

## GENERAL ELECTIVES

### APEX ONLINE LEARNING

**GRADES: 9-12**

Focused on building essential skills and content knowledge, Apex Learning® Online Courses are designed to support success for both struggling and mainstream high school students. Rich graphics, engaging multimedia, hands-on interactivity, video, and audio tracks provide support for those reading below grade level and address different learning styles for all students. Robust scaffolding in the form of annotated readings, study sheets, and graphic organizers assists all learners in making consistent progress through coursework. Each semester course offers 70-90 hours of interactive direct instruction, guided practice, and integrated formative, summative, and diagnostic assessment. Students are required to complete all course study guides and all electronic elements of the APEX course.

### CODING AND GAMING CSI (COMPUTER SCIENCE INVESTIGATION)

**020811**

**GRADES: 9-12**

**.5 CREDIT/1 TERM**

**General Elective**

**\*PREREQUISITE: NONE**

What makes your cell phone and computer tick? Can you create a challenging and captivating game? Play games and compete in challenges while learning about how computers work, the history of computing, algorithms, and how information is stored. Exercise and build your problem solving skills all while learning the basics of computer science.

#### Benchmarks

The students will:

- learn about the history of computing, basic components of computers, and how computers store and use information.
- will focus on general problem solving skills in order to be prepared to take additional courses in computer science.

### AP COMPUTER SCIENCE

**021811**

**GRADES: 10-12**

**1 CREDIT/2 TERM**

**General Elective**

**\*PREREQUISITE: CODING AND GAMING**

The AP Computer Science A course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.

#### Benchmarks

The students will:

- design, implement, and analyze solutions to problems.
- use and implement commonly used algorithms.
- use standard data structures.
- develop and select appropriate algorithms and data structures to solve new problems.
- write solutions fluently in an object-oriented paradigm.
- write, run, test, and debug solutions in the Java programming language, utilizing standard Java library classes and interfaces from the AP Java subset.
- read and understand programs consisting of several classes and interacting objects.
- read and understand a description of the design and development process leading to such a program. (Examples of such solutions can be found in the AP Computer Science Labs.)
- understand the ethical and social implications of computer use.

### DRIVER EDUCATION (Evenings and Summer)

**GRADES: 9-12**

**.5 CREDIT**

**(3 WEEK SESSION)**

**\*PREREQUISITE: PERMIT REQUIRED**

The Mississippi Bend Area Education Agency provides a State of Iowa approved Driver Education course for students at Bettendorf High School. The service is not provided during the school day. Instead, Driver Education is offered in the evenings during the school year or each summer during the day. There are eight evening sessions to choose from throughout the school year. During the summer, three sessions are offered. Enrollment forms can be obtained from the guidance office. See your counselor for more information.

NOTE: Starting in the summer of 2012 Driver Education grades will be on a Pass / Fail grading system. Students will still earn .5 credits; however, a “S” or “U” grade will be assigned.

**INTRODUCTION TO ALLIED HEALTH OCCUPATIONS****140021****GRADES: 12****\*PREREQUISITE: NONE****1 CREDIT/2 TERMS****DUAL CREDIT HSC-102 (4.5 College Credits)****General Elective****Location: Scott Community College and students need to provide their own transportation.**

This course will provide learning opportunities for obtaining skills in the health care field. Those interested in the allied medical field will receive experience from trained allied health educational professionals in various lab departments. Through observation and practical lab experiences, students will be guided as they think about career choices. Students will attend class in a lab setting and will be assigned hands-on activities. The following areas will be scheduled for lab rotations in the Allied Health fields: Radiology, END, Surgical Technology, HIT, Dental Assisting and Cancer Information Management. (4.5 college credits)

- discuss basic understanding of the allied health care industry in today's society
- identify all aspects of the allied health care processes and responsibilities of the health care team members to which the student is exposed
- apply critical/reflective thinking and the allied health care assessment process in selective clinical experiences
- cite health care theoretical concepts as related to various allied health fields
- summarize legal, ethical, professional and personal values and professional and personal values and professional standards as factors that affect the health care process within various healthcare environments
- demonstrate interpersonal and culturally sensitive communication skills
- demonstrate individual accountability for own personal and professional behavior
- experience lab activities at the SCC Campus to investigate college training programs.

**OFFICE AIDE****GRADES: 11-12****\*PREREQUISITE: LETTER OF APPLICATION****.5 CREDIT/1 TERM****General Elective**

Student office aides greet the public, take notes to teachers, answer telephones, and assist with general office duties. A good attendance record is mandatory. To be selected, interested juniors and seniors need to complete an Office Aide Application which can be found in the guidance office. Once a student is selected to be an Office Aide, the course would be added to his/her schedule. Each credit must be earned in a different office.

**Benchmarks**

The students will:

- comprehend the importance of regular attendance.
- communicate with adults in an honest manner in work situations.
- maintain, protect, and care for school property.
- organize and accomplish tasks without direct supervision.
- exhibit ethical behavior regarding confidential information.
- understand appropriate behavior in various formal and informal situations.

**NOT OFFERED 2019-2020****PLANETARIUM PRODUCTIONS****031511****GRADE: 10-12****\*PREREQUISITE: NONE****.5 CREDIT/1 TERM****General Elective**

This course will focus on producing a planetarium show from scratch. Students will gain experience in pre-production with researching a topic, writing a script, and poster boarding the images and sound. The majority of the time will be used in producing images, animations, video, sound and narration to be used in the show. Post-production will involve editing the final product and programming the planetarium computer. The final product will be a show that is to be used in the high school curriculum.

**Benchmarks**

The students will:

- gain an appreciation for the production process and what it means to produce a quality product
- create animation and video spots to be used as part of a larger project
- research and write a quality script detailing the most recent information on a given topic embedded into existing Bettendorf curriculum
- meet the goal of aligning the content of the production with an established school standard
- work as a team to produce a quality show that will be presented to the public

**PROGRAMMING IN C++****032511****GRADES: 11-12****\*PREREQUISITE: GEOMETRY OR HONORS GEOMETRY****.5 CREDIT/1 TERM****DUAL CREDIT – CIS-161 (3 College Credits)****\*\*Class is taught off sight and students need to provide their own transportation.**

The students will learn how to read, write, and revise computer programs using the programming language C++. Students will earn dual high school and community college credit. NOTE: This course is held at the Kahl Building in Downtown Davenport. Students must furnish their own transportation.

**Benchmarks**

The students will:

- write well structured programs in the C++ programming language, planning input and output and using iterative loops and conditional statements where appropriate.
- break large programming problems into smaller pieces using Procedures and Functions and use parameters to send values between these subprograms.

**NOT OFFERED 2018-2019****PROGRAMMING IN JAVA****032611****GRADES: 11-12****\*PREREQUISITE: PROGRAMMING IN C++****.5 CREDIT/1 TERM****NOTE: CLASS IS HELD IN THE KAHL BUILDING IN DOWNTOWN DAVENPORT****General Elective**

The students will learn how to read, write, and revise computer programs using the programming language Java. Students will earn dual high school and community college credit. NOTE: This course is held at the Kahl Building in Downtown Davenport. Students must furnish their own transportation.

**Benchmarks**

The students will:

- write well-structured programs in the Java programming language, planning input and output and using iterative loops and conditional statements where appropriate.
- break large programming problems into smaller pieces or subprograms.
- document programs and subprograms.
- read programs or subprograms and determine what they do.
- revise previously written programs to alter their function.

**SPORTS MEDICINE****235111****GRADE: 10-12****\*PREREQUISITE: NONE****.5 CREDIT/1 TERM****General Elective**

This course is an introductory course into the world of Sports Medicine. It is an excellent course for anyone interested in any medical field or anyone interested in knowing more about athletic fitness and injury prevention. The primary focus of study will revolve around the recognition, prevention, and very basic treatment and rehabilitation of injuries that occur during physical activity or athletics. As students develop knowledge in physiology and anatomy of the muscular, ligamentous, skeletal systems and other basic systems of the body, they will be introduced to common injuries and general illnesses that can occur in active individuals. Sports related injuries will be discussed as well as the importance of understanding the mechanism for prevention, treatment and rehabilitation. Students will be exposed to basic principles of modalities and rehabilitation of injuries. In addition, prophylactic taping and bracing through hands on practice may take place throughout the course.

**Benchmarks:**

The students will:

- identify the muscles, bones, and ligaments of moveable joints in the human body
- understand the basic principles of active/athletic injury evaluation
- understand basic mechanism and causes of active/athletic injuries
- identify common injuries, conditions, and general illnesses in active/athletic individuals
- understand basic first aid treatment for active/athletic injuries and conditions

- understand basic principles associated with rehabilitation of active/athletic injuries
- understand basic medical terminology and concepts that are a base for understanding injury
- understand the basic concepts of prevention and prophylactic measures to active/athletic injury
- identify situations and environmental factors where common injuries and conditions are likely to occur

**NOT OFFERED 2018-2019**

**STEM**

**161411/161412**

**GRADE: 11-12**

**1 CREDIT/2 TERM**

**\*PREREQUISITE: NONE**

This course continues student development in the areas of science, technology, engineering, and math (STEM). Students will be engaged in product-driven activities, including competitions, problem analysis, and solutions formation. Students will work in a collaborative environment on activities of their choice, including but not limited to competitions, independent study projects, and ongoing projects of interest to students.

Benchmarks

The students will:

- Describe and follow a design process as it relates to STEM
- Work in a team towards a common goal
- Produce tangible work or document progress toward a product or problem solving goal
- Incorporate elements of science, technology, engineering, and math in a cohesive, interdisciplinary fashion

**SUCCESS SKILLS**

**0803B8**

**GRADE: 9/10**

**.5 CREDIT/1 TERM**

**General Elective**

**\*PREREQUISITE: Recommendation Only**

Success Skills is designed to provide direct instruction with positive transitional and relationship skills for freshman and sophomores who are transitioning to the high school. This course provides instruction on goal planning, being proactive, and making good habits. The course will also provide assistance to the needs of the students across the curriculum.

Benchmarks

The students will:

- communicate and work productively with others, incorporating different perspectives and cross cultural understanding, to increase innovation and the quality of work.
- demonstrate leadership skills, integrity, ethical behavior, and social responsibility while collaborating to achieve common goals;
- demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life.
- demonstrate the ability to be productive, accountable and have a successful transition to the high school by meeting high expectations.

**STUDENT COUNCIL**

**GRADES: 9-12**

**.5 CREDIT/1 TERM**

**.125 CREDIT/3 TERMS**

**\*PREREQUISITE: BY ELECTION**

Student Council is a course students register for upon election as a representative. Elections are held in April for offices to serve the following year. A minimum grade point average of 2.3 is required. Students gain experience in leadership, activity planning, execution and evaluation. Students will serve their school as representatives, plan service and fund raising activities for the school, community, and beyond.

Benchmarks

The students will:

- produce quality work while working collaboratively with other council members
- identify and adhere to the procedures and rules in student council.
- effectively communicates, internally and externally, in order to successfully manage events and tasks.
- demonstrate appropriate listening and speaking skills.
- identify and produce short and long term goals.
- convert short and long term goals into action plans.
- analyze success of tasks/events and able to make adjustments accordingly.

**NOT OFFERED 2019-2020**

**VIRTUAL REALITY EDUCATION PATHFINDER (VREP)**

**GRADES: 10-12**

**\*PREREQUISITE: INDEPENDENT STUDY APPLICATION & APPROVAL**

**.5 CREDIT/1 TERM**

Virtual Reality Education Pathfinder (VREP) is self-directed, giving students the freedom to decide what areas of interest to them and what technologies to use. Working with peers within their own school and across the VREP consortia, students complete projects, research and design their own virtual programs, and create 2D and 3D imaging that is then transferred into stereoscopic displays to create immersive virtual environments. Students and other viewers can then interact with the virtual environments, providing learning opportunities that engage today's learners.