Beacon High School
Elective Course Catalog
Grade 9
2025-2026

*Elective courses are dependent on enrollment numbers. Some electives may not fit your schedule, as such it is important students choose **four** elective choices.*

ARTS

Course Title: *Architectural Design*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Studio Art or one full art credit
Description: Architectural Design is a half year introductory art course. Students will learn the fundamental aspects needed to learn the concepts of Architectural Design. Traditional hands on drawing methods and digital software will be utilized to make student projects. Students will analyze both still art works, which imply perspective, creating 3-D models and using computer programs to enhance their understanding of what Architectural Design is. There will be lectures on the great works of architecture and possible visits to different architectural designs within our community. Sketchbooks will be used to aid in analyzing artworks, keeping notes, and experimenting with media and new techniques.

Course Title: *Cartooning and Animation*
Term: One semester
Credit: 0.5
Prerequisite: Successful completion of Studio Art or one full art credit
Description: This is a half year introductory art course. This class can be used in conjunction with other half year classes like Ceramics 1, Digital Art 1 and the semester long Studio Art class to get a full art credit. Students will learn the fundamental aspects needed to create a successful animation and cartoon. Character design, storyboarding and storytelling will be taught. Traditional hands on drawing methods and digital software will be utilized to make student projects. Students will analyze both still artworks, which implies movement, and animated segments from fine art and popular culture to enhance their projects. Political and satirical cartoons will also be employed to enhance students' understanding of cartooning. Sketchbooks will be used to aid in analyzing artworks, keeping notes, and experimenting with media and new techniques.

Course Title: *Ceramics I*
Term: One semester
Credit: 0.5
Prerequisite: None
Description: Hand built pottery, techniques of coil; slab, pinch as well as throwing on the potters' wheel will be introduced. The firing process and glazing process of clay are also explored. Form, function and decoration are the emphasis of this course.

Course Title: *Ceramics II*
Term: One semester
Credit: 0.5
Prerequisite: Successful completion of Ceramics I
Description: Building methods developed in Ceramics I will be further explored and refined. More complex concepts in ceramics will be explored such as sculpting and production pieces.

Course Title: *Ceramics III*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Ceramics I and Ceramics II
Description: Ceramics III will focus on the potter's wheel. Creating bowls, cups, vases and possible plates. In addition to the potter's wheel we will strengthen our skills in hand building as well as concept design to create a cohesive body of artwork.

Course Title: *Digital Art I*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: This course will introduce the computer as an artist's tool. The elements and principles of design will be used to create two dimensional artworks. Programs such as Photoshop will be explored.

Course Title: *Digital Art II*
Term: One semester
Credit: 0.5
Prerequisite: Successful completion of Digital Art I
Description: Enhancing skills from Computer Graphics I, digital cameras, and advanced capabilities in the Photoshop program will be the emphasis of this course.

Course Title: *Drawing & Painting I*
Term: One semester
Credit: 0.5
Prerequisite: Successful completion of Studio Art or one full art credit
Description: Concepts of gesture, contour line, shading and perspective will be explored using still life, figure drawing and imaginative subjects. Mediums used will include pencil, charcoal, markers, pastel, color pencil, oil pastel, and ink. Exploration of color, hue, and value using watercolor and acrylic will be included in this course.

Course Title: *Drawing & Painting II*
Term: One semester
Credit: 0.5
Prerequisite: Successful completion of Drawing and Painting I
Description: Advancement of techniques in creating the illusion of form, light, texture and space in drawings and painting. Students will work on canvas and a variety of art papers to create skillful solutions to design problems.

Course Title: *Interior Design*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Studio Art or one full art credit
Description: Students will learn the fundamental aspects needed to learn the concepts of Interior Design. Beginning levels of color theory and pattern developing will be discussed and applied to the students projects. Students will learn about perspective. Students will both draw out the rooms and 3D model the rooms. Computers will also be used to create interior spaces. Sketchbooks will be used to aid in analyzing artworks, keeping notes, and experimenting with media and new techniques.

Course Title: *Photography I*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Studio Art or one full credit of art
Description: This course will introduce the camera as an artist's tool. Students will work with both current Digital SLR cameras and experiment with traditional darkroom printing to understand the full range of photographic possibilities.

Course Title: *Photography II*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Photography I
Description: This course is designed to develop technical and artistic competence with a digital camera and editing software. Students will learn to create a series of photographs that work together as a cohesive body of work. Completed photographs will be presented in a variety of formats such as a student designed photo book.

Course Title: *Studio Art*
Term: Full year
Credit: 1.0
Prerequisite: None
Description: This is a full year foundation course with an emphasis on studio problem based learning activities that explore the electives of the Art Dept. Students will work on a variety of project based activities utilizing a variety of mediums, such as pencils, charcoal, pastels, watercolor, acrylic paints, pen and three-dimensional materials. Students will be required to demonstrate creativity, innovation and problem solving skills using critical thinking and higher order thinking. Students will develop an understanding of the history of art and art related careers. At the end of the course students will be able to identify the Elements of Art and Principles of Design.

Course Title: *Textiles I/Fashion*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Studio Art or one full art credit
Description: This course is based on fashion. The students will be involved in learning how to draw the fashion figure. The beginning levels of sewing will be introduced. Possible fashion careers will be discussed.

Course Title: *Textiles II/Fashion*
Term: One Semester
Credit: 0.5
Prerequisite: Successful completion of Textiles I
Description: This course will build on the concepts and principles explored in Textiles I. Pattern making will be explored. Advanced textiles techniques such as fabric dying will also be explored. Students will develop an understanding of the different careers available to them in fashion.

BUSINESS COURSES

Course Title: *Introduction to Occupations*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: This course is designed to give students the opportunity to explore a variety of careers and occupations. Students will research the requirements and skills needed for specific occupations; learn about the job application process, job interview procedures and workplace expectations

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ENGLISH

Course Title: *Drama*
Term: One Semester
Credit: 0.5
Prerequisite: English 8
Description: This course will foster public speaking, listening and communication skills. The curriculum is performance based, which means students will read and watch performances of works and then perform scenes and related variations of themes in class. This class is not only designed for entertainment and recreation;its purpose is to help students read critically and respond analytically to readings in discussion and writing; expand vocabulary through reading and the use of a dictionary; consider audience when writing essays; view filmed and live performances with a critical eye; and engage in and analyze oral discourse effectively.

Course Title: *Theater Production*
Term: One semester
Credit: 0.5
Prerequisite: English 8
Description: If all the world is a stage, someone has to build the set and light it! The behind-the-scenes people who produce the magic of a production sometimes steal the spotlight from the actors who perform it! This course will expose students to the multi-faceted world of theater and focus on those extremely important behind-the-scenes jobs. Students will study and engage in a variety of activities that are necessary for live productions: set design, lighting design and operation, costume design, makeup design, house management, advertising, writing, directing and stage management.

HEALTH

Course Title: *Health*
Term: One semester
Credit: 0.5
Prerequisite: None
Description: Health is a course required of all high school graduates. The course includes topics of personal, social and mental health along with topics relating to the quality of life in general. Parenting Education, nutrition, disease, drugs, alcohol, tobacco, mental health, consumer health and public health are among the topics included in the course of studies. Class participation, an outside class project and a final examination are requirements for this course to be successfully completed.

MATHEMATICS

Course Title: *Computer Science Essentials*
Term: Full Year
Credit: 1.00
Prerequisite: None
Description: Computer Science Essentials exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block based programming and seamlessly transition to text - based programming with languages such as Python to create apps and develop websites, and learn how to make computers work together to put their design into practice. They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

MUSIC/PERFORMING ARTS

Course Title: *Chorus*
Term: Full Year
Credit: 1.00
Prerequisite: None
Description: This course strives to develop a high level of vocal performance while enjoying singing and learning to participate in an organized group. Vocal skills such as proper diction, intonation and breathing are emphasized. Concert participation is required. Students will be involved in school performances and concerts in the community. This course is open to students who behave well and enjoy singing. The chorus will perform in at least three (3) required concerts each year.

Course Title: *Concert Band*
Term: Full Year
Credit: 1.00
Prerequisite: Minimal playing experience
Description: This course is for students interested in playing in a school band. Participation in Marching Band is required for all students enrolled in Concert Band for the two yearly parades. Students will be pulled from their classes once a week on a rotating basis to attend lessons. The band will be involved in at least six (6) performances each year. All performances are scheduled after school and attendance is mandatory.

Course Title: *Guitar*
Term: One semester
Credit: 0.5
Prerequisite: None
Description: Guitar is a one semester course covering the basics of the instrument and an application of essential music fundamentals. Students will learn the basics of playing the guitar at the beginning level through studying guitar tablature, chord symbols and peer modeling. An acoustic guitar which is kept at BHS will be provided for this course. **Students must keep their fingernails cut short for the semester to take this class.**

Course Title: *Guitar II*
Term: One semester
Credit: 0.5
Prerequisite: Guitar I
Description: Guitar II is a one semester course continuing on the basics of the instrument and an application of essential music fundamentals. Students will build on what they learned in Guitar I. An acoustic guitar which is kept at BHS will be provided for this course. **Students must keep their fingernails cut short for the semester to take this class.**

Course Title: *Music Theory*
Term: Full Year
Credit: 1.00
Prerequisite: Vocal or instrumental via Concert Band, Concert Choir, or outside musical experience is required. This course is designed for those students pursuing a sequence in music and/or wish to expand their musical foundation.
Description: A course introducing the motivated music student to the study of melody, harmony, texture, rhythm, form, musical analysis, elementary composition and to some extent, musical history and style. Critical musicianship skills are developed in the process such as notation, dictation, listening skills and sight-singing.

Course Title: *Music Production*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: Students will discover and explore introductory concepts used in audio recording, arranging, remixing, creating MIDI tracks and mixing. No prior musical experience is needed, however, having training on an instrument or voice is helpful. Students will create music using music editing software and keyboards. Students interested in the current methods of music creation and production should consider taking this course.

Course Title: *Music Production II*
Term: One Semester
Credit: 0.5
Prerequisite: Music Production I
Description: Students will build on the introductory concepts learned in Music Production I for audio recording, arranging, remixing, creating MIDI tracks and mixing. Students will create music using music editing software and keyboards.

SCIENCE

Course Title: *Field Biology*
Term: One semester
Credit: 0.5
Prerequisite: None
Description: A general interest in learning about nature and ecology and willingness to go outdoors during class time is a must. Students will have the opportunity to go outside to do field work and engage in an agriculture curriculum. Activities will include building, planting, and maintaining an organic garden, winter, fall, and spring tree identification, invasive species remediation, aquatic ecosystem studies with field trips to the Hudson River and Fishkill Creek, litter removal, environmental outreach, local ecosystem studies, and citizen science projects including bird counts and collecting climate data. Students enrolled in this course will have to be ready to dig in the dirt and go outside in any weather.

Course Title: *Forensic Science*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: Forensic Science is the application of scientific knowledge to legal questions and encompasses various scientific disciplines. This course will introduce various methodologies and applications used in the forensic context. Topics covered are: observational skills, crime-scene investigation and evidence collection, fingerprints, DNA fingerprinting, blood and blood spatter, ballistics, drug identification and toxicology, handwriting analysis, and death. Our focus will be to learn the basic concepts of Biology, as it applies to the basic concepts of Forensic Science. You will learn to apply the scientific method, do hands-on lab activities, class work and projects. Each lab activity will show you more clearly the techniques used at crime-scenes and for analyzing evidence so that you can see for yourself science in action.

Course Title: **Hands on Chemistry**
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: This course will explore different phenomena in the realm of chemistry with a focus on hands-on activities and experimentation. Topics explored will include examining the difference between compounds and mixtures, matter and energy, and types of chemical reactions. Through experimentation the connection between theory and application will be realized.

Course Title: *Laboratory Skills*
Term: One semester
Credit: 0.5
Prerequisite: None
Description: Hands on activities with lab equipment, such as using microscopes. This comprehensive course will help students who wish to pursue a career as a lab technician, or research technician in Biotechnology, pharmaceutical, medical facility, or Universities. Students will be exposed and trained in various laboratory practices and skills. Units such as measurement, basic principles of chemistry, and how to use a microscope are covered. This class is perfect for the new science learner.

Course Title: *Marine Biology*
Term: One semester
Credit: 0.5
Level: Intermediate
Prerequisite: Successful completion of Life Science - Biology R. Preference to juniors and seniors.
Description: Interested in marine animals and dissecting? Marine Biology is the scientific study of the plants, animals, and other organisms that live in the ocean. The course of study will include principles of marine science, marine life, and marine activities. Dissections are required for successful completion of the course.

Course Title: **Principles of Neuroscience**
Term: One semester
Credit: 0.5
Prerequisites: Completion of Life Science - Biology R
Requirement: Open to grades 9-12
Description: The field of Psychology & Behavioral Science is changing as we understand more about how the biological system of the brain senses and perceives the world. As more research into cognitive neuroscience emerges, some of the most fascinating questions about human nature can be explored and explained through an understanding of the neurological mechanisms underpinning behavior. The class will consist of three main modules: Neurons & Neuroanatomy, Neural Systems and Brain & Behavior. We will conduct hands-on experiments, analyze clinical case studies and dive into strange phenomena of sensation and perception.

Course Title: *Science Research Literacy I*
Term: One semester
Credit: 0.5
Prerequisite: None
Description: Have you ever thought of a really great question that a search engine can't answer to your liking? Then you're probably ready for Science Research. This course offers the opportunity to solve problems using a systematic thought process. Students will learn and apply the core skills of scientific inquiry and apply those skills by completing a research project. Students conduct primary research on a topic, formulate testable predictions and continue by designing a method to carry out their own experiments. Basic statistical analysis will allow students to draw valid conclusions while communicating their findings to a broader audience through presentations and in writing. Students are required to submit a completed written research paper.

Course Title: *Topics in Earth Science: Paleontology*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: In this course, students will learn about the fascinating creatures, both large and small, that roamed the earth before humans. The course covers the diversity of life in the past, how organisms adapted to their environment, the remains of organisms that have been replaced by rock or preserved by impressions in rock, and the methods scientists use to analyze fossils. Additionally, the course has a focus on project based learning.

Technology

Course Title: *New Media*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: This course aims to provide students with most of the new emerging aspects coming into how we both make and imbibe media. Students will be introduced to production equipment and software along with the creative license to make material that pertains to 21st century media. The course will encompass aspects of internet influencing, video game streaming, podcasting, esport competition, YouTube Shorts, sound design, and advertising. The course will blend both live instruction, hands-on equipment, and online tutorials. Assignments will include (and are subject to change as media evolves): 5 Minute podcasts, 10 Minute game streaming reel, group work with a live in class esport tournament, 1 minute short films, etc. This course is entirely project based.

Course Title: *TV Production I/Broadcasting*
Term: One Semester
Credit: 0.5
Prerequisite: None
Description: This course is the introduction of skills involving communication through Television. Students will be introduced to the artistic and technical aspects of Television Production such as: camera and computer editing techniques. Camera techniques include panning, zooming and tilting. Editing techniques include assembly editing, insert editing and visual effects. Each skill is taught through hands-on experience in the studio, classroom, and is entirely project based.. Assignments will include a beauty reel, basic photography and framing, interviewing, a 1 ½ min short, and a 2 ½ min short.

Course Title: *TV Production II/Broadcasting*
Term: One Semester
Credit: 0.5
Prerequisite: TV Production I
Description: In this course students will study the freelance arena including: influencing, streaming, interviewing, podcasting, and short films. Students will be forming groups and participating in a variety of assignments up to: 1 min short films, 3 min interviews, 5 min movies, industry applicable positions and script writing. Students, through the use of release forms, will also be allowed to take home equipment in order to get better products on film.

Course Title: ***Video Game and Design***
Term: One semester
Credit: 0.5
Prerequisites: None
Description: Video game designers use extensive technology, such as editing and design software. Students will create programs or choose formats for websites, magazines, or movies, all of which call for an understanding of technology and software. Many jobs as video game designers require candidates to create programs or products both aesthetically appealing and functional. Consoles will be used throughout the course as well as applicable games for the use of level creation, 3D building, and strategy. Creativity is necessary in this process since individuals brainstorm innovative designs and make choices on product appearance.