

## **GENERAL EDUCATION COURSES**

All applicants for a technical program or a general education course must complete reading, writing and math placement testing. Students with an Associate's degree or higher are exempt from the placement tests. Students who have earned a C or better in Composition I from any accredited institution are exempt from the writing portion of the placement test. Students with a C or better in College Algebra from an accredited institution are exempt from the math portion of the test. Note: Placement test scores are invalid after three years. Ask the academic advisor about transferability of general education courses. **Students are encouraged to work with the academic advisor when developing a plan of study that leads to a certificate or degree.**

### **BIO 105 General Biology, 5 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090; qualifying Writing test score or ENG 100)**

This course enables students to apply basic biological principles to appropriate daily situations. Students apply the scientific process to problem solving and deductive reasoning to analyze and interpret observations.

### **BUS 100 Introduction to Business, 3 credits**

This is an introductory course with the primary goal of helping students develop a general understanding of a wide range of topics within the field of business. It is a study of business functions, methods of business operation, types of business ownership, and the role of business organizations in society. There will be opportunities throughout the course to discuss current events in business as they apply to the topics being covered.

### **COM 102 Interpersonal Communication, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090)**

This course is a broad introduction to interpersonal communication, which focuses on the principles of effective speech communication in small group and one-on-one relationships. Students develop an understanding of the dynamic and complex system involved in human communication. Theory and practice of interpersonal communication are studied and applied to a variety of life situations. The course focuses on perception, self-concept, listening, conflict, language, stereotyping, shyness, disclosure, friendship, and communication in interpersonal relationships nonverbal communication and culture as they relate to interpersonal relationships.

### **COM 105 Public Speaking, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090).**

This course will emphasize the fundamental basics of good private and public speaking experiences. The course will cover speech organization, development of ideas, delivery, listening, peer and audience analysis, and understanding of all types of public speeches.

### **CSA 105 Introduction to Computer Applications and Concepts, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090)**

This course is an overview of basic computer operations, computer applications, ethics, and hardware. Skills gained in this course will provide a foundation for using technology in other courses.

**CSA 110 Introduction to Computer Programming, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090)**

This course uses Visual Basic, an object-oriented language, to teach programming concepts. This course is designed as an introductory programming course with an emphasis on conceptual techniques of problem solving and program design.

**ENG 090 Basic Writing, 3 credits. (Prerequisite: qualifying placement test score)**

This course is designed to help students improve their writing skills and prepare them for ENG 100 and ENG 101 by providing instruction and practice in writing clear and effective sentences, paragraphs, and short essays. Students will use the writing process of planning, drafting, and revising. By successfully completing Basic Writing, students will be eligible for Technical Writing and English Composition I. **(Note: credit for this course does not apply for transfer or a degree.)**

**ENG 097 Technical Writing Review, 2 credits. (Prerequisite: qualifying placement test score and must be enrolled concurrently in ENG 100)**

The purpose of this course is to undergird the Technical Writing course through concentrated work on building clear, concise, and accurate written communications suitable for the workplace. Students also work on college level reading and writing skills, critical thinking, and customized work where individual students need it the most.

**ENG 100 Technical Writing, 3 credits. (Prerequisite: Qualifying placement test score)**

Technical Writing is an introduction to technical and professional workplace writing. The course emphasizes the writing process to compose technical documents (e.g. memo, email, letter, instructions, proposal, and report) with attention to document design, graphics, and readability. Other emphases include job search skills (cover letter, résumé, and interview), oral presentations, and research skills.

**ENG 101 English Composition I, 3 credits (Prerequisite: Qualifying Writing test score or ENG 097 or ENG 100)**

This course is an introduction to expository writing and emphasizes clear and effective writing, the writing process, audience, purpose, analytical reading, peer conferencing, and research procedures. The course provides instruction and practice in development of ideas, methods of organization, sentence structure, grammar, mechanics, documentation, and MLA format.

**ENG 102 English Composition II, 3 credits (Prerequisite: ENG 101)**

Composition II focuses on argumentation and research. Students will engage in critical reading and class discussions to build logical arguments, will use the writing process to write argumentative essays, and will perform research independently and in collaboration. The course provides instruction and practice in using sources to support an argument and in using MLA guidelines for format and documentation.

**HUM 101 Ethics in the Workplace, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090; qualifying Writing test score or ENG 100)**

This course explores issues in our everyday life with a focus on the challenges encountered in the workplace. The topics range from personal to professional issues.

**MAT 090 Basic Mathematics, 3 credits. (Prerequisite: qualifying placement test score)**

This course is designed to provide students with the mathematical background necessary for entering technical career fields. Attention is given to preparing students to succeed in college level mathematics. Topics include basic operations, fractions, decimals, percent, and measurement. The second part of the semester focuses on basic quantitative problem solving, algebra with technical applications, measurement, proportions, and geometry. **Note: This course does not satisfy the college level mathematics requirements for an Associate of Applied Science degree.**

**MAT 095 Beginning Algebra, 3 credits. (Prerequisite: MAT 090 or qualifying Math test score; qualifying Reading test score or concurrent enrollment in REA 090)**

This is an introductory algebra course that includes applications. Topics include a review of pre-algebra, variable expressions, solving algebraic equations, linear equations in two variables, inequalities and polynomials. The objective of this course is to offer students a solid background in basic algebra and accompanying applications and to prepare students for future mathematics courses including Intermediate Algebra. **Note: This course does not satisfy the college level mathematics requirements for an Associate of Applied Science degree.**

**MAT 097 Technical Math Review, 2 credits. (Prerequisite: Qualifying Math test score; qualifying Reading test score and must be enrolled concurrently in MAT 101)**

This is an overview course of mathematics that focuses on technical applications. The course will begin with a review of basic mathematics. Then move on to topics including basic quantitative problem solving, algebra with technical applications, measurement, proportions, and geometry. This course is designed to provide students with the mathematical background necessary for entering technical career fields.

**MAT 101 Technical Math, 3 credits. (Prerequisite: MAT 100, MAT 090 or MAT 095 or qualifying placement test score; qualifying Reading test score or concurrent enrollment in REA 090)**

This is an overview of mathematics course that focuses on technical applications. Topics include basic quantitative problem solving, algebra with technical applications, measurement, proportions, and geometry. This course is designed to provide students with the mathematical background necessary for entering technical career fields.

**MAT 105 Intermediate Algebra, 3 credits. (Prerequisite: MAT 100, MAT 101, MAT 095 or qualifying placement test score; qualifying Reading test score or concurrent enrollment in REA 090)**

The focus of this course is to prepare the student for College Algebra. Students learn how to perform common calculations in several applied occupational fields. Prerequisite: Math test score, C or better in Technical Math, or test out of Technical Math with 80% or better on a comprehensive course exam.

**MAT 150 College Algebra, 3 credits. (Prerequisite: MAT 105 or qualifying placement test score; qualifying Reading test score or concurrent enrollment in REA 090)**

Students learn how to interpret mathematical symbols and notations, simplify expressions, factor polynomials, solve equations (including absolute value, quadratic and systems of linear equations), perform operations on radical expressions, write equations of lines and evaluate functions.

**NDT 100 Introduction to Non-Destructive Testing, 3 credits.**

Through a variety of classroom and/or shop/lab learning and assessment activities, students in this course will acquaint themselves with the six major nondestructive evaluation disciplines: radiographics, ultrasonics, eddy current, magnetic particle, liquid penetrants and visual inspection and provide students with an overview of less common nondestructive testing methods.

**NDT 110 Visual Inspection, 3 credits. (Prerequisites: NDT 100 recommended, not required).**

This course is devised to introduce the student to forms of discontinuities in the manufacturing and service life of a part. Provide students with an understanding of how and why a specific nondestructive testing method is chosen. To acquaint students with visual inspection techniques, and their correct use. This course is designed to meet certain Nondestructive Testing Level II certification requirements.

**POL 105 American Government, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090; qualifying Writing test score or ENG 100)**

This course is designed to introduce students to the political, economic, and legal issues, procedures, laws, and systems of the American government. Emphasis is placed on the federal level of government, but the state and local levels receive some attention, especially as regards the state-local-federal interrelationship. The course will build a foundation of understanding of the branches of government and the structure of the legal and economic systems. Students will examine each government structure and apply it to their lives to demonstrate an understanding of how the relationship between government and society works.

**PSY 100 Personal Growth and Development, 1 credit**

This course includes skills needed to remove barriers between you and a better career. Explore social class communication, financial literacy, economic stability, and SMART goal setting. You will create your own unique, high-demand, workforce brand that fits into the local economy. Note: This is a PASS/FAIL and is not calculated in a GPA. It may count towards the required number of electives necessary for degree completion.

**PSY 101 General Psychology, 3 credits. (Prerequisites: Qualifying Reading test score or concurrent enrollment in REA 090; qualifying Writing test score or ENG 100)**

This General Psychology course provides an introduction to the scientific study of human behavior as it applies to daily living. The scope of this course includes history, basic theories, and biological bases of behavior, development, cognitive processes, individual awareness, motivation, emotion, personal adjustment and social psychology.

**REA 090 Effective College Reading, 3 credits. (Prerequisite: Qualifying Reading test score)**

This course promotes the development of active reading strategies for the tasks and texts students encounter in college. The course stresses the interaction among the reader, the text, and the context

as applied to a variety of disciplines, making critical connections between reading and writing strategies. Students are guided to become independent readers who process information to enhance learning within the classroom and throughout life.