

Port Townsend High School

Description of Elective Courses

Grades 9-12 2008 / 2009

* * FOREIGN LANGUAGE * *

SPANISH 1 (9-12) - This is an introduction to the Spanish language and the geography and culture of the Spanish speaking world. The emphasis is on listening comprehension and speaking, but reading and writing are also practiced. Students will learn to engage in common courtesy exchanges, ask and answer simple questions, and communicate about a variety of common school, family and community topics. Through the study of a second language and culture, students will also come to know and understand their own culture and language better. **** PREREQUISITE: "B" OR ABOVE IN 9TH GRADE LANGUAGE ARTS. ****

SPANISH 2 (10-12) - Students continue to work on all aspects of communication in Spanish (listening, reading, speaking and writing). The primary grammar focus is narration in the past. Students also learn more about the geography, history and culture of the Spanish-speaking world. Spanish 1 is a prerequisite.

SPANISH 3, SPANISH 4 (10-12) - These courses review previously learned tenses and students continue to work on proficiency in all aspects of communication. New grammar topics include the future, the conditional and the subjunctive. These courses include more in-depth issues relating to Hispanic culture such as current events, immigration, environmental issues, history, etc. These are often presented through literature, film, and newspapers, and include discussion and writing in Spanish. This class is taught completely in Spanish. Prerequisite is Spanish 2. **Five University of Washington credits for Spanish 103** are possible upon completion of this class and payment of applicable fees. (Minimum enrollment for UW credit option is 16 students)

FRENCH 1 (9-12) - This is an introduction to the French language and the geography and culture of the French speaking world. The emphasis is on listening comprehension and speaking, but reading and writing are also practiced. Students will learn to engage in common courtesy exchanges, ask and answer simple questions, and communicate about a variety of common school, family and community topics. Through the study of a second language and culture, students will also come to know and understand their own culture and language better.

FRENCH 2 (10-12) - Students continue to work on all aspects of communication in French (listening, reading, speaking and writing). The primary grammar focus is narration in the past. Students also learn more about the geography, history and culture of the French-speaking world. French 1 is a prerequisite.

* * SCIENCE * *

SCIENCE 1 - Science 1 is a full year course designed to cover basic topics in the metric system, scientific method, inorganic chemistry, electronics, magnetism, organic chemistry, respiration, photosynthesis, and ecology.

SCIENCE 2 ****PREREQUISITE-SUCCESSFUL COMPLETION OF SCIENCE 1-** Science 2 is a full year course designed to build on topics previously studied in Science 1 through new topics which include geology, genetics, anatomy, Newtonian physics, environmental science and biochemistry. This class will prepare students for further studies in living systems.

ENVIRONMENTAL SCIENCE (11-12) is a dynamic life science elective that touches on topics of population, biodiversity, basic ecology, sustainable economics, resources, the local environment, environmental quality and others. The course includes, readings, lectures, discussions, activities, field trips, guest speakers and projects. Environmental Studies is a one-year course open to mature juniors and seniors who have successfully completed two years of science (Science 1 and Science 2 or their equivalent) and may be taken concurrently with physics or chemistry.

PHYSICS (11/12) – **Prerequisite:** Successful completion of Science 1 and Science 2. Successful completion of one (preferably two) years of algebra based mathematics. Physics is an algebra based, laboratory oriented course-covering topics, which include mechanics, heat, light, electricity, and magnetism. Algebraic solutions to problems in mechanics and electricity will be presented. Applications to everyday physics, materials science, theoretical physics, and ‘how things work’ will be emphasized through the use of projects.

AP PHYSICS ‘C’ MECHANICS (11-12) **Prerequisite:** Calculus or **Co-requisite:** Precalculus. Advanced Placement Physics is a class designed to introduce students to the study of mechanics. The use of pre-calculus and calculus concepts will be developed as we solve kinematics, dynamics, momentum, energy, and rotational motion problems. Homework, problem solving, quizzes, and tests are part of the class. Students wishing to take this class must demonstrate excellent self-motivation and an effective ability to work independently. If time permits, some introduction to electricity and magnetism will be presented through the use of projects.

CHEMISTRY (11-12) **Prerequisite:** Successful completion of Science 1 and 2 with a C grade or better. **Co-requisite:** Algebra II Trig. Chemistry is a laboratory and mathematics oriented course covering topics which include atomic and nuclear chemistry, gas laws, acid-base chemistry, solution chemistry, kinetics, equilibrium, electrochemistry, and organic chemistry. Practical applications of the study of chemistry to materials, household chemicals, environmental chemistry, etc., will be emphasized through the use of projects.

* * MATHEMATICS * *

PRE-ALGEBRA (9th Grade) - This transition course connects middle school mathematics and high school Algebra 1. Students will explore and practice concepts involving expressions, equations, lineal graphing, integers, and rational expressions. Students will also continue to practice and master basic operations involving whole numbers, decimals, fractions, percents, and problem solving strategies. No prerequisite.

APPLIED MATH (11-12) is a two to three year course that covers the equivalent of Algebra I and Geometry. This course is intended for juniors and seniors, but with special permission can be offered to sophomores. The course is designed to cover all algebra and geometry topics with applications to on-the-job problems.

ALGEBRA 1 (9-12) - This course is an integrated course including a study of algebra, probability, statistics, discrete mathematics and functions with an emphasis on algebra skills. Students will explore and solve mathematical problems and learn to think critically, work cooperatively, and communicate mathematical ideas clearly. Fulfills the first year university math admissions requirement.

PRE-CALCULUS (11-12) **Prerequisite:** Successful completion of Algebra II Trig with a C grade or better. Pre-calculus is designed to prepare students for the study of Calculus. Elementary functions including polynomial, exponential, logarithmic, and trigonometric are studied. Homework, problem solving, quizzes and tests are part of the class. Students wishing to take this class must demonstrate excellent self-motivation and an effective ability to work independently. Graphing calculators will be used extensively as tools and it is recommended that students purchase an approved calculator. At times, students are expected to learn selected material without the aid of a calculator.

AP CALCULUS Prerequisite: Successful completion of Pre-calculus with a C grade or better; or permission of instructor, counseling department, and parents. Advanced Placement Calculus is a class designed to introduce students to differential and integral calculus. Topics include trigonometric and exponential functions, limits, the derivative and its applications, antiderivatives, and the integral and its applications. Homework, problem solving, quizzes, and tests are part of the class. Students wishing to take this class must demonstrate excellent self-motivation and an effective ability to work independently. Graphing calculators will be used extensively as tools, and it is recommended that students purchase an approved calculator. At times, students are expected to learn selected material without the aid of a calculator. This class will prepare students for the Advanced Placement Calculus test in May.

AP CALCULUS 'AB' Prerequisite: Successful completion of Precalculus with a B grade or better; or permission of instructor, counseling department, and parents. Advanced Placement Calculus is a class designed to introduce students to differential and integral calculus. Topics include trigonometric and exponential functions, limits, the derivative and its applications, antiderivatives, and the integral and its applications. Homework, problem solving, quizzes, and tests are part of the class. Students wishing to take this class must demonstrate excellent self-motivation and an effective ability to work independently. Graphing calculators will be used extensively as tools, and it is recommended that students purchase an approved calculator. Students are also expected to learn selected material without the aid of a calculator. This class will prepare students for the Advanced Placement Calculus test in May.

GEOMETRY (9-12) - This course has a major emphasis on concepts of geometry including an exploration of angles line segments, parallel lines, polygons, triangles, polyhedrons, Pythagorean Theorem, area and volume. The course also includes basic concepts in logical thinking and an introduction to the concept of proof including proving congruent and similar triangles. Prerequisite: Successful completion (C or better) of Algebra 1 or Conceptual Math 2. Completion of this course fulfills the second year university math admissions requirement.

ALGEBRA 2 / TRIGONOMETRY (10-12) This course reviews and advances student's knowledge in the areas of algebra and trigonometry. Topics include: solving systems of equations, solving second degree equations, quadratic formula, solving rational equations, simplifying complex fractions, imaginary and complex numbers, fractals, graphing conic sections, functions, probability, statistics, matrices and trigonometry. Prerequisite: Successful completion (C or better) Geometry. Completion of this course fulfills the third year university math admissions requirement.

ACCOUNTING 1 (10-12) - 1 Year

Accounting provides the process for keeping orderly records of personal and business financial activities. Using double entry accounting, student's plan, keeps, and analyzes financial transactions and records. Some concepts covered include payroll, taxes, preparing financial statements, journalizing transactions, and posting to general and subsidiary ledgers. Microsoft Excel will be used to complete some projects on the computer. Two manual simulations will also be completed. Student may earn EITHER an occupational credit OR a math credit for successful completion of this class. Students may also earn 5 credits for BA101 at Peninsula College through the tech-prep program.

**** ACCOUNTING 1 _ (11-12) MAY ALSO BE TAKEN FOR MATH CREDIT.**

*** * ENGLISH * ***

BUSINESS COMMUNICATIONS (12) Year

This class is designed as an alternative to the literature-based English 12 curriculum. Employers are demanding that their employees possess strong thinking, listening, composing, revising, editing, speaking, and technological skills. Students will explore workplace writing using a real-world approach. Computers will be used to create visually pleasing documents that incorporate the fundamentals of effective communication. Students will write for a variety of audiences, generating documents such as professional letters and memos, employment communication, instructions, news releases, and proposals. *** THIS COURSE IS DESIGNED**

FOR STUDENTS PLANNING TO ATTEND A COMMUNITY COLLEGE, VOCATIONAL OR TECHNICAL SCHOOL, OR STUDENTS WHO ARE PLANNING TO ENTER THE MILITARY OR THE WORLD OF WORK AFTER GRADUATION. * Students who earn a B or better both semesters may earn 5 credits for AOS 170 through the Peninsula College Tech Prep program.

*** * SOCIAL STUDIES * ***

WORLD HISTORY- ANCIENT (10-12) **Goals:** In this one semester course, we will study the story of the human community from its beginnings into the 1500's. Our purpose is three-fold:

- * To track the broad outlines of the human story as it developed across the globe over the millennia.
- * To examine in depth key civilizations and /or turning points, asking the questions, Who are these people? What's going on here? What difference did it make to those who came after -- and to me?
- * To build good learning habits, and develop critical thinking & communications skills: reading, listening, learning, analyzing, researching, writing, and presenting.

WORLD HISTORY-MODERN (10-12) **Goals:** Same goals as first semester with an emphasis on history since the 1500's.

HONORS WORLD HISTORY – (10 – 12) Optional Honors Program for interested students.

AP U.S. HISTORY - The Advanced Placement History class at Port Townsend High School combines the standard curriculum of U.S. Studies with an in-depth look of cause and effect of social and political issues. During the course of the year, students will assess history by utilizing critical thinking skills and decision-making skills. Also, class discussions, presentations, and impromptu debating are often part of the learning process. Students are expected to complete 2 outside readings, “Killer Angeles” and “ The Long Walk.”

In preparation for the AP exam in May, students throughout the school year are expected to analyze and answer Document Based Questions along with taking practice multiple-choice questions. All students are required to take the AP exam.

*** * PERFORMING ARTS * ***

ORCHESTRA (9-12) - Students will study orchestral music and improve their playing technique. Music will be selected by the director. Opportunities will exist for solo and ensemble collaboration. School concert and community performances are required. Previous orchestra experience is necessary.

BAND (9-12) - Students will participate in band performances and improve their playing technique. Music will be selected by the director. Opportunities will exist for solo and ensemble collaboration as well as for performing in symphony orchestra. Students are required to perform at all school concerts, school activities and other events. Previous band experience is necessary.

JAZZ BAND (9-12) - Jazz Band will study the history of jazz, rehearse and perform standard big band and contemporary fusion literature, and focus on the fundamentals of music theory and improvisation. Registration in band or orchestra is a prerequisite and acceptance into the Jazz Band will be based on an audition during the fall. This class meets during the zero period before school.

DRAMA (9-12) -

Drama Class - Course Objectives: Drama is an active and engaging class because theater is active and engaging. The emphasis in class will be on exposing students to the various areas associated with a theatrical production and preparing students for participation in future productions at PTHS, if they so desire.

Course Description: Areas of study will include acting, stage-movement and voice, set design and construction, lighting design, sound design, costuming, hair and make-up, set dressing and publicity. All students will have instruction in all areas starting with acting.

We will produce and present a full-length play, one-acts or scenes each semester which will be the students' semester final. There may be extra after-school rehearsals scheduled but they will not be required. Homework will consist of memorizing lines and preparing for presentations in class, with some short reading selections from time to time.

Field Trips: Taking students to live performances is a great way to expose them to different theatrical styles and experiences. I will use drama ASB money to subsidize as many opportunities as possible. These trips will not be mandatory but all students will be encouraged to participate.

Main Stage Productions: Traditionally PTHS produces two shows a year, one in the fall and one in the spring. The spring production is usually a musical. Past productions have included *Grease*, *Into the Woods*, and *Anything Goes*. Students do not need to be registered for drama class to participate in these productions and rehearsals are all held after school.

* * FINE ARTS * *

ART - DRAWING & PAINTING (9-12) - A year-long STUDIO course designed to offer strong foundation and familiarity with the "language of art" while students explore different media and develop personal style in a safe and supportive environment. **First Semester:** Emphasis on drawing techniques, value studies, observational skills, life-drawing, still life and studio maintenance. Graphite, pen/ink and charcoal are explored as well as collage and mixed medium. Students are required to have a large sketchbook for out-of-class drawings, which are turned in every six weeks. Students design a personal portfolio. **Second Semester:** Emphasis on painting, exploring color and theory in a variety of mediums: acrylic, watercolor, oil pastel, colored pencil and chalk. Also includes guest artists, walking field trips, a trip to S. A. M., videos and slides. Artwork will be displayed at school and in the community through The Leader Project, publications, Arts Nite and Art Wave, murals, and in conjunction with PT Film Fest. Advanced student contracts available; mentoring and Centrum workshops encouraged. Developing presentational skills, contest submissions and portfolio. Six-week sketchbook entries required. (Art fee: \$50 yearly.)

ART - FORM & FUNCTION (9-12) - A year-long course. The objective of this course is to learn the basics of clay construction and to make useful, decorative objects (i.e. sculpture) and also to learn the practice of studio maintenance. **First Semester:** Introduction to ceramics. Wedging, recycling, tools, slab roller use; building techniques include coil, slab, pinch and for some, working on the potter's wheel. Basic glazing, underglazing, high and low firing. All students are required to keep a small sketchbook to record size and shape of pieces, glazes and cone. Field trips, guest speakers and independent projects are offered. **Second Semester:** Continued development of skills and experimentation with different clay, such as porcelain. Students are encouraged to explore textural and relief effects as well as scale. Advanced students will develop an area of concentration, unload and load the kiln, assist in mixing glazes, demonstrate technique and display their body of work. (Art fee: \$50 yearly.)

* * GRAPHIC ARTS * *

PHOTOGRAPHY (10-12 or permission of instructor)

Students should have access to an adjustable 35 mm camera, or an adjustable digital camera. There are a limited number of school cameras available for short-term check out. This course includes basics of 35 mm and digital photography including history of photography, camera operation, photographic processing, print finishing, digital print manipulation, Photoshop technique and print analysis. **Fulfills Art or Occupational Education Requirements.** (Yearly Fee: \$40)

VIDEO PRODUCTION (10-12)

Basic course in video production techniques and skills including: script writing, pre-production planning, lighting, camera operation, editing, and audio for video. Students will produce a daily news program for the

high school, as well as broadcast school & community events and programming through PTTV facilities. Students are required to participate in several after school broadcasts each semester. (Yearly Fee: 420)

ADVANCED MEDIA 1 Year. Requirements: Successful completion of Video Production, Photography, or by permission of instructor. Designed for the student who is considering a media-related career post high school. Emphasis is on developing a professional portfolio in the student's chosen field: video, photography, electronic imaging or computer animation. Additionally the course will cover elements of media history and critical analysis of contemporary forms, business applications and media law and ethics. (Semester Fee: \$40)

WEB DESIGN 1 Year - The Internet has become the World's Main Street. Bringing customers to your site and keeping them coming back has become key to any successful enterprise. Fundamentals of web design from idea to implementation. Students will explore basic concepts in effective web design, working with (X)HTML, CSS, Java Scripts, Graphics, Video & more as they develop websites using industry standard tools and techniques.

* * BUSINESS * *

COMPUTER APPLICATIONS (10 - 12) - Semester or Year

Using PCs, Windows XP and Microsoft Office Suite 2007, students will study in-depth (9 weeks each) word processing (WORD), spreadsheet (EXCEL), database (ACCESS), and presentation (POWERPOINT) software application programs. We will also use Publisher for desktop publishing projects, complete internet projects, create and send email and attachments, and work with peripherals including digital cameras and scanners. This is a great course for college-bound students to help prepare presentations, reports, and scholarships. It is also good for students planning to enter the world of work or a 2-year technical program or community college after graduation to provide a solid foundation for further studies in computer software applications. Prior experience with any of the four programs is helpful but not required. College credit through Peninsula College may be earned (4 credits each quarter, for a maximum of 16 credits) for the following courses: CAT 130 (Word), CAT 140 (Excel), CAT 145 (Access) and CAT 160 (Powerpoint.)

ACCOUNTING 1 (10-12) - 1 Year

Accounting provides the process for keeping orderly records of personal and business financial activities. Using double entry accounting, students will plan, keep, and analyze financial transactions and records. Some concepts covered include payroll, taxes, preparing financial statements, journalizing transactions, and posting to general and subsidiary ledgers. Microsoft Excel will be used to complete some projects on the computer. Two manual simulations will also be completed. Students may earn either an occupational credit or a math credit for successful completion of the class. Students who earn a B or better both semesters may also earn 5 credits for BA101 at Peninsula College through the Tech Prep program.

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* * INDUSTRIAL ARTS * *

CARPENTRY (9-12) - PTHS carpentry teaches woodworking and building techniques to students entering the program with a variety of skills and ability. Students will learn and practice the safe and proper use of a variety of tools and equipment. This class appeals to people who are motivated and love to build things. Students have opportunities to build projects for themselves and to work on projects benefiting a wide range of community groups. Projects can be done alone or in groups. Carpentry is a popular and productive program at PTHS. (Fee: \$20 yearly)

* * PHYSICAL EDUCATION * *

P.E./CONDITIONING (10-12) an active class for students who want to improve their physical fitness. This class includes a variety of activities such as games, stretching, exercise, weight lifting and running. Course space is limited due to weight room safety.

* * ADDITIONAL ELECTIVES * *

SPORTS MEDICINE (10-12) This course is designed for those students interested in entering a medical field. It will explore the treatment, prevention and rehabilitation of athletic injuries. Students will become proficient in first aid, human anatomy and physiology, and terms applied in the medical field. Students should expect to spend time outside of the normal class time for practical lab experiences. Additional credit may be earned with additional practicum hours.

SPORTS MEDICINE II Prerequisite: Sports Medicine I and Instructor's permission. Additional emphasis will be placed upon competent knowledge of first aid, human anatomy and physiology, medical terminology and treatment and rehab of injuries and conditions that occur on the athletic field. Students will be assigned to an athletic team and will need to find job shadow in the medical field.

BOOK PUBLICATION (9-12) (Yearbook) - Offers the student a hands-on experience in book and glossy magazine design and production. Students enrolled in Book Publications comprise the production staff of the high school yearbook. Students learn basic techniques of page layout, copy writing, editing, proofreading, photo selection, and computer word processing and desktop publishing programs with additional experience in sales and print advertising. Students with special interest and experience may concentrate in the areas of photography, business management of computer graphics. Advanced students are expected to assume leadership and supervision roles in editing and design. **** PREREQUISITE: "B" OR ABOVE IN 8TH GRADE ENGLISH. ****

JEWELRY MANUFACTURING (9-12) - (Up to two consecutive periods) - Provides students the opportunity to learn the safe use of tools and equipment in the manufacture of jewelry and a working knowledge of various jewelry materials with the emphasis on selling finished projects for profit. Fall semester emphasizes fabrication using sheet and wire stock for silver and gold soldering, cutting gemstones on lapidary equipment and finishing techniques. Spring semester emphasizes creation of wax patterns, which are used to make a mold into which silver, brass, or gold is melted and cast. The product is then polished and a student made or purchased stone is set into the jewelry mounting. Second and third year students have more freedom to explore creative design options in a separate work area, which may lead to a mentorship or apprenticeship in an operating jewelry store. Also good background is established leading to careers in dental technology, musical instrument design, and/or creation of prosthetic devices for the handicapped. (Fee: \$20 yearly)

JEWELRY MANUFACTURING II: Prerequisite: Jewelry Manufacturing I and teacher permission. With teacher permission, second year students (intermediate) or third year students (advanced) may work independently in order to have more freedom to explore creative design options in a separate work area. This could lead to a mentorship or apprenticeship in an operating jewelry store.

