in the physician's clinic and hospital setting. Emphasis is placed on training individuals to properly collect and handle specimens for laboratory testing and to interact with health care personnel, patients, and the general public. Upon completion, students should be prepared for entry-level phlebotomy and to sit for the Phlebotomy Technician Examination (ASCP).

MUSIC ENSEMBLE (MUL)

CLASS PERFORMANCE INSTRUCTION

Group instruction is available in voice, piano, woodwinds, brass, percussion and fretted instruments for students with little or no previous training. Emphasis is placed on the rudiments of music, basic performance technique and general musicianship skills. Upon completion of one or a sequence of courses, students should be able to demonstrate a basic proficiency in singing or playing and a knowledge of music fundamentals.

MUL 101-102; 201-202. CLASS PIANO I, II, III, IV. – 1 hour. C

MUL 111-112; 211-212. CLASS VOICE I, II, III, IV. – 1 hour. C

MUL 161-162. CLASS FRETTED INSTRUMENTS I, II. – 1 hour. C

MUL 170-171; 270-271. MUSIC WORKSHOP (GUITAR ENSEMBLE) I, II, III, IV. – 1-3 hours. C

These courses are seminar clinics in advanced rehearsal/performance techniques. Emphasis is placed on intensive rehearsal techniques required for advanced or specialized performance groups. Upon completion, students should be able to effectively participate in performances presented by this type of ensemble.

MUL 180-181; 280-281. CHORUS I, II, III, IV. – 1-2 hours. B
MUL 182-183; 282-283. VOCAL ENSEMBLE I, II, III, IV. – 1 hour. B
MUL 184-185; 284-285. JAZZ/SHOW CHOIR (ENCORE) I-II; III-IV. – 1-2 hours. B
MUL 190-191; 290-291. CONCERT BAND I, II, III, IV. – 1-2 hours. B
MUL 192-193-292-293. JAZZ COMBO (INSTRUMENTAL ENSEMBLE) I, II, III, IV. – 1-2 hours. B
MUL 196-197; 296-297. JAZZ BAND (NACC JAZZ ENSEMBLE) I, II, III, IV. – 1-2 hours. B

PREREQUISITE: Permission of the instructor.

These courses provide an opportunity for students to participate in a performing ensemble. Emphasis is placed on rehearsing and performing literature appropriate to the mission and goals of the group. Upon completion, students should be able to effectively participate in performances presented by the ensemble. The course is open by audition only.

MUSIC (MUS) CLASS INSTRUCTION

MUS 100. MUSIC CONVOCATION. – 1 hour. C

This course (required for music majors each semester) is designed to expose students to a variety of repertory styles and to give students an opportunity to practice individual performance skills. Emphasis is placed on exposure to performances and lectures by guest artists, faculty or students, and on personal performance(s) in class each semester.

MUS 101. MUSIC APPRECIATION. – 3 hours. A

This course is designed for non-music majors and requires no previous musical experience. It is a survey course that incorporates several modes of instruction including lecture, guided listening, and similar experiences involving music. The course will cover a minimum of three (3) stylistic periods, provide a multi-cultural perspective, and include both vocal and instrumental genres. Upon completion, students should be able to demonstrate a knowledge of music fundamentals, the aesthetic/stylistic characteristics of historical periods, and an aural perception of style and structure in music.

MUS 110. BASIC MUSICIANSHIP. – 3 hours. C

This course is designed to provide rudimentary music knowledge and skills for the student with a limited music background. Topics include a study of notation, rhythm, scales, keys, intervals, chords and basic sight singing and ear training skills. Upon completion, students should be able to read and understand musical scores and demonstrate basic sight singing and ear training skills for rhythm, melody and harmony.

MUS 111. MUSIC THEORY I. – 4 hours. B

PREREQUISITE: MUS 110 or suitable placement score or permission of the instructor.

This course introduces the student to the diatonic harmonic practices in the Common Practice Period. Topics include fundamental musical materials (rhythm, pitch, scales, intervals, diatonic harmonies) and an introduction to the principles of voice leading and harmonic progression. Upon completion, students should be able to demonstrate a basic competency using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills.

MUS 112. MUSIC THEORY II. – 4 hours. B

PREREQUISITE: MUS 111.

This course completes the study of diatonic harmonic practices in the Common Practice Period and introduces simple musical forms. Topics include principles of voice leading used in three- and four-part triadic harmony and diatonic seventh chords, non-chord tones, cadences, phrases and periods. Upon completion, students should be able to demonstrate competence using diatonic harmony through analysis, writing, sight singing, dictation and keyboard skills.

MUS 115. FUNDAMENTALS OF MUSIC. – 3 hours. C

This course is designed to teach the basic fundamentals of music and develop usable musical skills for the classroom teacher. Topics include rhythmic notation, simple and compound meters, pitch notation, correct singing techniques, phrases, keyboard awareness, key signatures, scales, intervals and harmony using I, IV, and V with a chordal instrument. Upon completion, students should be able to sing a song, harmonize a simple tune, demonstrate rhythmic patterns and identify musical concepts through written documentation.

MUS 116. COMPUTER APPLICATIONS IN MUSIC. – 3 hours. C

This course introduces the history and use of computer applications in music. Topics include an introduction to computer skills, MIDI and the application of notation and sequencing software programs (i.e. Finale, Performer). Upon completion, students should be able to demonstrate basic competency in the use of computers in music.

MUS 211. MUSIC THEORY III. – 4 hours. C

PREREQUISITE: MUS 112.
COREQUISITE: MUS 213, if ear training lab is a separate course.

This course introduces the student to the chromatic harmonic practices in the Common Practice Period. Topics include secondary functions, modulatory techniques, and binary and ternary forms. Upon completion, students should be able to demonstrate competence using chromatic harmony through analysis, writing, sight singing, dictation and keyboard skills.

MUS 217. JAZZ IMPROVISATION. – 1-3 hours. C

PREREQUISITE: Permission of the instructor.

This course is designed to prepare the student with the theoretical background and improvisational techniques utilized in jazz performance. Emphasis is placed on the understanding of chord structures, chord progressions, scale structures and melodic design. Upon completion, students should be able to perform an improvisational solo with a jazz ensemble.

MUS 251 INTRODUCTION TO CONDUCTING – 3 Hours. C

PREREQUISITE: MUS 110

This course introduces the fundamentals of conducting choral and/or instrumental ensembles. Topics include a study of simple and compound meters, score reading and techniques for conducting effective rehearsals. Upon completion, students should be able to prepare and conduct a choral and/or instrumental score in a rehearsal or performance setting.

MUSIC PERFORMANCE (MUP)

INDIVIDUAL PERFORMANCE INSTRUCTION

Individual performance instruction is available in keyboard instruments, voice, woodwinds, brass, percussion and fretted instruments. Emphasis is placed on developing technique, repertoire and performance skills commensurate with the student's educational goals. Students are required to practice a minimum of five hours per week for each credit hour. Upon completion, students should be able to effectively perform assigned repertoire and technical studies in an appropriate performance evaluation setting.

MUP 101-102; 201-202. PRIVATE PIANO I, II, III, IV. – 1-2 hours. B
MUP 111-112; 211-212. PRIVATE VOICE I, II, III, IV. – 1-2 hours. B
MUP 127-128; 227-228. PRIVATE DOUBLE BASS I, II, III, IV. – 1-2 hours. B
MUP 133-134; 233-234. PRIVATE GUITAR. – 1-2 hours. B
MUP 135-136; 235-236. PRIVATE FRETTED INSTRUMENTS (OTHER THAN GUITAR) I, II, III, IV. – 1-2 hours. B
MUP 141-142; 241-242. PRIVATE FLUTE I, II, III, IV. – 1-2 hours. B
MUP 143-144; 243-244. PRIVATE CLARINET I, II, III, IV. – 1-2 hours. B
MUP 145-146; 245-246. PRIVATE SAXOPHONE I, II, III, IV. – 1-2 hours. B
MUP 151-152; 251-252. PRIVATE OBOE. – 1-2 hours. B
MUP 153-154; 253-254: PRIVATE BASSOON I, II, III, IV. – 1-2 hours. B
MUP 161-162; 261-262. PRIVATE TRUMPET I, II, III, IV. – 1-2 hours. B
MUP 163-164; 263. PRIVATE FRENCH HORN I, II, III. – 1-2 hours. B
MUP 171-172; 271-272. PRIVATE TROMBONE I, II, III, IV. – 1-2 hours. B
MUP 173-174; 273-274: PRIVATE EUPHONIUM/ BARITONE I, II, III, IV. – 1-2 hours. B
MUP 175-176; 275-276: PRIVATE TUBA I, II, III, IV. – 1-2 hours. B
MUP 181-182; 281. PRIVATE PERCUSSION I, II, III. – 1-2 hours. B

NURSING ASSISTANT AND HOME HEALTH CARE

NAS 100. LONG-TERM CARE NURSING ASSISTANT. – 4 hours.

This course fulfills the seventy-five (75) hour Omnibus Budget Reconciliation Act (OBRA) requirements for training of long-term care nursing assistants in preparation for certification through competency evaluation. Emphasis is placed on the development of the knowledge, attitudes, and skills required of the long-term care nursing assistant. Upon completion of this course, the student should demonstrate satisfactory performance on written examinations and clinical skills.

NURSING (NUR) CONCEPT BASED CURRICULUM

NUR 112: FUNDAMENTAL CONCEPTS OF NURSING – 7 hours. (4-2-1)

PREREQUISITE: Admission to Nursing Program.
CO-REQUISITE: BIO 201, MTH 100 or higher level math

This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to: healthcare delivery systems, professionalism, health promotion, psychosocial well-being, functional ability, gas exchange, safety, pharmacology, and coordinator/manager of care.

NUR 113: NURSING CONCEPTS I – 8 hours. (4-1-3)

PREREQUISITE: NUR 112, BIO 201, MTH 100 or higher level math
CO-REQUISITE: BIO 202, ENG 101, PSY 200

This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to: coordinator/manager of care, perfusion, oxygenation, infection, inflammation, tissue integrity, nutrition, elimination, mobility/immobility, cellular regulation, acid/ base balance, and fluid/electrolyte balance.

NUR 114: NURSING CONCEPTS II – 8 hours. (5-0-3)

PREREQUISITE: NUR 113, BIO 202, ENG 101, PSY 200
CO-REQUISITE: NUR 115, SPH 107

This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to: coordinator/manager of care, sexuality, reproduction and childbearing, infection, inflammation, sensory perception, perfusion, cellular regulation, mood disorders and affect, renal fluid/ electrolyte balance, and medical emergencies.

NUR 115: EVIDENCE BASED CLINICAL REASONING – 2 hours. (1-0-1)

PREREQUISITE: NUR 113, BIO 202, ENG 101, PSY 200
CO-REQUISITE: NUR 114, SPH 107

This course provides students with opportunities to collaborate with various members of the health care team in a family and community context. Students utilize clinical reasoning to assimilate concepts within the individual, health, and nursing domains.

NUR 209: CONCEPTS FOR HEALTHCARE TRANSITION STUDENTS – 10 hours. (6-1-3)

PREREQUISITE: BIO 201, BIO 202, ENG 101, MTH 100, PSY 200, SPH 107

This course focuses on application of nursing concepts to assist health care professionals to transition into the role of the registered nurse. Emphasis in this course is placed on evidenced based clinical decision making and nursing concepts provided in a family and community context for a variety of health alterations across the lifespan.

NUR 211: ADVANCED NURSING CONCEPTS – 7 hours. (4-0-3)

PREREQUISITE: NUR 114, NUR 115, SPH 107
CO-REQUISITE: BIO 220, PSY 210

This course provides opportunities for students to integrate advanced nursing care concepts within a family and community context. Content includes but is not limited to: manager of care for advanced concepts in safety, fluid/electrolyte balance, cellular regulation,

gas exchange, psychosocial well-being, growth and development, perfusion, and medical emergencies.

NUR 221: ADVANCED EVIDENCE BASED CLINICAL REASONING – 7 hours. (3-0-4)

PREREQUISITE: NUR 211, BIO 220, PSY 210

CO-REQUISITE: HUMANITIES ELECTIVE (Ethics preferred)

This course provides students with opportunities to demonstrate graduate competencies through didactic and preceptorship experiences necessary to transition to the profession of nursing. Content in nursing and health care domains includes management of care, professionalism, and healthcare delivery systems.

OFFICE ADMINISTRATION (OAD)

OAD 101. BEGINNING KEYBOARDING. – 3 hours. C

This course is designed to enable the student to use the touch method of keyboarding through classroom instruction and outside lab. Emphasis on speed and accuracy in keying alphabetic, symbol, and numeric information using the typewriter or microcomputer keyboard. Upon completion, the student should be able to demonstrate proper technique and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of basic business documents such as memos, letters, reports, and tables.

OAD 103. INTERMEDIATE KEYBOARDING. – 3 hours. C

PREREQUISITE: OAD 101 or permission of instructor.

This course is designed to assist the student in increasing speed and accuracy using the touch method of keyboarding through classroom instruction and outside lab. Emphasis is on the production of business documents such as memoranda, letters, reports, tables, and outlines. Upon completion, the student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of business documents.

OAD 125. WORD PROCESSING. – 3 hours. C

PREREQUISITE: OAD 101 or permission of instructor.

This course is designed to provide the student with basic word processing skills through classroom instruction and outside lab. Emphasis is on the utilization of software features to create, edit and print common office documents. Upon completion, the student should be able to demonstrate the ability to use industry-standard software to generate appropriately formatted, accurate, and attractive business documents such as memo, letters and reports.

OAD 126. ADVANCED WORD PROCESSING. – 3 hours. C

PREREQUISITE: OAD 125 or permission of instructor.

This course is designed to increase student proficiency in using the advanced word processing functions through classroom instruction and outside lab. Emphasis is on the use of industry-standard software to maximize productivity. Upon completion, the student should be able to demonstrate the ability to generate complex documents such as forms, newsletters, and multi-page documents.

OAD 131. BUSINESS ENGLISH. – 3 hours. C

This course is designed to develop the student's ability to use proper English. Emphasis is on grammar, spelling, vocabulary, punctuation, word usage, word division, and proofreading. Upon completion, the student should be able to write and speak effectively.

OAD 138. RECORDS/INFORMATION MANAGEMENT. – 3 hours. C

This course is designed to give the student knowledge about managing office records and information. Emphasis is on basic filing procedures, methods, systems, supplies, equipment, and modern technology used in the creation, protection, and disposition of records stored in a variety of forms. Upon completion, the student should be able to perform basic filing procedures.

OAD 200. MACHINE TRANSCRIPTION. – 3 hours. C

PREREQUISITE: OAD 103.

This course is designed to develop marketable skills in transcribing various forms of dictated material through classroom instruction and outside lab. Emphasis is on the use of microcomputers and a commercial word processing package. Upon completion, the student should be able to accurately transcribe documents from dictated recordings.

OAD 202. LEGAL TRANSCRIPTION. – 3 hours. C

PREREQUISITE: OAD 103 or permission of instructor.

This course is designed to familiarize students with legal terms and provide transcription skill development in the production of legal correspondence, forms, and court documents through classroom instruction and outside lab. Emphasis is on transcribing legal documents from dictated recordings. Upon completion, students should be able to demonstrate the ability to transcribe accurately appropriately formatted legal documents.

OAD 211. MEDICAL TERMINOLOGY. – 3 hours. C

This course is designed to familiarize the student with medical terminology. Emphasis is on the spelling, definition, pronunciation, and usage of medical terms. Upon completion, the student should be able to communicate effectively using medical terminology.

OAD 212. MEDICAL TRANSCRIPTION. – 3 hours. C

PREREQUISITE: OAD 103.

This course is designed to orient students to standard medical reports, correspondence, and related documents transcribed in a medical environment through classroom instruction and outside lab. Emphasis is on transcribing medical records and operating a transcribing machine efficiently. Upon completion, the student should be able to accurately transcribe medical documents from dictated recordings.

OAD 218. OFFICE PROCEDURES. – 3 hours. C

PREREQUISITE: OAD 101.

This course is designed to develop an awareness of the responsibilities and opportunities of the office professional through classroom instruction and outside lab. Emphasis is on current operating functions, practices and procedures, work habits, attitudes, oral and written communications, and professionalism. Upon completion, the student should be able to demonstrate the ability to effectively function in an office support relationship.

OAD 231. OFFICE APPLICATIONS. – 1-3 hours. C

This course is designed to enable the student to develop skill in the use of integrated software through classroom and lab instruction. Emphasis is on the use of computerized equipment, software, and communications technology. Upon completion, the student should be able to demonstrate proficiency in the selection of appropriate computerized tools to complete designated tasks.

OAD 241. OFFICE CO-OP. – 1-3 hours. C

This course is designed to provide the student with an opportunity to work in an office environment. Emphasis is on the integration of classroom learning with on-the-job experiences that relate meaningfully to office careers. Upon completion, the student should be able to demonstrate the ability to apply knowledge and skills gained in the classroom to an actual work situation.

OAD 243. SPREADSHEET APPLICATIONS. – 3 hours. C

PREREQUISITE: As required by college.

This course is designed to provide the student with a firm foundation in the use of computerized equipment and appropriate software in performing spreadsheet tasks through classroom instruction and lab exercises. Emphasis is on spreadsheet terminology and design, common formulas, and proper file and disk management procedures. Upon completion, the student should be able to use spreadsheet features to design, format, and graph effective spreadsheets.

OAD 246. OFFICE GRAPHICS AND PRESENTATIONS. – 3 hours. C

PREREQUISITE: As required by college.

This course is designed to provide the student with a foundation in the use of the computer and appropriate application software in the production of business slides and presentations through classroom instruction and lab exercises. Emphasis is on available software tools, presentation options and design, as well as such presentation considerations as the make-up of the target audience. Upon completion, the student should be able to demonstrate the ability to design and produce a business presentation.

PARALEGAL/LEGAL ASSISTANT (PRL)

PRL 101. INTRODUCTION TO PARALEGAL STUDY. – 3 hours. C

This course introduces the paralegal profession and the legal system. Topics include regulations and concepts, ethics, case analysis, legal reasoning, career opportunities, certification, professional organizations, and other related topics. Upon completion, students should be able to explain the role of the paralegal and identify the skills, knowledge, and ethics required of legal assistants.

PRL 102. BASIC RESEARCH AND WRITING. – 3 hours. C

This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

PRL 103. ADVANCED LEGAL RESEARCH AND WRITING. – 3 hours. C

PREREQUISITE: PRL 102.

This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents and the advanced use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

PRL 150. COMMERCIAL LAW. – 3 hours. C

This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper.

PRL 160. CRIMINAL LAW AND PROCEDURE. – 3 hours. C

This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/ federal crimes, defenses, constitutional issues, pre-trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case.

PRL 192. SELECTED TOPICS IN PARALEGAL. – 3 hours. C

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

PRL 210. INTRODUCTION TO REAL PROPERTY LAW. – 3 hours. C

This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property.

PRL 230. DOMESTIC LAW. – 3 hours. C

This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law.

PRL 240. WILLS, TRUSTS, AND ESTATES. – 3 hours. C

This course covers various types of wills, trusts, probate estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts.

PRL 262. CIVIL LAW AND PROCEDURE. – 3 hours. C

PREREQUISITE: As required by program.

This course is designed to give the student a basic understanding of the federal rules of civil procedure and Alabama rules of court. The student will demonstrate the ability to prepare a trial notebook for litigation purposes.

PRL 282. LAW OFFICE MANAGEMENT AND PROCEDURES. – 3 hours. C

This course focuses on the organization, function, practices and procedures of a law office. Emphasis is placed on basic law office

management, including office layout, personnel, equipment and supplies, filing systems, scheduling and docket control; as well as the creation, preparation, organization and processing of pleadings, forms, briefs and other legal documents. Upon course completion, students will be able to demonstrate and apply appropriate law office management techniques and procedures.

PRL 291. INTERNSHIP. – 3 hours. C

PREREQUISITE: Instructor permission, PRL 101, PRL 102.

This course provides students opportunities to work in paid or unpaid positions in which they apply paralegal skills and knowledge. This course requires a minimum of 100 hours of practical experience in the legal field, including work in law offices, municipal courts, banks, insurance companies, and governmental agencies, and with district and circuit court judges. Upon course completion, students will be able to apply in real-work settings competencies obtained in the PRL curriculum.

PHILOSOPHY (PHL)

PHL 206. ETHICS AND SOCIETY. – 3 hours. A

This course involves the study of ethical issues which confront individuals in the course of their daily lives. The focus is on the fundamental questions of right and wrong, of human rights, and of conflicting obligations. The student should be able to understand and be prepared to make decisions in life regarding ethical issues.

PHYSICAL EDUCATION (PED)

PED 103. WEIGHT TRAINING (BEGINNING). – 1 hour. C

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

PED 104. WEIGHT TRAINING (INTERMEDIATE) – 1 hour. C

This course covers advanced levels of eight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.

PED 105. PERSONAL FITNESS. – 1 hour. C

This course is designed to provide the student with information allowing him/her to participate in a personally developed fitness program. Topics include cardiovascular, strength, muscular endurance, flexibility and body composition.

PED 106. AEROBICS. – 1 hour. C

PREREQUISITE: As required by program.

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength and flexibility, and on safety precautions. Upon completions, students should be able to select and implement a rhythmic aerobic exercise program.

PED 109. JOGGING. – 1 hour. C

PREREQUISITE: As required by program.

This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities.

PED 118. GENERAL CONDITIONING. – 1 hour. C

This course provides an individualized approach to general conditioning utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness and conditioning programs. Upon completion, students should be able to set up and implement an individualized physical fitness and conditioning program.

PED 126. RECREATIONAL GAMES. – 1 hour. C

This course is designed to give an overview of a variety of recreational games and activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime recreational games. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime recreational activities.

PED 133. TENNIS (BEGINNING). – 1 hour. C

PREREQUISITE: As required by program.

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

PED 134. TENNIS (INTERMEDIATE). – 1 hour. C

PREREQUISITE: PED 133 and/or as required by program.

This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes, and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis.

PED 150. TAI CHI. – 1 hour. C

Tai Chi is an ancient martial art form through which the student will improve flexibility, balance, strength, and mental discipline. By learning the slow and deliberate movements of Tai Chi, the student also will develop proper breathing and relaxation techniques and enhance joint flexibility. Tai Chi skills are a combination of stretching, isometrics, and isotonic movements in combination with diaphragmatic breathing and postural maintenance.

PED 176. VOLLEYBALL (BEGINNING). – 1 hour. C

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball.

PED 188. YOGA. – 1 hour. C

This course introduces basic instruction in yoga for beginners. Emphasis is placed on instruction in gentle stretching, breathing practices, progress deep relaxation, and posture. Upon completion, students should be able to participate in and appreciate the benefits of the activity.

PED 200. FOUNDATIONS OF PHYSICAL EDUCATION. – 3 hours. B

In this course, the history, philosophy, and objectives of health, physical education, and recreation are studied with emphasis on the physiological, sociological, and psychological values of physical education. It is required of all physical education majors.

PHYSICAL SCIENCE (PHS)

PHS 111. PHYSICAL SCIENCE I. – 4 hours. A

This course provides the non-technical student with an introduction to the basic principles of astronomy, geology, and meteorology. Laboratory is required.

PHS 112. PHYSICAL SCIENCE II. – 4 hours. A

This course provides the non-technical student with an introduction to the basic principle of chemistry and physics. Laboratory is required.

PHS 121. APPLIED PHYSICAL SCIENCE I. – 4 hours.C

This course introduces the general principles of physics and chemistry. Topics included measurement, motion, Newton's laws of motion, momentum, energy, work, power, heat, thermodynamics, waves, sound, light, electricity, magnetism, and chemical principles. Upon completion, students should be able to demonstrate and understanding of the physical environment and be able to apply the scientific principles to observations experienced.

PHS 230. INTRODUCTION TO METEOROLOGY. – 4 hours. C

This course is an introductory survey of meteorology emphasizing the hydrologic cycle, cloud formation, weather maps, forecasting, and wind systems. Local weather systems will be given detailed study. Laboratory is required.

PHYSICS (PHY)

PHY 115. TECHNICAL PHYSICS. – 4 hours. C

PREREQUISITE: MTH100

Technical physics is an algebra based physics course designed to utilize modular concepts to include: motion, forces, torque, work energy, heat wave/sound, and electricity. Results of physics education research and physics applications in the workplace are used to improve the student's understanding of physics in technical areas. Upon completion, students will be able to: define motion and describe specific module concepts; utilize microcomputers to generate motion diagrams; understand the nature of contact forces and distinguish passive forces; work cooperatively to set-up laboratory exercises; and demonstrate applications of module-specific concepts.

PHY 120. INTRODUCTION TO PHYSICS. – 4 hours. C

PREREQUISITE: MTH 098 or higher.

This course provides an introduction to general physics for non science majors. Topics in fundamentals of mechanics, properties of matter, heat and temperature, simple harmonic motion, SHM, waves and sound, electricity and magnetism, optics and modern physics. Laboratory is required.

PHY 201. GENERAL PHYSICS I -TRIG BASED. – 4 hours. A

PREREQUISITE: MTH 113 OR equivalent.

This course is designed to cover general physics at a level that assures previous exposure to college algebra, basic trigonometry. Specific topics include mechanics, properties of matter and energy, thermodynamics, and periodic motion. A laboratory is required.

PHY 202. GENERAL PHYSICS II-TRIG BASED. – 4 hours. A

PREREQUISITE: PHY 201.

This course is designed to cover general physics using college algebra and basic trigonometry. Specific topics include wave motion, sound, light optics, electroplatics, circuits, magnetism, and modern physics. Laboratory is required.

PHY 213. GENERAL PHYSICS WITH CALCULUS I. – 4 hours. A

PREREQUISITE: MTH 125.

This course provides a calculus-based treatment of the principle subdivisions of classical physics: mechanics and energy, including thermodynamics. Laboratory is required.

PHY 214. GENERAL PHYSICS WITH CALCULUS II. – 4 hours. A

PREREQUISITE: PHY 213.

This course provides a calculus-based study in classical physics. Topics included are: simple harmonic motion, waves, sound, light, optics, electricity and magnetism. Laboratory is required.

POLITICAL SCIENCE (POL)

POL 211. AMERICAN NATIONAL GOVERNMENT. – 3 hours. A

This course surveys the background, constitutional principles, organization, and operation of the American political system. Topics include the U. S. Constitution, federalism, civil liberties, civil rights, political parties, interest groups, political campaigns, voting behavior, elections, the presidency, bureaucracy, Congress, and the justice system. Upon completion, students should be able to identify and explain relationships among the basic elements of American government and to function as more informed participants of the American political system.

POL 220. STATE AND LOCAL GOVERNMENT. – 3 hours. B

This course is a study of the forms of organization, functions, institutions, and operation of American state and local governments. Emphasis is placed on the variety of forms and functions of state and local governments, with particular attention to those in Alabama and to the interactions between state and local government and the national government. Upon completion, students should be able to identify elements of and explain relationships among the state, local, and national governments of the U.S., and function as more informed participants of state and local political systems.

PSYCHOLOGY (PSY)

PSY 200. GENERAL PSYCHOLOGY. – 3 hours. A

This course is a survey of behavior with emphasis upon psychological processes. This course includes the biological bases for behavior, thinking, emotion, motivation, and the nature and development of personality.

PSY 210. HUMAN GROWTH AND DEVELOPMENT. – 3 hours. A

PREREQUISITE: PSY 200.

This course is the study of the psychological, social, and physical factors that affect human behavior from conception to death.

READING (RDG)

RDG 084. DEVELOPMENTAL READING II. – 3 hours.

This course is designed to assist students whose placement test scores indicate serious difficulty with decoding skills, comprehension, vocabulary, and study skills. Students scoring below 70 (Accuplacer) on the reading subtest must take this course within the first two semesters of enrollment as a co-requisite to college-level courses. To complete RDG 084, students must finish the course with a minimum grade of "C" or 70%.

RELIGIOUS STUDIES

REL 100. HISTORY OF WORLD RELIGIONS. – 3 hours. A

This course is designed to acquaint the student with the beliefs and practices of the major contemporary religions of the world. This includes the religions of Africa, the Orient, and the western world. The student should have an understanding of the history and origins of the various religions in the world.

REL 151. SURVEY OF THE OLD TESTAMENT. – 3 hours. A

PREREQUISITE: As required by program.

This course is an introduction to the content of the Old Testament with emphasis on the historical context and contemporary theological and cultural significance of the Old Testament. The student should have an understanding of the significance of the Old Testament writings upon completion of this course.

REL 152. SURVEY OF THE NEW TESTAMENT. – 3 hours. A

PREREQUISITE: As required by program.

This course is a survey of the books of the New Testament with special attention focused on the historical and geographical setting. The student should have an understanding of the books of the New Testament and the cultural and historical events associated with these writings.

SALON AND SPA MANAGEMENT (SAL)

SAL 133. SALON MANAGEMENT TECHNOLOGY. – 3 hours.

PREREQUISITE: As required by program.

This course is designed to develop entry-level management skills for the beauty industry. Topics include job-seeking, leader and entrepreneurship development, business principles, business laws, insurance, marketing, and technology issues in the workplace. Upon completion, the student should be able to list job-seeking and management skills and the technology that is available for use in the salon. NDC

SAL 201. ENTREPRENEURSHIP FOR SALON/SPA. – 3 hours.

This course covers the important issues and critical steps involved in starting a new business from scratch. Topics covered include developing a business plan, creating a successful marketing strategy, setting up the legal basis for business, raising start-up funds, attracting and managing human resources, managing costs, and developing a customer base.

SOCIOLOGY (SOC)

SOC 200. INTRODUCTION TO SOCIOLOGY. – 3 hours. A

This course is an introduction to the vocabulary, concepts, and theory of sociological perspectives of human behavior.

SOC 210. SOCIAL PROBLEMS. – 3 hours. A

PREREQUISITE: SOC 200.

This course examines the social and cultural aspects, influences, incidences and characteristics of current social problems in light of sociological theory and research.

SPANISH (SPA)

SPA 101. INTRODUCTORY SPANISH I. – 4 hours. A

This course provides an introduction to Spanish. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas.

SPA 102. INTRODUCTORY SPANISH II. – 4 hours. A

PREREQUISITE: SPA 101 or equivalent.

This continuation course includes the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas.

SPA 201. INTERMEDIATE SPANISH I. – 3 hours. A

PREREQUISITE: SPA 102 or equivalent.

This course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

SPA 202. INTERMEDIATE SPANISH II. – 3 hours. A

PREREQUISITE: SPA 201 or equivalent.

This continuation course includes a review and further development of communication skills. Topics include readings of literary, historical, and/or cultural texts.

SPEECH (SPH)

SPH 107. FUNDAMENTALS OF PUBLIC SPEAKING. – 3 hours. A

This course explores principles of audience and environment analysis as well as the actual planning, rehearsing and presenting of formal speeches to specific audiences. Historical foundations, communication theories and student performances are emphasized.

THEATRE ARTS (THR)

THR 113-114-115. THEATER WORKSHOP I-II-III. – 2 hours. B

These courses provide practical experience in the production and performance of a dramatic presentation with assignments in scenery, lighting, props, choreography, sound, costumes, make-up, publicity, acting, directing, and other aspects of theatre production.

THR 120. THEATER APPRECIATION. – 3 hours. A

This course is designed to increase appreciation of contemporary theater. Emphasis is given to the theater as an art form through the study of history and theory of drama and the contributions to modern media. Emphasis of playwright, actor, director, designer and technician to modern media. Attendance at theater production may be required.

THR 124. THEATRE TECHNOLOGY SCENERY & LIGHTING. – 3 hours. C

Scenic construction techniques and execution of stage lighting via lectures, demonstrations, and practical application. Emphasis in tools, materials, and procedure.

THR 126. INTRODUCTION TO THEATER. – 3 hours. A

This course is designed to teach the history of the theater and the principles of drama. It also covers the development of theater production and the study of selected plays as theatrical presentations. CORE

THR 131. ACTING TECHNIQUES I. – 3 hours. B

This is the first of a two-course sequence in which the student will focus on the development of the body and voice as the performing instruments in acting. Emphasis is placed on pantomime, improvisation, acting exercises, an building characterizations in short acting scenes.

THR 132. ACTING TECHNIQUES II. – 3 hours. C

PREREQUISITE: THR 131.

This course is a continuation of THR 131.

THR 216. THEATRICAL MAKE-UP. – 2 hours. C

This course is a study of the materials and techniques of theatrical make-up.

THR 221. SCENOGRAPHIC TECHNIQUES. – 3 hours. C

This course includes practical work developing proficiency in drafting technical drawings for the stage, including ground plans, elevations, and orthographic and isometric drawings. The course also includes the study and application of the elements of design as relevant tools to theatrical design, including the roles of scenic, lighting, and costume designer and their relationship with the director.

THR 224. SCENE PAINTING. – 3 hours. C

Historic and contemporary methods of painting scenery for the stage. Includes practical application of techniques in the scenic studio.

THR 236. STAGECRAFT. – 3 hours. C

This course is a study of the principles, techniques, and materials in theatrical scenery and lighting.

THR 296. DIRECTED STUDIES IN THEATER. – 2 hours. C

This course deals with problems in theater and art management. Problems may be arranged in conjunction with other disciplines in the Fine Arts.

WELDING (WDT)

WDT 108. SMAW FILLET/OFC. – 3 hours.

This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting. This is a CORE course.

WDT 109. SMAW FILLET/PAC/CAC. – 3 hours.

This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting. This is a CORE course.

WDT 110. INDUSTRIAL BLUEPRINT READING. – 3 hours.

This course provides students with the understanding and fundamentals of industrial blueprint reading. Emphasis is placed on reading and interpreting lines, views, dimensions, weld joint configurations and weld symbols. Upon completion students should be able to interpret welding symbols and blueprints as they apply to welding and fabrication. This is a CORE course.

WDT 115. GTAW CARBON PIPE. – 3 hours.

This course is designed to provide the student with the practices and procedures of welding carbon pipe using the gas tungsten arc weld (GTAW) process. Emphasis is placed on pipe positions, filler metal selection, purging gasses, joint geometry joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, filler metals, purging gas, proper joint geometry, joint preparation and fit-up to the applicable code.

WDT 116. GTAW STAINLESS PIPE. – 3 hours.

This course is designed to provide the student with the practices and procedures of welding stainless steel pipe using the gas tungsten arc weld (GTAW) process. Emphasis is placed on pipe positions, filler metal selection, purging gasses, joint geometry, joint preparation and fit-up. Upon completion, students should be able to identify pipe

positions, filler metals, purging gas, proper joint geometry, joint preparation, and fit-up to the applicable code.

WDT 119. GAS METAL ARC/FLUX CORED ARC WELDING. – 3 hours.

This course introduces the student to the gas metal arc and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques and base and filler metal identification. This is a CORE course.

WDT 120. SHIELDED METAL ARC WELDING GROOVE. – 3 hours.

This course provides the student with instruction on joint design, joint preparation, and fit-up of groove welds in accordance with applicable welding codes. Emphasis is placed on safe operation, joint design, joint preparation, and fit-up. Upon completion, students should be able to identify the proper joint design, joint preparation and fit-up of groove welds in accordance with applicable welding codes. This is a CORE course.

WDT 122. SMAW FILLET/OFC LAB. – 3 hours.

This course is designed introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxy-fuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.

WDT 123. SMAW FILLET/PAC/CAC LAB. – 3 hours.

This course is designed introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per applicable welding code.

WDT 124. GAS METAL ARC/FLUX CORED ARC WELDING LAB. – 3 hours.

This course provides instruction and demonstration using the various transfer methods and techniques to gas metal arc and flux cored arc welds. Topics included are safety, equipment set-up, joint design and preparation, and gases.

WDT 125. SHIELDED METAL ARC WELDING GROOVE LAB. – 3 hours.

This course provides instruction and demonstrations in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various F3 and F4 group electrodes in all positions. Upon completion, the student should be able to make visually acceptable groove weld joints in accordance with applicable welding codes.

WDT 155. GTAW CARBON PIPE LAB. – 3 hours.

PREREQUISITE: WDT 115 and/or as required by college.

This course is designed to provide the student with the skills in welding carbon steel pipe with gas tungsten arc welding techniques in various pipe weld positions. Upon completion, students should be able to perform gas tungsten arc welding on carbon steel pipe with the prescribed filler metals in various positions in accordance with the applicable code.

WDT 156. GTAW STAINLESS PIPE LAB. – 3 hours.

PREREQUISITE: WDT 116 and/or as required by college.

This course is designed to provide the student with the skills in welding stainless steel pipe with gas tungsten arc welding techniques in various pipe weld positions. Upon completion, students should be able to perform gas tungsten arc welding on stainless steel pipe with the prescribed filler metals in various positions in accordance with the applicable code.

WDT 157. CONSUMABLE WELDING PROCESSES. – 3 hours.

This course provides instruction and demonstration with the consumable welding processes to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of electrode, current/polarity, shielding gas and base metals.

WDT 158. CONSUMABLE WELDING PROCESSES LABS. – 3 hours.

This course provides instruction and demonstration with the consumable welding processes to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of electrode, current/polarity, shielding gas and base metals. Upon completion, the student should be able to produce groove and fillet welds using consumable welding processes according to AWS Codes and standards.

WDT 160. ROBOTICS LAB I. – 3 hours.

This course is the practical application of robotics theory. Students will complete machine origins, robotic programming, robotic welding parameters, link programs to create jobs, and allocate a weave start.

WDT 166. FLUX CORE ARC WELDING. – 3 hours.

This course provides instruction and demonstration with the flux core arc welding process to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of filler metals, current/polarity, shielding gas and base metals. Upon completion, the student should be able to produce groove and fillet welds using the FCAW welding process, according to AWS Codes and Standards.

WDT 167. FLUX CORE ARC WELDING LAB. – 3 hours.

This course provides instruction and demonstration with the flux core arc welding process to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of filler metals, current/polarity, shielding gas and base metals. Upon completion, the student should be able to produce groove and fillet welds using the FCAW welding process, according to AWS Codes and Standards.

WDT 180. SPECIAL TOPICS. – 3 hours.

This course allows the student to plan, execute, and present results of individual projects in welding. Emphasis is placed on enhancing skill attainment in the welding field. The student will be able to demonstrate and apply competencies identified and agreed upon between the student and instructor.

WDT 181. SPECIAL TOPICS LAB. – 3 hours.

This course provides specialized instruction in various areas related to the welding industry. Emphasis is placed on meeting students needs.

WDT 217. SMAW CARBON PIPE. – 3 hours.

This course introduces the student to the practices and procedures of welding carbon steel pipe using the shielded metal arc weld (SMAW) process. Emphasis is placed on pipe positions, electrode selection, joint geometry, joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, electrodes, proper joint geometry, joint preparation, and fit-up in accordance with applicable codes.

WDT 218. CERTIFICATION. – 3 hours.

This course is designed to provide the student with the knowledge needed to perform welds using the prescribed welding process. Emphasis is placed on the welding test joints in accordance with the prescribed welding code. Upon completion, students should be able to pass an industry standard welding test in accordance with various applicable welding code requirements.

WDT 219. WELDING INSPECTION AND TESTING. – 3 hours.

This course provides the student with inspection skills and knowledge necessary to evaluate welded joints and apply quality control measures as needed. Emphasis is placed on interpreting welding codes, welding procedures, and visual inspection methods. Upon completion, students should be able to visually identify visual acceptable weldments as prescribed by the code or welding specification report.

WDT 221. PIPE FITTING AND FABRICATION. – 3 hours.

This course provides the student with skills and practices necessary for fabricating pipe plans using pipe and fittings. Emphasis is placed on various pipe fittings to include various degree angles. Upon completion, students should be able to fit various pipe fittings, and cut and fabricate tees, and assorted angles.

WDT 223. BLUEPRINT READING FOR FABRICATION. – 3 hours.

This course provides a student with advanced skills in identifying and interpreting lines, views, dimensions, notes, bill of materials, and the use of tools of the trade. Emphasis is placed on figuring dimensional tolerances, tolerances, layout and fitting of different component parts. Upon course completion, a student should be able to interpret, layout, and fabricate from blueprints to given tolerances.

WDT 228. GAS TUNGSTEN ARC WELDING. – 3 hours.

This course provides student with knowledge needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

WDT 229. BOILER TUBE. – 3 hours.

This course is designed to provide the student with the practices and procedures of welding boiler tubes using the gas tungsten arc and shielded metal arc welding process to the applicable code. Emphasis is placed on tube fit-up, tube welding technique, and code requirements. Upon completion, students should be able to identify code requirements and tube welding technique.

WDT 257. SMAW CARBON PIPE LAB. – 3 hours.

COREQUISITE: WDT 217 and/or as required by college.

This course is designed to provide the student with the skills in welding carbon steel pipe with shielded metal arc welding techniques in various pipe welding positions. Upon completion, students should be able to perform shielded metal arc welding on carbon steel pipe with the prescribed electrodes in various positions in accordance with the applicable codes.

WDT 258. CERTIFICATION LAB. – 3 hours.

PREREQUISITE: WDT 218 and/or as required by college.

This course is designed to provide the student with the skills needed to perform welds using the prescribed welding process. Emphasis is placed on the welding test joints in accordance with the prescribed welding code. Upon completion, students should be able to pass an industry standard welding test in accordance with various welding code requirements.

WDT 268. GAS TUNGSTEN ARC LAB. – 3 hours.

This course provides student with skills needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

WDT 269. BOILER TUBE LAB. – 3 hours.

PREREQUISITE: WDT 229 and/or as required by college.

This course is designed to provide the student with the skills in welding boiler tubes using the gas tungsten arc and shielded metal arc welding process using filler metals in the F6 and F4 groups to applicable code. Emphasis is placed on welding boiler tubes using the gas tungsten arc and shielded metal arc welding process in the 2G and 6G positions in accordance with the applicable code. Upon completion, students should be able to perform gas tungsten arc and shielded metal arc welding on boiler tubes with the prescribed filler metals in the 2G and 6G positions to the applicable code.

WORKPLACE SKILLS ENHANCEMENT (WKO)

WKO 106. WORKPLACE SKILLS. – 3 hours.

This course emphasizes the foundational information to develop knowledge and skills to prepare individuals for employment following completion of technical and academic programs. At the conclusion of this course, students will have knowledge and skills relevant to work ethic, communication, resume writing, job interviewing, dress and appearance, behavior, problem solving, decision making, and project management. Students will receive an National Career Readiness Certificate, an assessment-based credential, that gives students a measure of key workplace skills, as well as an OSHA 10-hour certification in General Industry Safety and Health.

WKO 110. NCCER CORE. – 3 hours.

This course is designed to provide students with knowledge and skills related to multi-craft technicians in a variety of fields. Information in this course is based on the National Center for Construction Education and Research (NCCER) core curriculum and prepares students to test for the NCCER credential.tolerances, layout and fitting of different component parts. Upon course completion, a student should be able to interpret, layout, and fabricate from blueprints to given tolerances.

WKO 131. MSSC SAFETY COURSE. – 3 hours.

This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. Students completing this course will be eligible to test for the MSSC Safety Certification. Students completing courses WKO 131, 132, 133 and 134 will be eligible to test for the Certified Production Technician credential.

WKO 132. MSSC QUALITY PRACTICES AND MEASUREMENT. – 3 hours.

This course is designed to provide students with knowledge and skills related to quality practices in a manufacturing environment. Students completing this course will be eligible to test for the MSSC Quality Practices and Measurement Certification. Students completing courses WKO 131, 132, 133 and 134 will be eligible to test for the Certified Production Technician credential.

WKO 133. MSSC MANUFACTURING PROCESSES AND PRODUCTION. – 3 hours.

This course is designed to provide students with knowledge and skills related to manufacturing practices in a manufacturing environment. Students completing this course will be eligible to test for the MSSC Manufacturing Processes and Production Certification.

Students completing courses WKO 131, 132, 133 and 134 will be eligible to test for the Certified Production Technician credential.

WKO 134. MSSC MAINTENANCE AWARENESS. – 3 hours.

This course is designed to provide students with knowledge and skills related to maintenance practices in a manufacturing environment. Students completing this course will be eligible to test for the MSSC Maintenance Awareness Certification. Students completing courses WKO 131, 132, 133 and 134 will be eligible to test for the Certified Production Technician credential.