



Elective Course Descriptions

Freshmen Year
2019-2020

Art Courses

DRAWING AND PAINTING I

.5 credit, Category II

Drawing will be studied as an important means of expression. Students will experience various kinds of drawing materials and techniques, including pencil, pen and ink, and pastel, in completing assignments in drawing from life and imagination. Various aspects of line and composition will be explored. Work outside of the class will be necessary.

DRAWING AND PAINTING II

.5 credit, Category II; Pre-req: Draw and Paint I

Students will have experience with various kinds of paint, surface texture and color media. References to the history of painting will be made as they apply to skills and techniques of painting, composition, proportion and color harmony. Students will create a self-portrait. Homework drawings will be assigned and critiqued. Students will be expected to properly present completed work.

PRINTMAKING I

.5 credit, Category II

Emphasis will be made on relief (raised), intaglio (incised) and planographic (flat surface printing) methods of printmaking. In-depth study will be made of the relief and intaglio methods of printmaking. These methods could include linoleum cut, collograph, embossing, drypoint, and monoprints. Students will complete assignments geared to improving drawing and design skills, and increasing the student's ability to solve problems with originality. Selected work will be properly presented.

DESIGN I

.5 credit, Category I

Students will be confronted with problems in selection and arrangement of design elements. Two and threedimensional design will be studied as the interpretive organization of form, color, and space, and as the production of visual images to inform, describe and motivate. A variety of materials and techniques will be used to create

functional and decorative objects. Assignments could include: creating a package or container, illustrating an idea, designing a poster, advertising layout, logo, business card or fabric design. Digital media may also be explored.

Assignments will have an emphasis on the elements of art and principles of design.

SCULPTURE I

.5 credit, Category II

Principles and concepts of drawing will be extended into the third dimension (3-D). Additive methods (modeling), subtractive methods (carving and chiseling), and constructive methods (assemblage, found materials, soft sculpture), will be introduced.

SCULPTURE II

.5 credit, Category II; Pre-req: Sculpture I

In-depth study will be made of some of the sculptural methods introduced in Sculpture 1. Modeled clay work will be cast in plaster. Materials may include clay, wood, plaster, cloth, stone, and other materials, which can be carved, modeled or cast. Significant sculptors in art history will be critiqued.

POTTERY I

.5 credit, Category II

Students will learn basic techniques in hand building clay forms and vessels (pinch, slab, and coil). Students will deal with fundamental techniques of surface decoration and glaze application, drying and firing procedures, and display of finished work.

POTTERY II

.5 credit, Category II; Pre-req: Pottery I

Students will develop skill in producing wheel-thrown forms and vessels and will be introduced to various methods to create handles and covers. Students will combine two or more methods to create functional clay forms and vessels. Emphasis will be on care and use of equipment. Extended procedures in glaze decoration will be learned.

FIBER

.5 credit, Category II

Students will use fibers as an artistic medium to create decorative and functional objects. Areas of study could include: Batik, weaving, basketry, felting, paper casting, and marbled, stenciled and painted textiles. Emphasis will be placed on effective use of the principles of design. Students will demonstrate the ability to see projects through from conception to completion. Assignments may require work outside of class.

Business & Finance Courses

INTRODUCTION TO MARKETING

.5 credit, Category II

This course provides an introduction to the fundamental concepts of marketing. The four "P's" of the marketing mix will be examined: product development, price structure, place (distribution channels), and promotion through advertising. Students will create an advertisement using the media (TV commercial, magazine ad, radio ad, etc.) of their choosing.

INFORMATION PROCESSING 1

.5 credit, Category II

This course gives students a strong foundation in technology skills that are crucial to all students in pursuit of academic and career success. Students will learn how to effectively use the Microsoft Office Suite programs: Word, Excel, and PowerPoint; and online collaborative applications such as Google Docs. Students will also improve keyboarding technique, speed, and accuracy. It is highly recommended that all students take this course.

INFORMATION PROCESSING 2

.5 credit, Category I; Pre-req Info Processing I

You will learn advanced Word features, including tables and charts, desktop publishing using columns and images, templates, wizards, merge and email functions. Enter and format data, construct formulas and functions, and produce spreadsheets and graphical displays using Excel. Make your PowerPoint presentations more professional by adding audio, video and sound to your slides. Use Access to maintain, sort and report information. Having these skills on your résumé may help increase your opportunities for future success.

PERSONAL FINANCE AND INVESTMENT

.5 credit, Category II

As a young adult, one of the keys to your success will be learning how to manage your personal finances. Students learn a great deal in this class that will help them now and in the future. Topics addressed are listed as follows:

- Financial decision making
- Investing fundamentals including risk and return
- Creating a budget and maintaining other financial records
- Investing in stocks, bonds, mutual fund, and index funds
- Understanding your pay and taxes
- Play the online Stock Market Game and invest \$100,000 virtual cash!
- Checking accounts - writing checks, deposit slips, balancing your account, and online banking
- Credit management - types of credit (mortgages, car loans, student loans, credit cards) and credit scores
- Saving for the future
- Buying a car and auto insurance

SMALL BUSINESS OWNERSHIP

.5 credit, Category II

Learn how business ownership has been the key to success for some of the world's wealthiest people. You will design a business plan, market your product, learn operational techniques, understand patent and copyright protections, develop investment strategies, and make decisions based on ethical and legal practices.

Family & Consumer Sciences Courses

CHILD, FAMILY AND COMMUNITY

.5 credit, Category II

Students should expect to learn about the different developmental stages in childhood and how the environment may impact a child's development. To be successful students need to be able to take notes, read a textbook and be able to have the ability to discuss different childcare practices and scenarios. **Reading and writing is a part of every class.**

English Courses

DRAMA 1

.5 credit, Category II

If you want to learn more about theater, if you are willing to act crazy in front of others, and if you like to write and perform scenes with new friends, this class is for you! A wide assortment of activities including the creation of skits, interpretation of scripts and improv exercises will be offered. Students are required to memorize monologues and dialogues and to perform them in front of their classmates.

DRAMA 2

.5 credit, Category II; Pre-req Drama I

This course is an intense study of play production and performance. After a review of basic theater techniques and scene study, students read and analyze a play to be produced. Students are responsible for all aspects of production: performance, set design, costumes, props and makeup. The scenes and plays selected vary depending upon the class size, experience and ability of each group. The program is designed for a student with special interest in play production. The course culminates in a final production presented to a small student audience.

Engineering and Technology Courses

PRINCIPLES OF ENGINEERING

1.0 credit, Category I; Pre-req: Concurrent enrollment in grade appropriate math (preferably Algebra 1/ACC or Geometry 9/ACC)

A Project-Lead-the-Way course, this helps students understand the field of engineering/engineering technology. Students will explore various technology systems and manufacturing processes to learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course "Principles of Engineering" also includes concerns about social and political consequences of technological change.

INTRODUCTION TO ENGINEERING DESIGN

1.0 credit, Category I; Pre-req: Concurrent enrollment in grade appropriate math (preferably Algebra 1/ACC or Geometry 9/ACC)

A Project-Lead-the-Way course, this teaches problem-solving skills using a design development process. Models of production solutions are created, analyzed and communicated using solid modeling computer design software.

INTRO TO COMPUTER ASSISTED DESIGN

.5 credit, Category I

This course introduces students to design and drafting in the manufacturing professions. Its primary focus is on the use of drafting tools, basic drawing types and appropriate manual drafting techniques. Students will apply geometric theory by producing orthographic and pictorial drawings. Students will also be introduced to computer aided drafting (CAD).

CAD & SOLID MODELING

.5 credit, Category I; Pre-req: Intro to CAD

In this course, the student will be guided through the transformation of an idea into a physical product using computer-aided design (CAD). Topics will include the creation of lines, arcs, points, symbols, text; methods of grouping, reusing, and manipulating these objects; and the development, modification, storage and presentation of complex drawings.

ARCHITECTURAL CONCEPTS

.5 credit, Category II

Students in this course will use manual and computer aided drafting (CAD) techniques to study architectural design. A set of residential house plans will be drawn and evaluated. Major topics will include residential design, floor planning, foundation planning, section drawing and elevations.

ARCHITECTURAL DESIGN

.5 credit, Category II; Pre-Req: Architectural Concepts

Students in this course will use computer aided drafting (CAD) and model-making techniques to further study architectural design. A set of residential addition plans and a scale model will be prepared and evaluated. Students will use CAD to produce drawings that apply their knowledge of building codes, residential design and construction techniques.

COMMUNICATION TECHNOLOGY

.5 credit, Category II

This course will expose students to a wide variety of communications technologies, including graphic, electronic, audio and video communications. The outcome will be an introduction to the terminology, systems and processes used in these fields supported by hands-on activities. Students will also explore careers and social impacts in the rapidly growing communications technology field.

ENERGY AND POWER

.5 credit, Category II

This course is an introduction to modern energy and power systems. Students will identify and select energy and power sources and apply application theories using hands-on projects. The culminating activity for this course requires the student to design and construct a working system that uses several power sources. Instructional topics will include power grids, fuel cells, with additional explorations of the relationships between environmental, health and safety issues and energy/power systems.

CONSTRUCTION TECHNOLOGY

.5 credit, Category II

This course introduces students to modern construction techniques and organization. Students will apply their knowledge by constructing scale models of both residential and commercial structures such as homes and bridges. Other topics include non-structural elements such as plumbing, heating and electrical wiring, and business considerations, including building codes, zoning, and permits.

CONSTRUCTION APPLICATIONS

.5 credit, Category II; Pre-req: Construction Technology

In this course, students build upon their prior work, constructing a full-size residential structure, as well as scale models of civil or commercial structures. Additional emphasis is placed on construction management and careers, the structure and organization of the construction industries, and the development of documentation such as bills of materials and cost estimates.

TRANSPORTATION TECHNOLOGY

.5 credit, Category II

Through their work on hands-on activities, students will demonstrate an ability to select, use, and evaluate land, air, space, and marine transportation systems. Students will design, construct, and test working models of vehicles in each mode of transportation, and will investigate the history and development of transportation systems. Other topics include transportation infrastructure; safety and security, and the future of personal and mass transit.

AUTOMATION AND ROBOTICS

.5 credit, Category II

Students will examine the history, development and applications of machine automation and robotics. The hands-on activities are designed to develop the skills necessary to create and apply programs to solve a variety of problems involving machine automation and computer systems. Students will explore careers related to automation and robotics.

TOOLS & MATERIALS

.5 credit, Category II

This laboratory-based exploratory course introduces students to a variety of materials and to the tools and machines used to process them. Materials utilized may include woods, metals, and plastics. A variety of manufacturing processes will be surveyed, including separating, forming, combining, joining, conditioning, and finishing. The hands-on instructional aspects of this course focus on proper operating procedures and safe operation of tools and machines.

VIDEO PRODUCTION TECHNIQUES

.5 credit, Category II

This course will cover the concepts, tools and activities essential to getting started in video production without prior knowledge of the field. Various software programs will be explored and incorporated into video segments. Students will become familiar with the use of video cameras, video shooting techniques, editing equipment, three point lighting, and studio production. Cameras and supplies are supplied by the department.

TELEVISION PRODUCTION

.5 credit, Category II; Pre-req: Video Production Techniques

The television production course stresses the importance of teamwork. Through a variety of production projects, students will experience the duties of key positions within a television studio. From pre-production to post production, students will participate in a variety of production roles including: scriptwriter, storyboard designer, performer, anchor, camera operator, floor manager, audio director, teleprompter, technical director, assistant technical director, graphic designer, editor, director, and producer.

This advanced course will focus on both studio and field production techniques. Students will have an opportunity to develop TV production skills and post-production techniques. Students will be expected to assist with the TV production of community and school events. Field assignments may require providing your own transportation.

MUSIC

AMERICAN MUSIC STUDIES (The History of Popular Music)

.5 credit, Category II

This course is an overview of popular music. Students will listen to, respond to, and explore representative styles of music including folk, jazz, blues, rock and roll, Broadway, and today's styles.

MUSIC HISTORY (The History of Classical Music)

.5 credit, Category II

This course is an overview of the history of music from the Middle Ages to the early 20th century. Course material will include composers such as Bach, Mozart, and Beethoven. Students will listen to, respond to, and explore representational works of each time period. This course is especially recommended for students interested in pursuing a post-high school music degree.

MUSIC THEORY I

.5 credit, Category II

This course provides a basic understanding of the elements of music including: clefs, scales, intervals, melody, rhythm, and chords. Ear training, traditional music notation, and music literacy are integral components of the class.

MUSIC THEORY II

.5 credit, Category II; Pre-req: Music Theory I

This course is a continuation of Music Theory 1. It will expand a student's vocabulary and understanding of music through the analysis of harmonic and melodic structure as well as more advanced melodic and rhythmic techniques. At the conclusion of this course, students will have a strong background in the general theoretical principles of music. This course will prepare students for AP Music Theory and college entrance exams for music majors.

Concert Choir

1.0 credit, Category II

This course is an ensemble of mixed voices that enjoy singing and want to learn more about the art of choral literature and vocal techniques. The choir performs throughout the year and may include a concert tour. Students are required to attend all performances as part of the choral curriculum. Student participation in Concert Choir or Chorus 1 is required to participate in extracurricular vocal performing groups.

BAND

1.0 credit, Category II

Band is an instrumental ensemble that performs music of varied styles in concert halls, as well as parades and football games. The band performs throughout the year and may include a concert tour. Students are required to attend all rehearsals and performances as part of the band curriculum. Student participation in Band is required to participate in extracurricular instrumental performing groups. Bass, Guitar and Piano students are exempt from this requirement.

PIANO/KEYBOARD

.5 credit, Category II

The development of piano/keyboard skills will be explored using a varied repertoire of piano literature with progressive levels of difficulty. Students will have an opportunity to perform individually and in keyboard ensembles. Four areas of study that will be explored through the use of the piano/keyboard are: sound exploration, development of piano technique, basic music theory, and composition. Individual projects relating to history, culture and style will also be required.

GUITAR (ACOUSTIC)

.5 credit, Category II

Students will have an opportunity to perform a varied repertoire of guitar literature and will use various guitar techniques: strumming, picking, and chording. Students will read tablature and standard notation for guitar. Individual performance as well as ensemble performance will be utilized. Understanding of basic music theory, the guitar's importance in music history, and proper maintenance and care will also be covered. Students do not need to have their own guitar.

MUSIC TECHNOLOGY

.5 credit, Category II

This course is an introductory course in music technology. Course content builds a knowledge base in several areas: basic audio systems operations, digital audio, MIDI, music sequencing, and music notation. Students will discover and explore introductory concepts used in music sequencing, notation and recording. Students will use technology to produce MIDI sequences, film scores, loop-based arrangements and compositions, and digital multi-track audio recordings. No prior musical experience is needed, however, having training on an instrument or voice is helpful. In this course, students will master the creative tools and techniques required to compose, record, remix, improvise, produce and edit musical ideas, as well as learn about basic musical forms.