

Churchill High School - Grade 12 Elective Mini Course Catalog

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Art / Graphic Design

Art 3D “Visual” (Grade 9-12)

- Exploring 3 dimensional form
- Sculpture using chipboard - angular, curved, representational, abstract, acrylic painting techniques, small figurines
- Project based course

Drawing/Painting - Elements CTE (Grade 9-12)

- Survey of basic drawing and painting skills and techniques - 2 dimensional
- Pattern, value, perspective, composition, grid system, color wheel, watercolor, acrylic
- Project based course

Drawing/Painting - Principles CTE (Grade 9-12)

- Survey of basic drawing and painting skills and techniques - 2 dimensional
- Texture, rhythm, color theory, portraits, charcoal, colored pencil, acrylic
- Project based course

Advanced Art “Studio” (Grade 9-12)

- For the serious and motivated advanced artist who wants to build his/her portfolio or continue to art school
- Very independent / self directed
- Materials, disciplines, and projects are individualized depending on the artist’s goals

Visual Design CTE/CN - Principles (Grade 9-12) (LCC ART115 - *Basic Design Fundamentals*)

- Survey of the Elements and Principles of Art
- Multiple mediums including ddd
- Line, value, form, harmony, silhouette, India ink, watercolor resist, cheesecloth, portraiture

Graphic Des I (Grade 10-12)

- Learn Adobe Illustrator and Photoshop CC
- Learn basic design fundamentals, techniques, and skills
- Logo design, advertising design, design process, target audience

Graphic Des CTE/CN II-Advertising (Grade 10-12)(LCC ART225 - *Digital Illustration*)

- Heavy use of Illustrator CC
- Public awareness campaign - logo design and propaganda poster design
- Advertising techniques - target marketing
- Poster design - live clients

Graphic Des CTE/CN II-Photoshop (Grade 10-12) (LCC MUL212 - *Digital Imaging*)

- Heavy use of Photoshop CC
- Advanced masking, layers, selection, adjustment layers, filters
- Cereal box design

Graphic Des II CTE-Typography (Grade 10-12)

- New class - lettering as fine art
- Font anatomy & design - create your own font - Glyphs software
- Calligraphy - old school - pen & ink
- Type modification techniques - Illustrator CC

Graphic Des CN III (Grade 11-12)(LCC GD110 - *Intro to Graphic Design* & LCC ART216 - *Digital Design Tools*)

- Capstone course for Graphic Design Academy
- Live client jobs - logos, posters, brochures, etc.
- T-shirt design - color separations
- Public presentation of capstone projects

Graphic Design IV (Grade 11-12)

- Independent study
- Live client jobs
- Limited enrollment - See instructor

Business / Technology

Personal Finance CN (Grade 9-12)

- Class emphasis is on personal budgets, real estate ownership, and intelligent use of consumer credit, credit institutions, insurance, personal investing, stocks, bonds, retirement planning, and mutual funds.
- The course is designed to provide an understanding of personal topics and the analytical tools necessary to optimize personal decision making in the subject area.

Intro to Business CN (Grade 9-12)

- This is an introductory business survey course covering basic concepts and language of business.
- Students will gain insight into the operations of business as well as practical experience.

Entrepreneurship (Business - AF053X0) (Grade 9-12)

- This course provides students with the skills necessary to succeed as an entrepreneur.
- Students will learn and develop business skills in an educational environment.

Sports Marketing CN (Grade 9-12)

- Course explores the sports and entertainment marketing industry and its consumer and communication realities.
- This intermediate marketing course introduces students to the sports and entertainment marketing business.

Adv Comp Apps - Cad I-CN (Grade 9-12)

- In this course students use AutoCAD drafting software to create 2D and 3D drawings.

Adv Comp Apps - Cad II-CN (Grade 9-12)

- This course is designed to teach students commands necessary for professional 2D and 3D drawing, design, and drafting using SolidWorks Software.
- Due to the integrated mathematics required for success with CAD, students need to pass Geometry before taking this course.

Adv Comp Apps - Cad III-CN (Grade 9-12)

- Architectural drafting techniques, methods and procedures, layout and drafting of standard residential working drawings for a residential house using the Revit program.

Adv Comp Apps - Cad IV-CN (Grade 9-12)

- Students will create a virtual commercial building using an advanced computer-aided drafting/design program that utilizes a 3D feature-based parametric solid modeler.

Digital Media

Design Thinking (Grade 9-12)

- Based on *Stanford d-School* design model
- Students learn visual thinking, visual tools and visual facilitation techniques
- Students will practice solution-oriented problem solving combined with critical and collaborative thinking.

Yearbook - A (Grade 10-12)

- Incorporates concepts of photography, journalism, design, and layout

Yearbook - B (Grade 10-12)

- Continues and builds upon concepts introduced in YBK A
- Focus on marketing & distribution of the yearbooks
- Extends yearbook concept into CHS Digital Magazine
- Preparation & planning for following school year

Digital Media Design - A (Grade 9-12)

- Basic to Intermediate video production skills
- Coursework will emphasize the various software elements of Adobe Creative Cloud.

Digital Media Design CN - B (Grade 9-12)

- Intermediate to Advanced video production skills
- Incorporates Adobe Muse (web design) with a focus on creating digital media content for the web

Digital Photography (Grade 10-12)

- Introduction to basic DSLR camera operations
- Elements & Principles of Art applied to photography
- Introduction to basic composition techniques

Entrepreneurship (Digital Media AF198G1) (Grade 11-12)

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Advanced Occupational Leadership - CTE (West End) AF999X4 (Grade 12)

- Senior Capstone class for the Digital Media pathway
- Advanced video production skills

Engineering

Engr Design - A & B (Grade 9-12)

- Learn how to read blueprints and precision measuring.
- The beginning of an engineering pathway goes through the design process.
- In Design B, students learn how to build parts using Inventor software.

Robotics (Grade 9-12)

- Program robots
- Compete on teams to complete challenges
- Emphasis on control and interface

Principles of Engr - A & B (Grade 10-12)

- Physics applications in Engineering
- Simple Machines, Gears, Electricity and Statics 1st trimester
- Programming 2nd trimester
- Must have already taken Engineering Design A and B

3D Maker - CN (Grade 10-12)

- Not to be confused with 3D printing, this class is about 3D Modeling and analysis using Solidworks software.
- Prerequisite: Engineering Design A and B with a C or better.

Civil Engr/Arch CN - A & B (Grade 10-12)

- This is an architecture class where you will build a model shed to learn and understand construction terminology.
- In Architecture B, students will build their dream house on the computer using Revit Software.
- Prerequisite: Engineering Design A and B with a C or better.

Engr Capstone/Internship-CTE (Grade 12)

- Only for students completing the Engineering Pathway
- Engineering design project of your choosing
- Counts as LEAP

Exploring Computer Science - A & B CTE/CN (Grade 9-12)

- Includes computational practices of algorithm design, problem solving, and programming.

AP Comp Sci Principles - A & B CN (Grade 10-12)

- Philosophy, culture and trends in Computer Science
- Python® is the primary tool.
- Projects and problems include app development, visualization of data, cyber security, and simulation.

English Language Arts

AP Eng LA/Comp - A, B, C (Grade 11-12)

- Students read and carefully analyze a broad and challenging range of non-fiction prose selections, deepening their awareness of rhetoric.
- Students examine essays, letters, speeches, images as well as some poetry.

AP Eng Lit - A, B, C (Grade 11-12)(Writing 121/English 105 credit possible w/ passing of exam)

- Intended for Grade 11/12 (10th upon teacher recommendation)
- Students engage in the critical reading and discussing of classical literature from throughout history and around the globe.
- Writing includes a year long project analyzing examples of a variety of literary devices used by authors, along frequent in-class essays.

Courageous Conv- CN - A,B (Grade 11-12) (LCC Ethnic Studies 101 *Historical and Racial Issues*)

- Juniors may take this class as an additional elective, but must be enrolled in English 11 ABC or an AP English ABC
- Students investigate the dynamic interaction between race, class, culture, gender, identity in American society
- Curriculum includes academic articles, documentaries, spoken-word poetry, non-fiction, and guests speakers.

World Lit - A, B (Grade 12)

- Reading, writing, and discussion of contemporary global literature is the heart and soul of this course.
- We will examine our own worldview and those of others, exploring literary archetypes as communicated through diverse textual mediums, including poetry, prose, visual, and lyrical (music!).

Native Literatures (Grade 11-12)

- Learn about contemporary Native American perspectives, values, and experience through a community oriented, placed-based, historically accurate curriculum
- Listen to diverse Native voices through hip hop, literature (poetry and prose), oral narrative
- Concepts covered include treaty law, sovereignty, language reclamation, identity, indigenous environmental activism, and Native futures

Short Works (Grade 12)

- This class is intended for Grade 12 students who are interested in solidifying writing skills.
- Short works of literature, poetry, and non-fiction will be studied then various writing styles will be explored.
- There will be an emphasis on editing and revising, so writers can be more confident in polishing their work.

Creative Writing (Grade 11-12)

- We will study short works and poetry and how the author uses plot, character, setting, dialogue, and theme to effectively tell a story.
- Through warm ups, exercises, and writing assignments, we will explore and develop our own ability to tell our own stories.

Health

Health 1 (Grade 9-12)

- Replaces Health Education
- Topics include: the health triangle, nutrition, body systems, disease prevention

Health 2 (Grade 9-12)

- Replaces Human Sexuality & Healthy Lifestyles
- Topics include: violence, suicide prevention, and human sexuality.

Exercise Physiology (Grade 11-12)

- Students will spend part of their time in the classroom learning core concepts and the remaining time in learning labs testing their designs.
- Explore fitness and nutritional goals, critically evaluate diet and training fads.

Nutrition (Grade 10-12)

- Evaluate personal diet and fitness levels
- Create individual nutrition and fitness plans

Health Services Pathway - Prerequisites: Health 1 & Health 2 or equivalent

Medical Terms - A CN (Grade 11-12)

- Part 1 in 3 course series. Students must also take Anat & Physiology CN-A and Anat & Physiology CN-B
- Learn to measure patient vital signs. Explore how word roots, prefixes, and suffixes are used to construct medical terms or decode medical charts.

Anat & Physiology CN-A, B (Grade 11-12)

- Part 2 & 3 in 3 course series. Students must also take Medical Terms- A CN
- Hands on exploration of body systems and their pathologies
- A - Skeletal, Muscular, Digestive, Blood/Circulatory, Lymphatic
- B - Cardiovascular, Respiratory, Nervous, Special Senses, Endocrine, Reproductive
- Application of medical terms

Trends in Healthcare - CTE -CN (Grade 11-12)

- Part 1 in 3 course series.
- Exploration of medical law, patient confidentiality, medical ethics, workplace safety and disease prevention. Overview of healthcare systems, career clusters, and social determinants of health.

Adv Health Occupations (Grade 11-12)

- Part 2 in 3 course series.
- Hands on application of patient diagnostic skills, medical charting, exploration of themed career units such as Emergency Medicine, Family Practice, Physical Therapy, and Dentistry. Preparation for senior health internships

Health Services Sr Sem (Grade 11-12)

- Part 3 in 3 course series.
- Hands on application of patient care and evaluation skills, medical charting, exploration of themed career units such as Veterinary Medicine, Lab Diagnostic/Pathology, Obstetrics, Geriatric Care/Home Health, etc. Completion of senior health internships.

Mathematics

Alg II STEM - A, B (Grade 10-12)

- Prerequisite of Geo A/B **AND** Teacher Approval
- Project-based with hands-on activities that implement deeper understanding of concepts

Pre-Calculus CN - A, B (Grade 10-12)

- College Level math courses equivalent to Math 111/112
- Prerequisite of B- or better in Algebra 2A/2B is a MUST

Calculus CN - A, B (Grade 10-12)

- College Level math courses equivalent to Math 251/252
- Prerequisite of B- or better in Pre-Calculus CN or IB Pre-Calc
- Study of differential and integral Calculus, equivalent to the first two quarters in the OUS system

AP Calculus BC A, B, C (Grade 10-12)

- College level mathematics course covering the entire first year of college calculus
- Students take the AP Exam in May. College credit is given by universities for passing scores on the AP Exam
- Study of differential and integral calculus, the calculus of polar and parametric functions, and sequences and infinite series, equivalent to the first three quarters in the OUS system
- Prerequisite of B or better in Pre-Calculus CN or IB Pre-Calc. Heavy workload to be expected.

IB Pre-Calc - A, B, C (Grade 11)

- Required math course for students planning on taking the IB Math Studies Exam
- MUST be in IHS to take the exam
- Juniors ONLY
- IB Math Studies Project Internal Assessment completed in this course

Financial Algebra-A (Grade 12)

- Teacher Approval needed

Financial Algebra-B (Grade 12)

- Teacher Approval needed

AP Statistics CN - A, B (Grade 10-12)

- Strongly enforced Algebra 2A/B prerequisite
- Option for Math 243 college credit
- For college credit, prerequisite of Precalc A
- Limited calculations, very reading and writing intensive. Not your average math class.

Music

Symphonic Band - A, B, C (Grade 9-12)

- Woodwind, brass and percussionists welcome
- Multiple performance during the year
- Football Pep band performances required

Jazz Band- Intermediate (Grade 9-12) Instructor approval Required, Full Year Commitment Expected

- Zero period class
- Pep Band performances required
- Any students interested in learning and performing jazz band music.

Jazz Ensemble - A, B, C (Grade 9-12) Audition Required, Full Year Commitment Expected

- Zero period class
- Football Pep Band performances required
- Any musician who has an interest in jazz, jazz theory, and improvisation.

Wind Ensemble - A, B, C (Grade 10-12) Audition Required, Full Year Commitment Expected

- Advanced course for woodwinds, brass and percussion.
- Football Pep Band performances required

Choir - Treble - A, B, C (Grade 9-12 Soprano/Alto Voices- NO audition required)

- Soprano & Alto Voice Ensemble that sings many different genres and styles, including classical, world music, folk & contemporary styles
- One concert outside of class per term
- Fun, supportive, and dedicated group of singers

Choir - Concert - A, B, C (Grade 9-12 “Bass/Tenor Voices”; Grade 10-12 “Soprano/Alto Voices”, Audition Required, Full Year Commitment Expected)

- Large Mixed Voice Ensemble that sings many different genres and styles, including classical, world music, folk & contemporary styles
- Extra performances and trips outside of school hours
- Fun, supportive, and dedicated group of singers

Downing Street Singers - A, B, C (Grade 10-12, Audition Required, Full Year Commitment)

- Small Vocal Jazz/A’cappella Group
- Many extra performances and trips outside of school hours
- Fun, supportive, and dedicated group of singers

AP Music Theory - A, B, C (Grades 10-12, Summer work required)

- This course is for students who want to learn about how music works from a technical standpoint. Topics that are covered include- music fundamentals, chords and how they relate to

composed music, ear training (being able to hear music and write it down), advanced music theory concepts

- Students must have a prior knowledge of music concepts as outlined in the Summer Homework. It is also helpful to have experience singing or playing in a music ensemble.

Music Technology A (Grade 9-12)

- Designed for students who are interested in creating music in the digital world.
- Students do not have to play a musical instrument, but should be interested in creating and producing music using software.
- Recommended Trimester 2 for Music Pathway students interested in the music Technology path.

Music Technology B (Grade 9-12)

- Designed for students who are interested in using music technology to create, edit and produce music using microphones, laptops and other recording equipment.
- This is a continuation of Music Tech A for students interested in capturing live sound and using technology to edit and produce music for themselves and other artists.
- Meets in Churchill's new recording studio.

Physical Education

General PE (Grade 9-12)

- Students will learn the basics of physical fitness through a variety of activities including; team sports, dual sports, and lifetime activities.

Strength/Conditioning (Grade 9-12)

Students will learn strength and conditioning techniques, weight room etiquette and protocol, and other lifelong training strategies that can help develop a healthy lifestyle

Athletic Conditioning (Grade 9-12)

- Focus is on sport specific pre-season conditioning and instruction. Offered during 0 period.
- **1st trimester (A):** girls and boys basketball, wrestling, and swimming.
- **2nd trimester (B):** softball, baseball, and track.
- **3rd trimester (C):** volleyball, girls and boys soccer, football, and cross country.

Team Sports (Grade 10-12)

- High-energy competitive sports based class (basketball, football, ultimate Frisbee, soccer, team handball, slam ball, and a few dual sports).
- Students will learn rules and regulations of each sport and practice the skills to be successful.

Yoga (Grade 10-12)

- Students will learn basic yoga poses, breath control, and stress relief techniques.

Rachel Carson Environmental Studies

RC Environ & Wld Iss - A, B, C (Grade 11-12)

- Interested in the natural world and human impacts on the environment? This class examines environmental science issues such as wildlife ecology, the effects of pollution and habitat loss, water & water use, forests & timber and agriculture & soils.
- Learn in a personalized, hands-on, project-based, collaborative learning environment that incorporates field trips, lab activities, discussions and debates.

RC Field Studies - A, B, C (Grade 11-12)

- Do you like active learning? Do you like to be outside in all weather? In Field Studies, students go outside to learn environmental science skills and complete restoration work once per week.
- This class is embedded in the RC Environ & World Issues class. You must take both simultaneously.

RC Internship - A, B, C (Grade 12)

- Earn you LEAP while getting certified as a Lane County Master Recycler and help coordinate schoolwide recycling and waste reduction efforts at CHS.
- Prepare for and compete in Oregon's state Envirothon competition at Oregon Garden in Silverton, OR.
- This is the RC Academy's capstone class. All Academy completers must enroll.

AP Environ Sci CN - A, B, C (Grade 12)

- Prerequisite of RC Environmental World Issues or with RC Teacher Approval
- This year-long course is designed to be the equivalent of a one-year, introductory, college-level course in environmental science. Each trimester earns the student 4 College Level credits in Science from LCC. For a total of 12 college credits.
- An interdisciplinary course, involving the fields of ecology, biology, ocean and atmospheric sciences, climatology, chemistry, geology, physics, toxicology, geography, economics, politics, and ethics. It is a rigorous and comprehensive look at local and global environmental issues.

Science

Marine Biology A (Grades 11-12 only, Biology completion required)

- Advanced, “college style” class covering the invertebrate and vertebrate animals of the world’s oceans. Focus will be on their environments, adaptations and conservation.
- Students will learn through fun and interactive note-taking and videos. Good attendance is required, class moves at a fast pace.

AP Biology-A, B, C (Grades 10-12, Biology Completion Required)

- AP Biology is an introductory college-level biology course.
- Topics include: evolution, cellular processes such as energy and communication, genetics, information transfer, ecology, and interactions.

Chemistry - A, B (Grades 10-12)

- This is a lab based course where we study matter and its interactions.
- Excellent foundational course for college bound students.

Chemistry - CN (Grades 10-12)

- College Now Chemistry is a dual enrollment course which earns students college credit.
- This is a hybrid online course which allows significant schedule flexibility.
- The level is equivalent to the standard Chemistry B course.

Physics - A (Grade 11-12)

- Study fundamental motion topics and mechanics
- Learn why stuff moves the way it does
- Simple algebra is used but is not the focus

Physics - B (Grade 11-12)

- Energy topics like light, sound and electricity
- Algebra and geometry used but not the focus
- Learn how stuff works

AP Physics B - I, II (Grade 11-12)

- Upper level physics course aimed at preparing students for the AP Physics 1 exam
- Algebra, trigonometry, and geometry used extensively
- Equivalent to a first year, introductory physics course

IB Physics II - A, B, C (Grade 12)

- Final three trimesters of 5 trimester course
- Algebra, trigonometry, and geometry used extensively
- Open to everyone but focused for students wishing to complete the IB Diploma program.
- Topics include light, sound, quantum and nuclear physics

Social Studies

World Hist SP Topics “Peace Out” (Grade 11-12)

- One term course focused on the psychology of war and peace, the dynamics of non-violent conflict resolution, the history of non-violent movements and genocides, the exploration of Nobel Peace Prize winners, analysis of modern hate groups
- Focus is on experiential learning

Contemporary World Issues (Grade 11-12)

- One term course focused on critical analysis of current events and world issues
- Class uses variety of discussions, debates, and essays to show mastery

U.S. Government (Grade 11-12)

- One trimester survey of the foundations, structures, and functions of the U.S. Government and how it pertains to you.
- Develop your awareness of personal political beliefs and ideology through writing, discussion, and debate. Learn how to participate and make a difference.

Environmental Law (Grade 11-12)

- One-trimester exploration of the ways human activities impact the environment and the rules in place to protect natural resources and environmental services.
- Topics are organized by key laws and include endangered species, air and water pollution, land use and environmental justice.

Economics (Grade 11-12)

- One trimester course in which you will learn about economic systems
- Specific units will cover the law of supply and demand, factors of production, and the business cycle.
- Students will play the stock market in a simulation that goes throughout the term

AP U.S. History - A, B, C (Grade 11-12)

- College-level course; requires strong reading and writing skills
- Covers many different aspects of American history from the early 1600’s up to the present (social, political, economic, technological, religious)

AP Psychology - A, B (Grade 11-12)

- Two trimester, college-level, introduction to psychology, the study of the mind, brain, and self.
- Prepares students to succeed on the AP Exam in May which can result in one or two classes worth of college credit.

World Language

World Language credits are NOT needed to graduate from CHS but ...

- they fulfill Fine Arts graduation requirements
- most universities require AT LEAST 2 years of the same language as part of their entrance requirements
- IHS students need 3 years to complete IHS graduation requirements
- ALL World Language students must pass each term with a C or higher to continue on.
- If a student has had previous language instruction or experience with a language, and is unsure which level is best, please check with Alicia Newton-Hamill or Miiko Suzuki for guidance
- Students can request three trimesters of Spanish that are in order. For example: Spanish IA, IB, 2A or Spanish 2A, 2B, 3A or Spanish 2B, 3A, 3B

Spanish I - A, B

Spanish II - A, B

Spanish III CN - A, B

Spanish IV CN - A, B, C

Spanish V CN - A, B, C

AP Spanish Lang CN - A, B, C

Japanese I - A, B

Japanese II CN - A, B

Japanese III CN - A, B

Japanese IV CN - A, B

Japanese V CN - A, B

AP Japanese - A, B