



B.S. IN TECHNOLOGY AND ENGINEERING EDUCATION PROGRAM ADVISEMENT SHEET (2024-present)

STUDENT NAME _____ ID NUMBER _____

STARTING SEMESTER _____ TRANSFER FROM _____

ADVISOR _____ *More Info:* <https://www.umes.edu/teed>

REQUIRED COURSES IN MAJOR (82 credits)

COURSE	TITLE	CR	SEM	GR
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Instructional Planning and Development Area (9 credits)

EDTE 122	Intro to Des. for T&E Ed.	<u>3</u>	_____	_____
EDTE 467	Instr. Design & Cur. Dev.	<u>3</u>	_____	_____
or EDTE 468	Cur. & Teach. Meth. in CTE			
EDTE 481	Fac. Organ. & Mngmt.	<u>3</u>	_____	_____

Production Technology Area (6 credits)

EDTE 132	CADD II	<u>3</u>	_____	_____
EDTE 242	Const. & Manufac. Tech	<u>3</u>	_____	_____

Communication Technology Area (6 credits)

EDTE 131	CADD I	<u>3</u>	_____	_____
EDTE 232	Info. & Comm. Tech.	<u>3</u>	_____	_____

Energy/Transportation Technology Area (6 credits)

EDTE 105	Elec. Circuit Tech I	<u>3</u>	_____	_____
or EDTE 211	Elec. & Elct. Tech I			
EDTE 252	Pow., Ener. & Tran. Tech	<u>3</u>	_____	_____

Technology Education Area (12 credits)

EDTE 121	Principles of T&E Ed.	<u>3</u>	_____	_____
EDTE 410	Foundations of Tech.	<u>3</u>	_____	_____
or EDTE 487	Found. of T&E			
EDTE 382	Core Technologies	<u>3</u>	_____	_____
_____	T&E Elective*	<u>3</u>	_____	_____

*Select one: EDTE 205, EDTE 216,
EDTE 314, EDTE 445, EDTE 451,
EDTE 485, or EDTE 499

TOTAL CREDITS **39**

Professional Education Courses (43 credits)

EDCI 200B	Intro Contemp. Ed	<u>3</u>	_____	_____
EDCI 201	Praxis Preparation	<u>1</u>	_____	_____
PSYC 205	Developmental Psych.	<u>3</u>	_____	_____
PSYC 207	Educational Psych.	<u>3</u>	_____	_____
EDCI 409	Reading in Cont. Area I	<u>3</u>	_____	_____
EDCI 410	Reading in Cont. Area II	<u>3</u>	_____	_____
EDCI 311	Comp. Assess. in Ed.	<u>3</u>	_____	_____
or EDTE 437	Stud. Perfm. & Assess			
EDCI 406	Classroom Mngmt.	<u>3</u>	_____	_____
EDSP 428	Com. & Collab. Spec. Ed.	<u>3</u>	_____	_____
or EDSP 432	Diff. Learning in CTE			
EDCI 425D	C&I Methods in T&E Ed	<u>3</u>	_____	_____
EDCI 400	Senior Seminar in Ed	<u>3</u>	_____	_____
EDCI 460	Teaching Intern: MS	<u>6</u>	_____	_____
EDCI 470	Teaching Intern: HS	<u>6</u>	_____	_____

TOTAL CREDITS **43**

NOTES/ADVISEMENT DATE:

GENERAL EDUCATION REQUIREMENTS (38 credits)

COURSE	TITLE	CR	SEM	GR
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Curriculum Area 1 -Arts and Humanities (6 credits)

ARTS 101	Expl. of Visual Arts	<u>3</u>	_____	_____
or ENGL 207	Intro to Creative Writing			
ENGL 203	Fund. of Cont. Speech	<u>3</u>	_____	_____

Curriculum Area 2 - Social and Behavioral Sciences (6 credits)

PSYC 100	Intro. to Psychology	<u>3</u>	_____	_____
HUEC 203	Hum. Dev: Lifespan	<u>3</u>	_____	_____

Curriculum Area 3 – Biol. and Physical Sciences (7 credits)

PHYS 121	General Physics I	<u>3</u>	_____	_____
PHYS 123	Gen Physics I Lab	<u>1</u>	_____	_____
ENVS 101	Intro to Env. Sciences	<u>3</u>	_____	_____
or BIOL 101	Theor. & App of Biol.			

Curriculum Area 4 – Mathematics (3 credits)

MATH 109	College Alg.	<u>3</u>	_____	_____
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Curriculum Area 5 - English Composition (9 credits)

ENGL 101	Basic Composition I	<u>3</u>	_____	_____
ENGL 102	Basic Composition II	<u>3</u>	_____	_____
ENGL 305	Technical Writing	<u>3</u>	_____	_____

Curriculum Area 6.1 – Freshman Experience (1 credit)

GNST/EDTE 100	First Year Exp. Sem.	<u>1</u>	_____	_____
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Curriculum Area 6.2 – Computer Literacy (3 credits)

ETGE 111	Technology and Society	<u>3</u>	_____	_____
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Curriculum Area 6.3 – Justice, Equity, Diversity, Inclu. (3 credits)

HUEC 230	Mul. Pers. on Fam. in U.S.	<u>3</u>	_____	_____
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TOTAL CREDITS **38**

Passed PRAXIS Core:

Reading	_____
Writing	_____
Math	<u>Exempt</u>

Passed PRAXIS II and Cumulative GPA:

#5051 Tech Ed	_____ (Required score: 151)
#5624 PLT	_____ (Required score: 157)
3.00 GPA	_____

TOTAL CREDITS FOR GRADUATION - 120

Suggested Course Sequence for the B.S. in Technology and Engineering Education

Freshman Year

First Semester: Credits 16

- ETGE 111 Technology and Society (3)
- EDTE 131 Computer-Assisted Drawing and Design I (CAD) (3)
- ENGL 101 Principles of Composition I (3)
- MATH 109 College Algebra (3)
- PSYC 101 Introduction to Psychology (3)
- EDTE 100 First Year Experience Seminar (1)

Second Semester: Credits 16

- ENGL 102 Principles of Composition II (3)
- PSYC 205 Developmental Psychology (3)
- EDCI 200B Introduction to Contemporary Education (3)
- ENVS 101 Introduction to Environmental Sciences (3)
- EDTE 132 Computer-Assisted Drawing and Design II (CAD) (3)
- EDCI 201 PRAXIS Preparation (1)

Sophomore Year

First Semester: Credits 16

- ARTS 101 Exploration of the Visual Arts (3)³
- HUEC 203 Human Development: A Lifespan Perspective (3)
- PHYS 121 General College Physics I (3)
- PHYS 123 General College Physics I Laboratory (1)
- ENGL 203 Fundamentals of Contemporary Speech (3)
- EDTE 211 Electrical and Electronics Technologies I (3)

Second Semester: Credits 15

- EDTE 121 Principles of Technology and Engineering Education (3)
- HUEC 230 Multicultural Perspectives on Families in the U.S. (3)
- ENGL 305 Technical Writing (3)
- EDTE 232 Information and Communication Technologies (3)
- EDCI 409 Teaching Reading in the Content Areas: I (3)

Junior Year

First Semester: Credits 15

- EDCI 410 Literacy in the Content Area: Part II (3)
- PSYC 207 Educational Psychology (3)
- EDSP 428 Communication and Collaboration in Special Education (3)
- EDTE 122 Introduction to Design for Technology and Engineering Education (3)
- EDTE 242 Construction and Manufacturing Technologies (3)

Second Semester: Credits 15

- EDCI 311 Comprehensive Assessment in Education (3)
- EDTE 252 Power, Energy and Transportation (3)
- EDTE 467 Instructional Analysis and Curriculum Development (3)
- EDCI 406 Classroom Management (3)
- EDTE 410 Foundations of Technology (3)

Senior Year

First Semester: Credits 12

- EDTE 382 Core Technologies (3)
- EDTE 314 Biotechnology and Agricultural Technologies (3)
- EDTE 481 Facilities Organization and Management (3)
- EDCI 425D Curriculum and Instructional Methods in Technology & Engineering Education: Middle/Secondary (3)

Second Semester: Credits 15

- EDCI 400 Senior Seminar in Education (3)
- EDCI 460 Teaching Internship: Secondary Program (7-12): Middle School (6)
- EDCI 470 Teaching Internship: Secondary Programs (7-12): High School (6)

Total Credit Hours: 120

T&E Education Program Course Descriptions

From the [UMES Undergraduate Academic Catalog](#)

- **T&E Courses**

EDTE 100 First Year Experience Seminar Credit 1

This course provides an opportunity for students to make a seamless transition from high school to college. Essential skills for transition will be explored and discussed. The course will assist students in developing skills that will assist them in adjusting personally and socially to the college environment. First-year students will develop skills in critical thinking, information literacy, self-awareness, and communication to facilitate a successful transition. In addition, to providing information needed for student success at the University of Maryland Eastern Shore, this course serves as a conduit for students entering the fields of Technology. Lecture one hour. Prerequisite: None.

EDTE 111 Technology and Society Credit 3

This course examines the nature of technology and society within the context of the designed world: its meaning, application, significance, the role it has played in our history and its importance in today's technological society. Course content focuses on: the characteristics and scope of technology; the nature of technology within the context of the designed world; the design and development process; core concepts of technology; relationships and connections between technology and other fields; the cultural, social, economic, and political effects of technology; the effects of technology on the environment; and the role of society in the development and use of technology. Lecture three hours. Prerequisite: None.

EDTE 131 Computer-Assisted Drawing and Design I (CAD) Credit 3

The attributes of design, the engineering design process, and the basics of technical drawing are covered in this course. The design process is utilized to solve problems and design contemporary products. Basic technical drawing skills are developed, such as sketching, coordinate systems, the principles and theory of visualization, shape description, orthographic projection, basic descriptive geometry, axonometric drawings, and developments. Students use and apply computer-assisted drawing and design (CADD) software to produce basic technical drawings and three-dimensional designs. Engineering design and problem solving are used to research and develop renderings and solid three-dimensional models. Lecture two hours. Laboratory two hours. Prerequisite: None.

EDTE 132 Computer-Assisted Drawing and Design II (CAD) Credit 3

This course covers advanced computer-assisted drawing and design software used to produce three-dimensional drawings. Engineering design and problem solving are used to research and develop renderings and animated wire-frame, surface, and solid three-dimensional models. The use of libraries of pre-drawn materials is also covered. Lecture two hours. Laboratory two hours. Prerequisite: EDTE 131 or permission of instructor.

EDTE 211 Electrical and Electronics Technologies I Credit 3

This is a study of electricity and electronic technologies within the context of the designed world. Different systems and technologies are presented to provide an overview of how systems relate to technology. Technical concepts and principles of different types of circuits, laws, symbols, scientific principles, design and test equipment are analyzed and applied to electronic technological systems. Theories and principles applied to communication devices such as computers, cell phones, and audio systems are studied. Students design, build, test, and evaluate systems. Laboratory two hours. Prerequisites: PHYS 121 and MATH 110.

EDTE 232 Information and Communication Technologies Credit 3

This course covers information and communications systems within the context of the design world. It examines how information can be encoded, transmitted, and received. Graphic communications, television, radio, computer networks, computer graphics, the Internet, telephone, and other systems and subsystems are also examined. The symbols, design, and language of information and communications are discussed. Lecture two hours; laboratory two hours. Prerequisite: EDTE 132 or permission of instructor.

EDTE 314 Biotechnology and Agricultural Technologies Credit 3

A study of techniques that use living organisms or parts of an organism to make or modify products to improve plants or animals, including humans, within the context of the designed world is covered in this course. Developing micro-organisms and agricultural products for specific uses is also examined. Medical technologies as related to biotechnology are infused through the course. Lecture two hours. Laboratory two hours. Prerequisite: BIOL 101.

EDTE 341 Transportation Technologies Credit 3

This course covers transportation systems used to transport people and goods within the context of the designed world and STEM disciplines. The design and operation of transportation systems and subsystems, governmental regulations, care of products and systems, design and operation of transportation systems, and the impact of transportation systems on society are studied. Lecture two hours, laboratory two hours. Prerequisite: Junior standing and/or permission of instructor.

EDTE 342 Energy and Power Technologies Credit 3

The use and impact of energy and power systems within the context of STEM and the designed world are examined in this course. Such areas as power efficiency and conservation, energy sources, thermodynamics, renewable and non-renewable forms of energy, and alternate energy are studied. Technical aspects of systems design and development for solar energy, nuclear energy, wind energy, geothermal energy, hydro-energy and other sources are examined. Lecture two hours. Laboratory two hours. Prerequisite: EDTE 341 or permission of instructor.

EDTE 351 Construction Technologies Credit 3

The structures, systems, processes, and procedures of construction technologies are examined within the context of the designed world. Principles of construction, personnel management and organization, the design process, methods, materials, tools, and equipment used in building structures are studied. Prefabricated materials, infrastructures and renovation are additional topics covered. Lecture two hours, Laboratory two hours. Prerequisite: Junior standing and/or permission of instructor.

EDTE 361 Manufacturing Technologies Credit 3

This course is a study of the principles of manufacturing goods, processes, and systems within the context of the designed world. Personnel management, organizational structures, durable and non-durable goods, product design, interchangeability, and product marketing are covered. Students research and select products suitable of mass-production using an enterprise system. Emphasis is placed on the manufacturing design process. The social, cultural and economic problems and benefits are also examined. Lecture two hours. Laboratory two hours. Prerequisite: Junior standing.

EDTE 410 Foundations of Technology Credit 3

The course focuses on the development of STEM knowledge, skills and dispositions regarding the following aspects of technology: 1) its evolution, 2) systems, 3) core concepts, 4) design, and 5) utilization. It addresses the three dimensions of technological literacy: knowledge, ways of thinking and acting, and capabilities with the goal of students developing the characteristics of a technologically literate citizen. This course explores teaching/learning strategies that enable students to build their own understanding. Prerequisite: Senior standing or Permission of instructor.

EDTE 467 Instructional Analysis and Curriculum Development Credit 3

This advanced curriculum design course covers how to design a standards-based unit of instruction based on an instructional analysis in a content area in order to develop curriculum materials. Students learn how to design, implement, and evaluate technology-oriented curriculum. Emphasis is placed on the integration and utilization of national and state content standards not only in Technology Education but also on academic areas such as math and science. Based on these standards and the backward mapping process, goals, objectives, indicators, student learning activities, instructional materials, and assessment instruments are designed. Lecture three hours. Prerequisite: Permission of instructor.

EDTE 481 Facilities Organization and Management Credit 3

Basic elements of designing, creating, and managing Technology Education learning environments, both classroom and laboratory facilities, are covered relative to state instructional standards. Room layout, selection of tools, supplies, equipment, safety and layout arrangements will be studied. Modular laboratory design and management will be examined. Lecture three hours. Prerequisite: Senior standing.

EDTE 482 Core Technologies I Credit 3

The core technologies are the building blocks of all technology systems within the context of the designed world. Mechanical and structural technologies will be examined with regard to common components, simple controls, basic system design, safety, and applications. Students will design, build, operate, and analyze a technological model, prototype or simulation related to the core technologies. An overview of materials technology will include an examination of ferrous and non-ferrous materials, common industrial forms, and the primary and secondary processing of industrial materials. Topical investigations and modular activity packages will be utilized to enhance understanding of the core technologies. Lecture two hours. Laboratory two hours. Prerequisite: Senior standing or permission of instructor.

EDTE 483 Core Technologies II Credit 3

The core technologies are the building blocks of all technology systems within the context of the designed world. Electrical, electronic, optical, fluid, and thermal technologies will be examined with regard to common components, simple controls, basic system design, safety, and applications. The context for the study of these core technologies will be the design and development of technology systems to solve practical problems. Students will design, build, operate, and analyze a technological model, prototype or simulation related to the core technologies studied in this course. Communication skills will be developed through the documentation of the design and development process. Topical investigations and modular activity packages will be utilized to enhance understanding of the core technologies. Lecture two hours. Laboratory two hours. Prerequisite: Senior standing or permission of instructor.

EDTE 499 Undergraduate Research in Technology Education Credit 1-6

This course is designed for the junior-senior undergraduate student who has an interest in pursuing a special problem as an independent research project. An Independent Study Contract must be prepared and submitted for the Department Chair's approval within the first week of the semester. Student cannot take more than two 499 courses for a total of 6 credits. Prerequisite: Consent of the instructor and approval of the Department Chair.

- **Professional Education Courses**

EDCI 200/Online Introduction to Contemporary Education Credit 3

This course is a comprehensive overview of the foundations of education in the United States. It incorporates the historical, political, economic, legal, social, philosophical and curricular foundations to provide future educators with an understanding of the teaching profession and the issues and controversies confronting American education today. The topics covered in the course provide novice educators with a broad picture of P-12 education and schooling in the United States. The primary focus is the preparation of reflective teachers who will make informed decisions that will improve and enhance the learning environment for children. Students will have a required field experience in the local public schools.

EDCI 201 PRAXIS Preparation Credit 1

This course provides training in the content and skills assessed in Praxis I testing in the areas of Reading, Writing, and Mathematics. This course is taken concurrently with EDCI 200. Credit for this course does not count towards graduation.

EDCI 311 Comprehensive Assessment in Education Credit 3

This course is designed to present an in-depth study of the purposes, principles, practices, and ethics of student assessment in elementary and secondary classrooms. The course emphasizes the basic concepts and terminology of assessment, as well as classroom applications. The course addresses the purposes, goals, and strategies for developing, administering, and interpreting a variety of assessments, including performance, portfolio, and standardized assessments. An understanding of current trends and practices in state and national assessment is emphasized. Prerequisite: Teacher Candidacy Status.

EDCI 400 Senior Seminar in Education Credit 3

The senior seminar is designed to supplement and complement the teaching internship phase of the teacher education program. The seminar focuses on the analysis and synthesis of the internship experiences so that teacher interns may successfully integrate their experiences into future practice. Preparation of a professional portfolio, maintenance of a log book and journal, and participation in group synthesis and analysis are required. This course is intended for all secondary and P-12 specialty teacher interns. Students enroll concurrently in the teaching internship and the senior seminar. Prerequisites: Admission to the Teacher Internship. This includes passing the PRAXIS II Tests for the specific content or specialty major.

EDCI 406 Classroom Management Credit 3

This course introduces the basic theories, techniques, and skills necessary to successfully manage small and large groups of diverse student populations at the elementary and secondary school levels. The focus of the course is on the study and application of effective individual and group management techniques based upon behavioral, cognitive, environmental, developmental, and psychoanalytic theories. Special emphasis is placed on developing supportive learning environments that promote self-esteem and motivate success. Students will have a required field experience in the local public schools. Prerequisite: Teacher Candidacy Status.

EDCI 409 Teaching Reading in the Content Areas: I Credit 3

This course addresses the fundamentals of the reading process, theories, and instructional strategies. It emphasizes the development of vocabulary and comprehension skills, the assessment of student reading levels, and textbook readability, with particular emphasis on the reading of content material at the secondary level. This course is intended for all secondary and P-12 specialty area teacher candidates. This course includes a required field experience. Prerequisite: Teacher Candidacy Status.

EDCI 410 Teaching Reading in the Content Areas: II Credit 3

This course addresses the literacy needs of diverse student populations and includes training in specific strategies to facilitate reading comprehension, incorporate writing to increase reading comprehension, interpret standardized reading test scores, use collaborative learning to promote literacy and content learning, and model processes for assessing literacy growth. It builds on theories and strategies in EDCI 409. A field experience/pre-internship in the area of specialization at a Professional Development School is required. This course is intended for all secondary and P-12 specialty area teacher candidates. Prerequisites: Teacher Candidacy Status and a "C" or better in EDCI 409.

EDCI 425D Curriculum and Instruction in Content Specific Areas Credit 3

This course is an in-depth study of current instructional methods and curricular materials used in teaching content in grades relative to the specific area (i.e., P-12 or 7-12). The focus of the course is on effective program development and instructional delivery. It includes lesson and unit planning, collecting reference and illustrative materials, observing and evaluating teaching, and applying effective strategies and techniques. Additional curricular topics include performance objectives, student outcomes, scheduling, community resources, and specialized equipment and technology. The philosophy, history, and important issues and trends related to the content specific area of education are included. A field experience/pre-internship in the content specific area at a Professional Development School is required. Refer to individual areas for specific course descriptions. Prerequisite: Teacher Candidacy Status.

EDCI 460 Teaching Internship Secondary Program (7-12): Middle School Credit 6

The student is assigned to a seven (7) or eight (8) week teaching internship at a Professional Development School at the middle school level. During this directed teaching experience, the student assumes the role and responsibilities of an educator on a full-time basis in the area of specialization. The internship provides the student with the opportunity to study the application of methods and techniques in a clinical setting through extended supervised practice. The student has the opportunity, under the direction and guidance of a university supervisor and a professional mentor, to refine skills and to develop professional expertise. This course is taken concurrently with EDCI 400 and EDCI 470 or 490. Prerequisites: Admission to Teacher Internship. This includes passing the PRAXIS II Tests for the specific content major.

EDCI 470 Teaching Internship Secondary Programs (7-12): High School Credit 6

The student is assigned to a seven (7) or eight (8) week teaching internship at a Professional Development School at the high school level. During this directed teaching experience, the student assumes the role and responsibilities of an educator on a full-time basis in the area of specialization. The internship provides the student with the opportunity to study the application of methods and techniques in a clinical setting through extended supervised practice. The student has the opportunity, under the direction and guidance of a university supervisor and a professional mentor, to refine skills and to develop professional expertise. This course is taken concurrently with EDCI 400 and EDCI 460 or 480. Prerequisites: Admission to Teacher Internship. This includes passing the PRAXIS II Tests for the specific content major.

EDSP 428 Communication and Collaboration in Special Education Credit 3

This course focuses on the nature of oral and written communication - theories, models, and definitions; the role of the individual and groups in the communication process; and content and settings for communication; various formats and techniques of communication; and the differences in communication styles based on diverse groups. In addition, the course presents effective and ineffective strategies for communication with the opportunity to systematically analyze one's individual communication style as well as that of others. The educational setting serves as the context for developing these effective communication and collaboration skills. The focus of this course is primarily on communication and collaboration between general and special educators, parents, administrators, paraprofessionals and students. This course has a required clinical experience. This course is taken concurrently with EDSP 404, EDSP 430, and EDSP 431. Prerequisites: The student must have Teacher Candidacy status.

PSYC 205/Online Developmental Psychology Credit 3

This course presents a lifespan survey of human growth and development, beginning at conception and ending with death with emphasis on intellectual, linguistic, emotional, perceptual, social and personality development. Prerequisite: PSYC 200 with a grade of "C" or better.

PSYC 207 Educational Psychology Credit 3

This course examines scientific research and psychological principles as they apply to teaching and learning. Topics include theories of learning, intelligence, memory, creativity, human diversity, and other factors influencing effective instruction and learning. Clinical/classroom experiences provide opportunity to apply learning theory within an educational framework. Prerequisites: PSYC 200 with a grade of "C" or better.

- **General Education Courses**

ARTS 101/Online Exploration of the Visual Arts Credit 3

This is a philosophical course in the nature of Art designed to acquaint the student with the complex phenomena that makes up the art of our time, ranging from prehistory to the present. Emphasis is placed primarily upon the visual arts of painting, drawing, sculpture, pottery, and the graphic arts. The course features specifically, the nature of visual form, the art object, the material and process by which it was formed, and the creative process. Field trips are a requirement. OPEN TO ALL STUDENTS.

ENGL 001/002/003 English Proficiency Examination Credit 0

The English Proficiency Examination (EPE) is a two-hour examination required to assure that students are able to write at an acceptable level. In order to graduate, every student must pass the English Proficiency Examination. The test is given during exam week in the Fall and Spring semesters and during exam day in the Winter and Summer III sessions. Students also registered for ENGL 102 should take ENGL 001; students also registered for ENGL 102H should take ENGL 003; students who have completed ENGL 102 should take ENGL 002.

ENGL 101/Online Basic Composition I Credit 3

This course is designed to provide instruction in the basics of college level essay writing, with an emphasis on organization and development of ideas and the rhetorical modes of expository writing. The course will also review the fundamentals of grammar, punctuation, and conventional usage. Adequate opportunity for written analysis and oral discussion of selected examples of prose and creative writing are provided to encourage development of critical reading and thinking skills.

ENGL 102/Online Basic Composition II Credit 3

This course continues the study of college level essay writing, with an emphasis on the development of critical analysis skills. Students will be introduced to basic research concepts, the use of secondary source material, and the tenets of source citation. A research essay will be required. Prerequisite: "C" or better in ENGL 101.

ENGL 203 Fundamentals of Contemporary Speech Credit 3

This course requires the preparation and delivery of short original speeches, outside readings and reports. It is recommended that this course be taken during the sophomore year. Prerequisites: ENGL 101 and ENGL 102.

ENGL 305/Honors/Online Technical Writing Credit 3

This course concentrates on the techniques of expository writing in the preparation of technical material. Among the areas of concentration are writing to support graphic illustrations, writing to clarify statistical information, and writing to explain process. Students are introduced to the selective use of the library and basic research facilities, particularly the use of periodical indexes and selective bibliographies. The course is open to all degree-seeking and special students who have successfully completed their freshman and sophomore years with at least 56 credit hours, and who have satisfactorily completed ENGL 101, ENGL 102, and ENGL 203.

ENGL 328 World Literature I Credit 3

This course is an introductory study of major movements and genres in Eastern, Western, and African Literatures from ancient times through the Western Renaissance, with the objective of helping students to gain knowledge of the culture of people other than American. Prerequisites: ENGL 101 and ENGL 102.

ECON 201/Honors/Online Principles of Macroeconomics Credit 3

Students learn the principles of analyzing the economy as a whole. Topics covered include inflation and unemployment; saving, investment and financial systems; fiscal and monetary policies; economic growth; and international trade. Prerequisite: MATH 102 or higher.

PSYC 200/Online Introduction to Psychology Credit 3

This course provides a survey of general principles underlying human behavior. It includes study of the nervous system, perception, learning, memory, thinking, emotions, and individual differences in intelligence, aptitude, and personality.

PHYS 121 General College Physics I Credit 3

This is the first semester of the two-semester course designed to provide the student with an overall view of the concepts, together with the ability to set-up and solve simple problems in physics. Areas covered include particle mechanics, heat, thermodynamics, and sound. This is a non-calculus based physics course. The course consists of three hours lecture per week. Prerequisite: MATH 109. Co-requisite: PHYS 123.

PHYS 122 General College Physics II Credit 3

This is the second semester of the two-semester course in non-calculus based physics. Areas covered include: electricity, magnetism, light, and selected topics in modern physics. The course consists of three hours lecture per week. Prerequisite: PHYS 121. Co-requisite: PHYS 124.

PHYS 123 General College Physics I Laboratory Credit 1

This course consists of two hours laboratory work per week. Standard laboratory experiments are selected to provide the student with practical knowledge of Physics and to enhance knowledge gained in the classroom. This course should be taken in concurrence with PHYS 121. Laboratory Fee: \$25.

PHYS 124 General College Physics II Laboratory Credit 1

This course consists of two hours laboratory work per week. Standard laboratory experiments are selected to provide the student with practical knowledge of Physics and to enhance knowledge gained in the classroom. This course should be taken in concurrence with PHYS 122. Laboratory Fee: \$25

BIOL 101/Online Theories and Applications of Biological Sciences Credit 3

This course provides an introduction to Biological principles as they apply to our daily lives. The course is designed to partially meet general education requirements in the Natural Sciences. Consideration is given to organisms, their components and activities. Emphasis is on the development and use of knowledge, skills and attitudes expected to be of value in future decision-making as it relates to Biology, our present environmental conditions, and problems facing each of us today. This course is comprised of three hours lecture per week.

MATH 109 College Algebra Credit 3

The purpose of this course is twofold: for students requiring quantitative mathematical skills but not trigonometry or calculus, it may be viewed as a terminal course; it also provides the algebraic and graphing skills necessary for satisfactory performance involving relations and functions, graphing, solving systems of linear equations, and the logarithmic and exponential functions. **Prerequisites:** MATH 101 with a grade of at least "C"; or two years of high school algebra, plus permission of the Department (obtained by receiving a satisfactory score on the placement test).

MATH 110 Trigonometry and Analytic Geometry Credit 3

This course is intended for students majoring in mathematics, computer science, science, technology, or engineering, or for students preparing to take calculus. Topics covered include the unit circle and graphs of the trigonometric functions, trigonometric identities, trigonometric equations, inverse trigonometric functions, complex numbers, and polar coordinates.

Prerequisites: MATH 109 with a grade of at least "C", or three years of high school mathematics (Algebra I or higher) plus permission of the Department (obtained by receiving a satisfactory score on the placement test).