**GENERAL EDUCATION**

**Division Chair**  
Eric Reed, Associate Professor

**Mission**  
The mission of the General Education Division is to provide broad intellectual knowledge, awareness, and critical thinking skills in the liberal arts, humanities, and natural and social sciences directed toward the successful pursuit of students’ personal and career goals as citizens and leaders in agriculture enterprises.

**Philosophy**  
General education is part of the academic experience that builds students’ growth as citizens and professionals. General education instruction engages students in independent, critical, and creative thinking; promotes open-mindedness and understanding; gives confidence and inquisitiveness to challenge assumptions and explore ideas and values; promotes the passing of sound judgment; encourages the consideration of ethical and practical consequences of actions; and facilitates wisdom.

**Associate of Science Curriculum**

**General Education Courses**

<table>
<thead>
<tr>
<th>Written Communication; Critical Thinking</th>
<th>3 hours required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 1503 TECHNICAL COMMUNICATION I</td>
<td></td>
</tr>
<tr>
<td>ENG 1903 WRITING &amp; INQUIRY</td>
<td></td>
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<tr>
<td>ENG 2203 WRITING &amp; ARGUMENT</td>
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<tr>
<th>Oral Communication</th>
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<tbody>
<tr>
<td>SPC 1113 PUBLIC SPEAKING</td>
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<table>
<thead>
<tr>
<th>Quantitative Literacy</th>
<th>5 hours required:</th>
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<tbody>
<tr>
<td>ECN 1803 STATISTICS</td>
<td></td>
</tr>
<tr>
<td>MTH 1203 INTERMEDIATE ALGEBRA</td>
<td></td>
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<tr>
<td>MTH 1503 COLLEGE ALGEBRA</td>
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<td>MTH 2252 TRIGONOMETRY</td>
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<tr>
<th>Problem Solving</th>
<th>8 hours required:</th>
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<tbody>
<tr>
<td>ASI 1024 FUND OF ANIMAL BIO</td>
<td></td>
</tr>
<tr>
<td>BIO 1104 GENERAL BIOLOGY &amp; LAB</td>
<td></td>
</tr>
<tr>
<td>BIO 1313 PLANT SCIENCE</td>
<td></td>
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<tr>
<td>BIO 1321 AGRONOMIC PLANT SCIENCE LABORATORY</td>
<td></td>
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<tr>
<td>BIO 1331 INTRODUCTION TO HORTICULTURAL SCIENCE LABORATORY</td>
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<tr>
<td>CHM 1014 CHEMISTRY IN CONTEXT I</td>
<td></td>
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<tr>
<td>CHM 1024 CHEMISTRY IN CONTEXT II</td>
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<tr>
<td>CHM 1104 GENERAL CHEM I</td>
<td></td>
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<tr>
<td>CHM 2104 GENERAL CHEM II</td>
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**Information Literacy; Intercultural Knowledge & Competence**  
1 hour required:

- ABM 1201 AG BUSINESS FOUNDATIONS
- AGR 1661 AGRONOMY ORIENTATION

**Associate of Applied Science Curriculum**

**General Education Courses**

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<td>SPC 1103 SALES COMM</td>
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<tr>
<td>MTH 1403 AGRICULTURAL MATHEMATICS</td>
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<tr>
<td>MTH 1503 COLLEGE ALGEBRA</td>
<td></td>
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<tr>
<td>MTH 2203 INTRODUCTION TO STATISTICS</td>
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<tr>
<td>VTS 1313 MATH FOR VET TECHS</td>
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**Problem Solving**  
4 hours required:

- ASI 1024 FUND OF ANIMAL BIO
- BIO 1104 GENERAL BIOLOGY & LAB
- BIO 1313 PLANT SCIENCE
- BIO 1321 AGRONOMIC PLANT SCIENCE LABORATORY
- BIO 1331 INTRODUCTION TO HORTICULTURAL SCIENCE LABORATORY
- CHM 1014 CHEMISTRY IN CONTEXT I
- CHM 1024 CHEMISTRY IN CONTEXT II
- CHM 1104 GENERAL CHEM I
- CHM 2104 GENERAL CHEM II
- SCI 1204 TECHNICAL SCIENCE
- VTS 1604 INTRODUCTION TO LABORATORY SCIENCE

**Information Literacy; Intercultural Knowledge & Competence**  
1 hour required:

- ABM 1201 AG BUSINESS FOUNDATIONS
- AGR 1661 AGRONOMY ORIENTATION
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Max credits per semester</th>
<th>Max credits per degree</th>
<th>Format</th>
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<tbody>
<tr>
<td>ASI 1001</td>
<td>SUCCESS IN ANIMAL SCIENCE</td>
<td></td>
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<tr>
<td>VTS 2241</td>
<td>CAREER STRATEGIES</td>
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<tr>
<td><strong>Civic Engagement</strong></td>
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<tr>
<td>AED 1023</td>
<td>INTERPERSONAL SKILLS FOR LEADERSHIP</td>
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<tr>
<td>PSY 1103</td>
<td>HUMAN RELATIONS</td>
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<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td>17</td>
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**BIO 1101 GENERAL BIOLOGY LAB**
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 2
Format: LAB

**BIO 1103 GENERAL BIOLOGY**
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

**BIO 1104 GENERAL BIOLOGY & LAB**
Description: Examination of fundamental principles of plant and animal biology including cell biology, genetics, development, diversity, and ecology.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: LEC

**BIO 1313 PLANT SCIENCE**
Description: Biology of plants grown for food, fiber, fun, or fuel. Plant life cycles in managed ecosystems and their role in global carbon and water cycles. Mechanisms plants use to drive and control their growth, propagate, and change to compete with other organisms in their environment.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

**BIO 1321 AGRONOMIC PLANT SCIENCE LABORATORY**
Description: Growth, development, morphology, and staging of annual and perennial monocot and dicot plants produced for grain, forage and grazing. Evaluation of seed, grain and forage quality for plants of agronomic importance.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LAB

**BIO 1331 INTRODUCTION TO HORTICULTURAL SCIENCE LABORATORY**
Description: Introduction to and practical experience in the production and usage of horticultural plants.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LAB

**CHM 1014 CHEMISTRY IN CONTEXT I**
Prerequisites: 1 year of high school algebra or 1 semester of a college math course.
Description: The extraordinary chemistry of ordinary things. The chemical model of solids, liquids, gases, molecules, and salts. How these models are used to explore chemical aspects of biological, social, or economic situation.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: LEC

**CHM 1024 CHEMISTRY IN CONTEXT II**
Prerequisites: CHEM 1014: Introduction to Chemistry I.
Description: How organic chemistry and biochemistry complement one another. Chemical aspects of biological, social, or economic situations.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: LEC

**CHM 1104 GENERAL CHEM I**
Prerequisites: Two years of high school algebra and one year of high school chemistry or two ears of high school algebra and CHM 1014.
Description: Lecture and laboratory serving as an introduction to chemical reactions, the mole concept, properties of the states of matter, atomic structure, periodic properties, chemical bonding and molecular structure.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: LEC

**CHM 2104 GENERAL CHEM II**
Prerequisites: CHM 1104: General Chemistry I
Description: Lecture and laboratory serving as an introduction to intermolecular forces, kinetics, chemical equilibrium, thermodynamics, and electrochemistry.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: LEC

**ENG 103 INTRODUCTION TO COLLEGE READING AND WRITING**
Description: This course allows students who have not achieved minimum placement scores in writing and reading (minimum 18 ACT in English & minimum 18 ACT in Reading or equivalent) to develop skills in those areas before taking a required English course.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
ENG 1503 TECHNICAL COMMUNICATION I
Prerequisites: ENG 0080 AND ENG 0090
Description: (Pre Req: 18 ACT Reading & 18 ACT English or ENG 103 or permission through English placement process) This course emphasizes the principles and strategies of written communication about technical subject matter using various media. It is designed to prepare the student to present technical and scientific documents in a clear and informative manner.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: ENG 2203

ENG 1903 WRITING & INQUIRY
Prerequisites: ENG 0080 AND ENG 0090
Description: (Pre Req: 18 ACT Reading & 18 ACT English or ENG 103 or permission through English placement process) A refinement of writing skills and critical reading, emphasizing the relationship between purpose and form, clarity, accuracy of expression, the development of the writer's voice and style, the elements of critical thinking, and the development of the research paper to prepare for university studies.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: ENG 2203

ENG 2203 WRITING & ARGUMENT
Prerequisites: ENG 1503 OR ENG 1903
Description: A course for students seeking advanced work in reading and writing expository prose and in methods of research. (Pre req: English 1503 or 1903)
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: ENG 2203

ENG 2223 BEGINNING CREATIVE WRITING
Description: Introduction to the writing of poetry, fiction, and screenplays. Lectures and discussions emphasize the principles, processes, and techniques of creative writing. Students develop their ability to respond to literature and scripts through workshops, discussions and written assignments requiring them to analyze professional and peer works. Emphasis on literary (as opposed to "slick") writing.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

MTH 1203 INTERMEDIATE ALGEBRA
Prerequisites: Test Placement
Description: Properties of real numbers, factoring, exponents and radicals, linear and fractional equations, linear and nonlinear inequalities, quadratic equations, and functions and graphs. This course may not be accepted in transfer toward the general education requirement for a baccalaureate degree.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

MTH 1403 AGRICULTURAL MATHEMATICS
Description: A study of mathematics, geometry and algebra that are utilized in the agricultural industry. Problems will include examples from crop production, horticulture, livestock management and agricultural business.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

MTH 1503 COLLEGE ALGEBRA
Prerequisites: 21 ACT in Math or equivalent test score; MTH 1203: Intermediate Algebra; or instructor permission
Description: Functions, inverse functions, graphing of linear and quadratic functions, the conic sections, polynomial functions, rational functions, exponential and logarithmic functions, systems of equations, determinants and matrices, and higher degree equations.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

MTH 2203 INTRODUCTION TO STATISTICS
Prerequisites: 24 ACT in Math or equivalent test score; MTH 1503: College Algebra; or instructor permission
Description: Frequency distributions, elementary probability theory, measures of dispersion and central tendency, normal distributions, confidence intervals, hypotheses testing, regression, and correlation.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

MTH 2252 TRIGONOMETRY
Description: Prerequisites: 24 ACT in Math or equivalent test score; MTH 1503: College Algebra; or instructor permission) Description: Designed for students who plan further study at the calculus level. Numerical trigonometry, trigonometric analysis, inverse trigonometric functions, and complex numbers.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC

PSY 1103 HUMAN RELATIONS
Description: This course studies the psychology of humans and their relationships with others. Emphasis is placed on one's ability to get along with others in a working relationship.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
SPC 1103 SALES COMM
Description: This course will instruct students in retail and service salesmanship, emphasizing the purpose of selling, the characteristics and functions of the salesperson, sales promotion, locating and qualifying prospects, and the steps in making a sale. Students are required to select a product, develop a sales manual and make a sales presentation.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

SPC 1113 PUBLIC SPEAKING
Description: This course contains a study of the methods of developing and presenting oral communications. It includes techniques in speech making and other methods of communicating orally in the business world.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

Associate of Applied Science Degree (A.A.S.) and associate of science (A.S.) Outcomes
Upon completion of the Associate of Applied Science degree students should be able to demonstrate the following skills and abilities (as defined by the Association of American Colleges & Universities VALUE Rubrics):

Program Outcomes
1. Written Communication. Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.
2. Oral Communication. Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners’ attitudes, values, beliefs, or behaviors.
3. Quantitative Literacy. Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).
4. Problem Solving. Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal.
5. Civic Engagement: Civic engagement is "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." (Excerpted from Civic Responsibility and Higher Education, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community.
6. Critical Thinking: Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.
7. Information Literacy. The ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand. - Adopted from the National Forum on Information Literacy.