



***Rainier Senior  
High School***

**Academic  
Program  
Guide**

2016-2017

---

28170 Old Rainier Road  
Rainier, Oregon 97048  
[www.rainier.k12.or.us](http://www.rainier.k12.or.us)

503-556-4215

# Rainier Jr/Sr High School Academic Program Guide

## Table of Contents

### Senior High School

Academic Policies	3
Graduation Requirements	4
English Language & Literature	11
Social Sciences & History	14
Senior Project	16
Sciences	17
Mathematics	21
Physical Education & Health	23
World Language - Spanish	25
Fine Arts/Applied Arts/Vocational/Technical	26
Elective Activities	33

Long range planning is essential for the attainment of goals and dreams. This curriculum guide is a document that students and parents can use to develop a course of study to complete the requirements for a high school diploma.

This guide lists courses offered at RJSHS, as well as provides you a brief description of each course. As we begin our process to determine the class schedule, it is important that you know that we develop our master course schedule based on student forecasts. Classes not receiving sufficient enrollment will not be offered. It is important that students and parents carefully choose classes so that we can build a course schedule that meets student needs.

Please read the information in this guide carefully as you develop a plan for your future.

## ***Academic Policies***

1. **NO CLASS CHANGES** will be made in your schedule after forecasting is completed, except those necessary because of the following reasons:
  - a. Failed courses or other conditions that affect your graduation
  - b. Administrative and school program needs
  - c. Placement changes
2. **Withdrawing from Classes:** Classes dropped after the third week of the semester will result in an F on the transcript.
3. All teachers will offer a final summative assessment or project during finals week. All assignments and late work must be completed one week prior to the end of the semester.
4. **Dual Credit Courses – High School and College Credit:**
  - Accounting 2
  - Advanced Studio Art
  - AP Calculus
  - Biology
  - Chemistry
  - College English (Writing 121, Speech 111, Writing 122)
  - Computer Applications
5. **Valedictorian and Salutatorian Selection:** Those students on an Honors Diploma who earn the highest grade point average and rank number one in the class by the end of the eighth semester or equivalent for early graduation, will become class valedictorians. In the event of ties, all students who earn the top GPA will receive this award. Students must be enrolled full time in both junior and senior years.

Students on an Honors Diploma who earn the second highest grade point average in the class by the end of the eighth semester or equivalent for early graduation will become class salutatorian. In the event of ties, all students who earn the second highest GPA will receive this award.

While recognition for class honors is primarily one of academic achievement, the Rainier School District, reserves the right to deny or to revoke class honors to any student who is found to have engaged in illegal actively and/or behaviors contrary to school policies and rules which bring dishonor to himself/herself or to the district while enrolled in high school. Such a decision to deny class honors shall be made by the high school principal and shall be subject to the appeal to the district superintendent, whose decision shall be final.

6. Year-long course=1 credit, Semester-long course=.5 credit

## Diploma Requirements

Credits By Subject	Class of 2014 and Beyond
Applied Arts/Fine Arts/World Language	3
English	4
Health	1
Mathematics	3 – All credits must be Algebra 1 level and above
Physical Education	1
Science	3
Social Studies	3
Consumer Finance and Economics (Senior Project)	1
Electives	6
Total Credits	25
<b>Personalized Learning</b>	
Educational Plan & Profile	X
Career-Related Learning Experiences	X
Extended Application (Senior Project)	X
<b>Essential Skills</b>	
Read & Comprehend a Variety of Text	X
Write Clearly & Accurately	X
Apply Mathematics in a Variety of Settings	X

## Honor Diploma Requirements

***Must have a 3.5 GPA and meet the following requirements including all Personalized Learning Goals***

Credits By Subject	Class of 2014 and Beyond
Applied Arts/Fine Arts	2
World Language	2
English-Honor Level	4
Health	1
Mathematics	4 – All credits must be Algebra 1 level and above
Physical Education	1
Science-At least 1 credit at College Prep Level	3
Social Studies	3
Consumer Finance and Economics (Senior Project)	1
Electives	7
Total Credits	28
<b>Essential Skills – Must Pass all State Testing and Provide Work Samples If Required</b>	
Read & Comprehend a Variety of Text (2 Speaking work samples required)	X
Write Clearly & Accurately	X
Apply Mathematics in a Variety of Settings	X
Science	X
*Please note that graduation requirements are subject to change based on changing Oregon Department of Education graduation requirements.	

## Modified Diploma Requirements

*Eligibility criteria for this diploma are set by state law. Students who are eligible, and their parents, will be informed by school staff as part of the student's individual planning process.*

Credits By Subject	Class of 2016 and Beyond
Applied Arts/Fine Arts/World Language	1
English	3
Health	1
Mathematics	2
Physical Education	1
Science	2
Social Studies	2
Consumer Finance and Economics (Senior Project)	1
Electives	11
Total Credits	24
<b>Personalized Learning</b>	
Educational Plan & Profile	X
Career-Related Learning Experiences	X
Extended Application	X
<b>Essential Skills*</b>	
Read & Comprehend a Variety of Text	X
Write Clearly & Accurately	X
Apply Mathematics in a Variety of Settings	X
*Assessments used as evidence for meeting essential skills requirements may be modified consistent with modifications the student has been receiving.	

## **Extended Diploma Requirements**

***Eligibility criteria for this diploma are set by state law. Students who are eligible, and their parents, will be informed by school staff as part of the student's individual planning process.***

<b>Credits by Subject</b>	<b>Class of 2016 and Beyond</b>
Applied Arts/Fine Arts/World Language	1
English	2
Health	1
Mathematics	2
Physical Education	1
Science	2
Social Studies	3
Total Credits	12*
*Of the 12 credits, no more than 6 credits may be earned in a self-contained special education classroom.	



## Assessment Options for Essential Skills

Essential Skills	Assessment Options (Only One Assessment Per Skill)	Achievement Standards (Maximum Levels. Lower levels may be set by ODE)
<b>READ</b> and comprehend a variety of text <b>AND</b> <b>WRITE</b> clearly and accurately	Smarter Balanced English Language Arts Assessment	2682
	ACT	18/19 (Read/Write)
	PLAN	18
	Work Keys	5
	Compass	81
	ASSET	42
	SAT	440/460 (Read/Write)
	PSAT	44
	2 Reading Work Samples: at least one informational reading selection (the second reading selection may either be informational or literary)	Score: 12 across the three required traits for each work sample (each trait must receive an individual score of at least 3). Work samples are locally scored with the Official State Reading Scoring Guide
	2 Writing Work Samples (one from 2 of the following): Expository, Persuasive, and Narrative	Score: 4 on each of the four required traits for 2 work samples. Work samples are locally scored with the Official State Writing Scoring Guide
Apply <b>MATHEMATICS</b> in a variety of settings	Smarter Balanced Math Assessment	2718
	ACT	19
	PLAN	19
	Work Keys	5
	Compass	66 (Intermediate Algebra Test)
	ASSET	41 (intermediate Algebra Test)
	SAT	450
	PSAT	45
	2 Math Work Samples (one each for two of the following: Geometry, Algebraic Relationships, and Statistics/Probability)	Score: 4 on each of the four strands plus accuracy. Work samples are locally scored with the Official State Math Problem Solving Scoring Guides.

## **Assessment Options for Essential Skills (con't)**

**For students on IEPs or 504 Plans:** School districts and public charter schools may administer modified work samples or OAKS assessments consistent with the requirements of the student's IEP or 504 Plan. When modifying and OAKS assessment, the school district or public charter school must also ensure that the modifications\* are in compliance with section 4(D) of OAR 5481-022-0610: Administration of State Tests. Modified OAKS assessments will remain invalid for purposes of school and district accountability.

**For students who are not on an IEP or a 504 Plan:** School districts and public charter schools may only administer modifications\* to work samples that are consistent with the modifications the student has received during instruction. Students must have received those modifications during instruction in the content area to be assessed and in the year in which the work sample is administered. These modifications must be approved in advance by the student's school team responsible for monitoring the student's progress. Students who are not on an IEP or 504 Plan may not receive a modified OAKS assessment.

*\*Modifications, as described in OAR 581-22-0610, are changes to the achievement level, construct, or measured outcome of an assessment. This means that IEP or school teams responsible for approving modifications for a student's assessment may adjust the administration of the assessment and/or the assessment's achievement standard.*

**For LEP Students:** Limited English Proficient students who have not had sufficient time in the US to gain the English language skills necessary to demonstrate their academic content knowledge who are able to meet all other graduation requirements, including credit completion, have the following options in meeting the Essential Skills requirements:

1. Eligible LEP students may demonstrate proficiency in Applying Mathematics in their language of origin using statewide or local assessments as appropriate and available.
2. Eligible LEP students may demonstrate proficiency in Reading, Writing, and any additional Essential Skills in their language of origin using statewide or local assessments as appropriate and available if:
  - a. The student has been in the US schools 5 years or less, and
  - b. The student receives at least a level 3 (Intermediate) on the English Language Proficiency Assessment (ELPA) by graduation

## **English Language and Literature**

### **9 Language Arts**

*Grade: 9*

*Prereq: None*

Students will communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards. Reading activities will cover a wide range of literary and nonfiction texts. Using and identifying textual evidence, and utilizing a variety of reading strategies will be mastered. Students will be accountable for learning new vocabulary while being assessed often. The emphasis is on adjusting to high school as we foster strong reading skills and written expression.

**Graduation Requirement**  
*(or Honors 9 Language Arts)*

### **9 Language Arts - Honors**

*Grade: 9*

*Prereq: None*

Students will communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards. Students will cover a wider range and more advanced texts as well as delve deeper into both literary and nonfiction works in comparison with the 9th grade English course. Students will need to be organized, have a passion for improving their reading and writing, already have a strong work ethic, and be individually motivated to be successful in this course. Students must have earned an A or B in 8<sup>th</sup> grade English and Literature or have teacher approval to enroll. The emphasis is on adjusting to high school while learning how to delve into challenging topics as we foster strong reading skills and written expression.

**Graduation Requirement**  
*(or 9 Language Arts)*

### **10 Language Arts**

*Grade: 10*

*Prereq: 9 Language Arts*

Students will communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards. Students should be prepared to actively engage in discussion, share their writing with others, and analyze complex texts. The focus will be on improving basic skills in both reading and writing to prepare for the 11<sup>th</sup> grade Smarter Balanced Assessment, including the emphasis of sentence combining to master complex sentence structures, vocabulary development, and close analysis of text. A variety of readings will be completed, encompassing non-fiction texts, novels, short stories, and poems. A research paper is also required.

**Graduation Requirement**  
*(or Honors 10 Language Arts)*

**10 Language Arts – Honors**

*Grade: 10*

*Prereq: 9 Language Arts with a B or higher, teacher approval*

Theme: Power. Students will communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards during this fast-paced course.

Students should be prepared to actively engage in discussion, share their writing with others, and complete homework daily. This class is intensive in reading, writing and critical thinking and will challenge students in these areas. Students will begin preparation for the 11<sup>th</sup> grade Smarter Balanced Assessment, and the ACT and SAT tests. As with all English courses, students are required to read 20 minutes a day at home. Studies prove that reading is the best way to improve comprehension, vocabulary, critical thinking skills and school performance.

**Graduation Requirement**

*(or 10 Language Arts)*

**American Literature**

*Grade: 11*

*Prereq: 9 & 10 Language Arts*

Theme: The American Dream. American Literature is a glance at the history of writing in America. The curriculum is aligned with U.S. History and projects are often combined. Students will communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards. To accomplish these goals, we read a variety of sources including plays, novels, short stories, poems, and non-fiction pieces and prepare for passing the required Smarter Balanced Assessment. This class is intensive in reading, writing and critical thinking and will challenge students in these areas. Additionally, students are required to read 20 minutes a day at home. Studies prove that reading is the best way to improve comprehension, vocabulary, critical thinking skills and school performance.

**Graduation Requirement**

*(or Honors American Literature)*

**American Literature – Honors**

*Grade: 11*

*Prereq: 9 & 10 Language Arts, B or higher in previous English courses and teacher approval*

Theme: The American Dream. This is a fast-paced course that will prepare students for college-level work. The curriculum is aligned with U.S. History to further delve into issues and gain a better understanding of the texts. Students will be expected to communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards. Students will work on SAT/ACT prep and prepare for and take the required Smarter Balanced Assessment. Additionally, students are required to read 20 minutes a day at home. Studies prove that reading is the best way to improve comprehension, vocabulary, critical thinking skills and school performance. Students planning on attending college should enroll in this course.

**Graduation Requirement**

*(or American Literature)*

**World Literature**

*Grade: 12*

*Prereq: 9 & 10 Language Arts, 11<sup>th</sup> grade American Literature*

Theme: Have a Plan! Students will communicate effectively through reading, writing, speaking, and listening as outlined in the Common Core State Standards. In this class, students focus on topics such as government, poverty, and human rights. This course will help students develop practical school and life skills and the curriculum is aligned with 12<sup>th</sup> grade courses Government and Consumer Finance to complete the required senior project. Additionally, students are required to read 20 minutes a day at home. Studies prove that reading is the best way to improve comprehension, vocabulary, critical thinking skills and school performance.

**Graduation Requirement**

*(or College English)*

**College English**

*Grade: 12*

*Prereq: 3.0 or higher GPA in previous English classes, a passing score on the placement test and instructor's approval*

This course works with Oregon Institute of Technology to offer college-level classes and credits to students who are interested (WRI 121, WRI 122, SPE 111). Students will need to pass the placement test and pay for the college credits (9 credits total at \$75.00 per credit). If you qualify for free or reduced lunch, the fee is waived. Students will be required to purchase two books for the course. Writing 121 centers on developing college-level writing skills and will cover MLA citations. In Speech 111, students will give an introductory, process, informative, persuasive and encomium speech. In Writing 122, students learn how to write argumentatively and will use APA citations. This is a challenging class that will require a commitment to completing coursework outside of the school day. \*Students may choose to take this class but not receive the college credit.

**Graduation Requirement**

*(or World Literature)*

## **Social Science and History**

### **World History**

### **Graduation Requirement**

*Grade: 9*

*Prereq: None*

This is a required course for freshmen. The units include: An Introduction to Geography and Culture, Ancient cultures, Rome, The Dark Ages, Nationalism, The Industrial Revolution, Imperialism, Immigration, The 20th Century Political Revolutions, the World Wars, the Cold War and the influence of world religions on historical events. Over the course of the academic year students will be introduced to, and practice, a range of skills within the various disciplines of the Social Sciences. Students will work with maps, read and analyze primary source documents, and think critically about the complex world in which they live as well as their place in it. Students will present information to the class and be expected to contribute positively to the educational environment.

### **US History**

### **Graduation Requirement**

*Grade: 11*

*Prereq: None*

Topics of study include: a review of American history before 1860, an in depth study of America since 1860 including Reconstruction, Imperialism, the Progressive Era, World War I, the Roaring Twenties, the Great Depression, World War II, civil rights, the Great Society, and recent presidents. It will also include American and world issues such as the Cold War, Korea, Vietnam, and the collapse of communism. Related economic, government, and geographic issues will be explored. Students will learn how past events have built and formed our culture and our country. The textbook will be a major source of information as well as movies, documentaries, newspaper clips, audiotapes, and other books. Special attention will be given to cause and effect relationships. There is an emphasis on reading, writing, and speaking to learn content.

### **Government**

### **Graduation Requirement**

*Grade: 12*

*Prereq: None*

Government topics include: the three branches of government, federalism, citizenship, constitutional issues, the political spectrum and current political issues. Oregon State and local government issues will be explored. Course instruction will be based on textbook reading, lectures, class discussion and projects. There is an emphasis on reading, writing, and speaking to learn content.

**Psychology** (Will not be offered 2016-17)

*Grade: 11, 12*

*Prereq: None*

The nature and origins of mental and emotional experience are among the last and greatest unsolved scientific questions. Psychology is a field of study that examines these questions and attempts to apply the answers to practical problems. This psychology course provides a guided exploration and survey of major concepts, research, and theories that describe both animal and human behavior. Specific areas of study will include pseudo-psychology and critical reasoning, brain and body, learning and cognition, human development, consciousness, social psychology, sensation and perception. Students will also be expected to develop their own interpersonal skills and to monitor their own personal psychological well-being.

# Senior Project

## **Consumer Finance and Economics**

## **Graduation Requirement**

*Grade: 12*

*Prereq: None*

*College Credit Option: 3 credits through Lower Columbia College\**

This course is designed to prepare individuals to make wise decisions in the marketplace. Students will examine their needs, wants, priorities, and resources. They will learn to budget their resources to reach their financial goals through creative problem solving. The information gained will help students make wise economic decisions about including choices about credit, transportation, housing, insurance, banking, and other financial concerns an individual faces. In addition, students will complete an employment unit which will result in completion of a job application, resume, letter of application, and ultimately a mock job interview and thank-you letter. A job shadow and completion of community service is integrated in this course. Basic economic theory will also be covered with a focus on how each concept is currently affecting the world and business environment.

\*Entire year must be completed in order to gain college credit.



## Sciences

### Physical and Earth Sciences

#### **Principles of Earth and Physical Science (PEPS)**

#### **Graduation Requirement**

*Grade: 9*

*Prereq: None*

Principles of Earth and Physical Science (PEPS) cover the basic concepts in Earth Science (weather, geology, hydrology, and astronomy) and Physical Science (chemistry and physics). The Earth Science portion of the course is an introduction to the parts of Earth. Students will investigate the lithosphere in a geology unit, the atmosphere in a weather unit, the hydrosphere in an oceans unit, the biosphere in a soils unit and beyond the atmosphere in an astronomy unit. The Physical Science portion of the course covers the basic concepts of chemistry and physics. Topics include lab safety and procedures, scientific method and measurements, atomic theory, periodic table, chemical reactions, nuclear reactions, motion, forces, energy, electricity, sound and light waves. Laboratory activities are a major part of this class, as well as weekly assignments out of the textbook. There is an emphasis on developing good study skills during the class. At least one science work sample meeting state requirements is will be offered each semester.

#### **Advanced Physical Science**

*Grade: 11, 12*

*Prereq: PEPS and Biology*

Advanced Physical Science is designed to build on and reinforce the concepts of physics and chemistry that were previously covered. These concepts correspond to the science benchmarks for physics and chemistry the student will encounter on the statewide science test. In Advanced Physical Science, we emphasize how physics and chemistry are used in the students' daily lives, and the effect it has on their lives. Laboratory activities are a major part of this class, although the textbook may be used occasionally for a class assignment, or for an individual student to make-up absences. Topics include laboratory safety and procedures; scientific method and measurements; physical and chemical changes; the periodic table, consumer chemistry and nutrition; and electro-chemistry. Additionally we will work with motion, including acceleration and projectiles; Newton's laws, including forces on a truss; work, power, and mechanical advantage, buoyancy, aerodynamics, and friction on boats; heat, energy transfer and kinetic theory as used to protect ice from melting; electrical circuits; and waves, including sound and electromagnetic radiation.

**Chemistry – College Prep (Offered every other year, 2017-2018 next year offered)**

*Grade: 11, 12*

*Prereq: A or B in PEPS and Biology (or Teacher Approval)*

*College Credit Options: Students who pass a set of proficiency exams can earn up to 5 credits transferable to most colleges and universities.*

CP Chemistry is designed for the college bound student. The class is structured to help students develop the study skills and behaviors that will allow them to be successful in college in general, as well as establishing a knowledge of the concepts of chemistry, which will help them to be successful in college level chemistry, if they choose to go in that direction. Additionally, they will gain an understanding and appreciation of how chemistry is involved in their daily lives. The class uses a textbook and homework, as well as making extensive use of a wide variety of laboratory activities. Mathematics and reasoning skills are developed and used throughout the year. A project that meets state standards is required each semester. Topics include laboratory safety and procedures, and scientific method and measurements, atomic theory, Atomic structure, the periodic law, Chemical bonding, Chemical equations and Chemical reactions, Acids and Bases, and Electro-chemistry.

**Physics – College Prep (Offered every other year, 2016-2017 will be offered)**

*Grade: 11, 12*

*Prereq: A or B in PEPS and Biology (or Teacher Approval)*

CP Physics is designed for the college bound student. The class is structured to help students develop the study skills and behaviors that will allow them to be successful in college in general, as well as establishing a knowledge of the concepts of physics, which will help them to be successful in college level physics, if they choose to go in that direction. Additionally, they will gain an understanding and appreciation of how physics is involved in their daily lives. The class uses a textbook and homework, as well as making extensive use of a wide variety of laboratory activities. Mathematics and reasoning skills are developed and used throughout the year. Independent projects are required each quarter and may include the following: mousetrap-powered car, wind-powered lift, a truss, and a catapult. Topics include laboratory safety and procedures; scientific method and measurements; motion including accelerating objects, projectiles and satellites; Newton's laws and the effect of forces on objects; work, power and mechanical advantage; buoyancy and aerodynamics; heat, energy transfer, kinetic theory and the changes of state; electrical circuits; and waves including sound and electromagnetic radiation.

## Life Sciences

### **Biology**

### *Graduation Requirement*

*Grade: 10*

*Prereq: PEPS*

*College Credit Options: Students who complete the program requirements will earn 5 credits transferable to most colleges and universities.*

This is a basic science class that explores the basic elements of Biology using labs, lectures and discussions, videos, and projects. Topics include the structure and function of cells, active and passive transport, cell division (mitosis and meiosis), DNA structure and its role in protein synthesis, Mendelian genetics, ecology and environmental systems, natural selection and evolution, and the role of classification systems in Biology. Additional topics include the structure and function of various plant structures as well as some basic Human Biology (heart, lungs, skeleton, and muscles). Numerous laboratory exercises are used as appropriate and work sample opportunities meeting state standards are incorporated each semester.

### **Zoology and Environmental Science**

*Grade: 11 & 12*

*Prereq: PEPS and Biology*

This class is designed for the student seeking to complete a third credit in Science necessary for graduation but not necessarily interested in a science-related career. There are numerous lab activities in both semesters offering the opportunity for the student to improve science and reasoning skills as well as develop an appreciation for the world around them. The first semester explores life forms starting with simple bacteria and protozoa and continues to the more complex organisms of the animal kingdom. Animal groups studied include sponges, jellyfish, flatworms, roundworms, earthworms, snails, clams, octopus, insects, spiders, crayfish, sea stars, fish, amphibians, reptiles, birds, and mammals. The second semester involves a study of environmental science using a project that is strongly based on lab activities to discover the cause and develop a solution to an environmental scenario based on a real-life problem. Additional study involves developing measurement skills to explore the surrounding campus, its woodlands, and wetlands. Work samples that meet state standards for science inquiry are included in the class.

## **Anatomy & Physiology- College Prep**

*Grade: 11 & 12*

*Prereq: Passing PEPS and Biology (or Teacher Approval)*

This full-year class is designed for students seeking a rigorous science experience and who are interested in pursuing a career in health care or any life-science-related field. Topics are presented in a lecture/discussion format with various lab experiences for each system studied. The class begins with study of basic terminology and tissue structure, a review of cell biology, and the skeletal and muscular systems. Additional study covers the structure and function of as many of the other body systems as possible. Dissection of a vertebrate specimen is included in the first semester and a final project in the second semester allows the student to develop and use diagnostic skills to diagnose and set up treatment plans for several patients.

# Mathematics

**Pre-Algebra (Note: This class is not offered every year and counts as electives credit, not math.)**

*Grade: 9, 10*

*Prereq: None*

The goal of this course is to provide a solid foundation for further exploration into mathematics. The student will develop problem solving and critical thinking skills in this course. Topics covered include Linear Equations (Solving, Writing, and Applications), Geometry (Lines & Angles, Triangles, Pythagorean Theorem, Volume, and Transformations) and Data Analysis (Rates, Ratios, Proportions, Measures of Center, and Graphs). A scientific or graphing calculator is required.

## **Algebra 1**

## **Graduation Requirement**

*Grade: 9, 10, 11, 12*

*Prereq: Proficiency in Pre-Algebra 7/8/HS*

The intent of this course to provide a solid foundation for further mathematics education, primarily in courses such as Geometry, Algebra 2, Pre-Calculus, and Calculus and to provide formal preparation for the State Assessments and standardized tests (SAT, ACT, etc.). You will develop your thinking, decision-making, and analysis skills in this course. Topics covered include equations, systems, functions, proportions, polynomials, statistics, and probability. In order to better meet the needs of our students, we may be able to offer this course also as a 2-year course, Algebra 1A and Algebra 1B. A scientific or simple calculator is required.

## **Geometry**

## **Graduation Requirement**

*Grade: 9, 10, 11, 12*

*Prereq: Proficiency in Algebra 1*

Geometry is a college-track course. To get into most colleges and universities, you will need to take the SAT (Scholastic Aptitude Test) or ACT (American College Test). Approximately 40% of the questions on both the SAT and ACT are geometry related. Topics covered include the language of geometry, proof, reasoning, angle classification, measurement, angle pairs, slope, parallel and perpendicular lines, distance, midpoint, classifying triangles, angle measurement in polygons, congruency, similarity, special segments in triangles, inequalities, trigonometry, circles, polygons and area, surface area and volume, and word problems. A scientific or graphing calculator is required.

## **Intermediate Algebra**

*Grade 10, 11, 12*

*Prereq: Algebra 1*

This course can be taken in order to build algebra readiness for Algebra 2. Students may take this course to reinforce foundational Algebra skills after passing Algebra 1, concurrently with Geometry, or after Geometry. Topics studied in this course will include investigating patterns, monomial, binomial, and polynomial functions, introduction to trigonometry, statistics, and applications of geometry. Work samples and state testing opportunities will be given throughout the year. A scientific or simple calculator is required.

## **Algebra 2**

*Grade: 9, 10, 11, 12*

*Prereq: Proficiency in Algebra 1 & Geometry*

Algebra 2 is a college-track course, and the minimum requirement for all 4-year colleges and universities. Topics covered include the expanding/connecting topics from Algebra 1 and Geometry and introducing new topics such as polynomial functions, finding zeros, complex numbers, exponential and logarithmic functions, trigonometry, word problems, probability and statistics. Students will also have instruction around and opportunities to complete work samples to meet the graduation requirement. A scientific or graphing calculator is required.

## **Graduation Requirement**

## **Pre-Calculus**

*Grade: 10, 11, 12*

*Prereq: Proficiency in Algebra 2 and instructor approval*

Pre-Calculus is a college track course and the recommended course for students entering a 4-year college or university. It is designed to prepare students for the study of calculus. Topics covered include functions, trigonometry, complex numbers, and limits. A scientific or graphing calculator is required for this class. A scientific or graphing calculator is required.

## **AP Calculus AB**

*Grade: 11, 12*

*Prereq: Proficiency in Pre-Calculus and instructor approval*

*College Credit Options: Students who pass the AP exam 1 year of math credit at any college or university.*

This college level class explores a variety of topics including: functions, limits, derivatives, and integrals. This class introduces students to real-life applications related to the topics stressing the ability to think logically and mathematically. Students will prepare to take the College Board's AP examination in the spring and those who successfully qualify may earn college credit and/or advanced placement in college. A graphing calculator is required for this class.

# Physical Education

## **Freshmen/Sophomore PE**

*Grade: 9 (0.5 credit), 10 (0.5 credit)*

*Prereq: None*

This is a required course for freshman and sophomores. It is an activity-based class designed to teach basic sports skills, functional exercises, age-appropriate motor skills, citizenship, and sportsmanship to foster lifelong physical activity and healthy character traits. Content knowledge is infused within the curriculum to round out the development of the whole child: physical, mental, and social well-being.

## **Graduation Requirement**

## **Strength Training**

*Grade: 9, 10, 11, 12*

*Prereq: None*

This course is designed for all students, from novice level with no experience to advanced strength development. Safety and proper technique are priorities. Students will be expected to participate in rigorous strength, speed, agility and quickness training each day. Emphasis is placed on active participation and improvements in these areas throughout the course. This course is a PE Elective and cannot replace state required freshman/Sophomore PE.

## **Lifeguarding**

*Grade: 9, 10, 11, 12*

*Prereq: None*

To be eligible for the lifeguard-training course, the candidate must be 15 years of age on or before the final scheduled session of this course. The purpose of the American Red Cross Lifeguard Training course is to teach lifeguard candidates the skills and knowledge needed to prevent and respond to aquatic emergencies. The course covers basic swim strokes, CPR and First Aid skills. The class will provide workers for the pool. There is a fee for pool usage. If students want the Lifeguard or CPR card, there is an additional fee of \$5 for each card, which goes to the American Red Cross. **Cannot replace state required freshman/Sophomore PE.**

**Unified PE**

*Grade: 10, 11, 12*

*Prereq: Teacher Approval*

Unified PE is physical education which may be adapted or modified to address the individualized needs of youth who have gross motor developmental delays. Activity will be appropriate for the person with a disability as it is for a person without a disability. In addition to the PE class, students will also have opportunity to be involved with Special Olympics Unified Sports either as an athlete or partner. Special Olympics Unified Sports is a program that combines approximately equal numbers of Special Olympic athletes and athletes without intellectual disabilities (partners) on sports teams for training and competition. We will learn and participate in a variety of games and activities from team and individual sports, to low impact games that you can play the rest of your life.

## **Health**

**Health**

*Grade: 9 (0.5 credit), 10 (0.5 credit)*

*Prereq: None*

Our health course is designed to provide each student with the knowledge and skills necessary to achieve and maintain an optimal state of well-being. Students will learn that health is primarily a matter of personal responsibility. A wide variety of activities will be presented to aid our students in their decision-making process. Units of study include nutrition, exercise science, human anatomy and physiology, sex education (parent request to opt out for alternative assignment is available), environmental health, personal hygiene, healthy relationships, first aid and CPR, communicable and chronic diseases.

**Graduation Requirement**



## World Language

### **Spanish 1**

*Grade: 9, 10, 11, 12*

*Prereq: C or better in last English course or instructor approval*

Spanish 1 is a yearlong college-prep course that will begin to prepare you for travel abroad, communicating with relatives, and for the 21<sup>st</sup> century workplace. Emphasis is placed on the vocabulary and grammar needed for speaking, reading and writing in Spanish. You will gain a general knowledge and understanding of the history, geography, and culture of the Spanish speaking worlds. Students must pass with a C- or better to move on to Spanish 2. *A workbook fee is required for this course.*

### **Spanish 2**

*Grade: 10, 11, 12*

*Prereq: C or better in Spanish 1 or instructor approval*

Spanish 2 is a yearlong college-prep course that builds upon the vocabulary and grammar gained in Spanish 1. Students will learn about life in other countries as they develop their ability to communicate with other Spanish speakers. Emphasis is on communication in a variety of everyday situations. You will gain a deeper knowledge and understanding of the history, geography, and culture of the Spanish speaking worlds. *A workbook fee is required for this course.*

## Fine/Applied Arts

### Art

#### **Studio Art**

*Grade: 9, 10, 11, 12*

*Prereq: None*

This one-year course introduces students to the Elements of Art and Principles of Design while developing drawing skills, painting techniques, and 3-dimensional art. Studio experiences in the classroom will give students opportunities to experience a variety of media (pencil, pen, ink, charcoal, pastel, watercolor, and acrylic paint) while developing student's individual style and creative problem solving skills. Students will demonstrate their ability to respond, to analyze, and to interpret their own artwork and the work of others through discussions, critiques, and writings. We will explore a wide range of materials not previously used in Junior High class. Students are graded on their artistic process (including daily progress and time use in class), work completion, originality, and quality of the resulting artwork. Students are expected to adhere to a respectful, responsible, and safe working environment while in the art studio.

#### **Ceramics & Sculpture**

*Grade: 9, 10, 11, 12*

*Prereq: One year of Studio Art with a final grade of B or higher or instructor's approval.*

This is an introductory course to 3D art with an emphasis on 2D planning/sketching. Basic drawing skills are necessary to take this course.

This class is designed for students who have an interest in working with clay and other media to create three-dimensional works of art. During the first semester, you will have opportunities to make both functional as well as sculptural pieces out of clay using a variety of techniques. We will explore a wide range of hand building skills in this class.

During the second semester we will explore a variety of other media for building sculpture such as paper mache, wood, plaster, soapstone, found objects, and metal wire. Introduction to traditional, historical, and contemporary ceramic and sculptural arts will be incorporated into each of the lab experiences. Students are graded on their artistic process (including daily progress and time use in class), work completion, originality, and quality of the resulting artwork. Students are expected to adhere to a respectful, responsible, and safe working environment while in the art studio.

### **Advanced Studio Art**

*Grade: 10, 11, 12*

*Prereq: One year of Studio Art, B or higher in all art courses, **and** instructor's approval.*

*College Credit Option: Up to 3 credits through Clatsop Community College with a B or higher.*

This class is an upper level course offered for serious art students who would like to undertake greater artistic challenges through the process of visual problem solving and individual creative inquiry. Advanced Studio Art is a high level continuation of Studio Art, focusing on improving composition, technique, expression, inventiveness, originality, personal style, and conceptual skills in individual works of art.

Advanced students are expected to build upon previous knowledge by applying it to all studio work in the curriculum. The course will begin with an introduction to the basic techniques and approaches to 2-dimensional work with an emphasis on the development of perceptual skills and observational study. Assigned creative projects explore a variety of media, subject matter, and conceptual problems inspired by historical and contemporary artistic practice. Later coursework will include a focus on public art and contemporary issues in 2 and 3-dimensional design.

### **Yearbook**

*Grade: 9, 10, 11, 12*

*Prereq: Must fill out application*

Students will utilize appropriate software to technology to work effectively and assume responsibility for pictures, pages and deadlines in the publication of the student body yearbook.

## Business Education

### **Computer Applications**

*Grade: 9, 10, 11, 12*

*Prereq: None*

*College Credit Option: 10 Lower Columbia College credits or 12 Clatsop Community College credits\**

Students demonstrate creative thinking and problem solving, construct projects, and develop innovative products and processes using the Microsoft Office Suite. Excel, Word, PowerPoint, Publisher, and Access are covered. Students are also taught to keyboard by touch and given daily opportunities to perfect this important skill. HTML basics are taught in order to promote a student-created business. Given time, students will learn the basics of game development in Multimedia Fusion and 3-D drawing in Google Sketch up.

\*Entire year must be completed in order to gain college credit.

### **Computer Programming and Game Design**

*Grade: 10, 11, 12*

*Prereq: Computer Applications 1*

In this course, students are introduced to core computer programming concepts. The class is designed to expose students to the fundamentals of computer programming and data manipulation. They will use this knowledge to creatively solve problems as they produce original games and animations. The course emphasizes top down programming technique, proper syntax, event-oriented programming, graphic user interface design, sprite creation, and “end user” oriented programming. These skills are learned through student exposure to HTML5, CSS, Alice 3, Scratch, Python, Construct II (possibly) and Google Sketch up.

### **Accounting 1**

*Grade: 9, 10, 11, 12*

*Prereq: None*

*College Credit Option:*

*5 college credits: Lower Columbia College\**

*3 college credits: Clatsop Community College\**

This course is an introduction to the basic principles of financial accounting. It includes the accounting cycle for service and merchandising companies. General and special journals, subsidiary ledgers, accounting for cash, end-of-period operations, worksheets, entries, and financial statements will be covered. An emphasis is placed on using accounting principles to solve business problems, with an emphasis on procedure rather than theory. Accounting provides students with hands-on experience by integrating Microsoft Excel to complete authentic financial instruments. Students will also explore employment opportunities in the accounting field.

\*Entire year must be completed in order to gain college credit.

**Accounting 2**

*Grades: 10, 11, 12*

*Prereq: Accounting 1*

*College Credit Option:*

*3 college credits: Clatsop Community College\**

Accounting II is an advanced course. Areas that will be covered in this class involve performing accounting tasks in a typical merchandising environment. The course will stress problem solving with regard to such essential financial areas as inventory control, notes receivable/payable, distributing dividends, plant assets and depreciation, and accrued revenue and expenses. Financial statements and end-of-fiscal-period entries for a corporation will also be covered, with a focus on how they differ from a more traditional merchandising business.

\*Entire year must be completed in order to gain college credit.

**Marketing**

*Grades: 10, 11, 12*

*Prereq: Computer Applications*

*College Credit Option: 5 Lower Columbia College credits*

Students will understand principles and concepts of marketing, promotional strategies for marketing products, the selling process in sales environments and image, service and customer relations. They will demonstrate competency describing the relationship between profit and customer service, developing and presenting a promotional plan, applying marketing knowledge to a variety of business situations in order to solve problems creatively and by identifying customer buying behaviors.

## Music

### **Concert Band**

*Grade: 9, 10, 11, 12*

*Prereq: Ability to read music and at least two years prior experience on a band instrument.*

This class will focus on developing performance techniques for various musical styles. The band performs at concerts and music competitions. Band members are expected to play in the pep band home football and basketball games. All band members will need special performance attire for concerts. Attendance at performances is mandatory.

### **Concert Choir**

*Grade: 9, 10, 11, 12*

*Prereq: A desire to improve singing skills in a group setting.*

This class will focus on developing classical singing performance techniques from various musical periods. Emphasis will be placed on reading music, sound production and ensemble singing. Performances will include the winter and spring concerts, as well as league and district choral competitions. All choir members will need special performance attire for concerts. Attendance at all performances is mandatory.

## Vocational/Technical

### **Introduction to Agriculture, Food, and Natural Resources**

*Grade: 9, 10, 11, 12*

*Prereq: None*

The *Introduction to Agriculture, Food, and Natural Resources* course is intended to serve as the **introductory course** within all agricultural programs of study. The course is structured to enable all students to have a variety of experiences that will provide an overview of the fields of agricultural science and natural resources so that students may continue through a sequence of courses for the plant systems or natural resources pathway.

Student experiences will involve:

- communication
- the science of agriculture
- plants
- animals
- natural resources
- Mechanics.

While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Students are encouraged to become active members of

the student organization, FFA. FFA is considered inter-curricular, meaning it is an integral part of the course of study.

## **Horticulture**

*Grade: 9, 10, 11, 12*

*Prereq: Introduction to Agriculture, Food and Natural Resources*

In the horticulture course students explore hands-on projects and activities, to learn the characteristics of plant science and work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers and producers, and plant research specialists face in their respective careers.

Student experiences will involve:

- communication
- plant anatomy and physiology
- plant reproduction
- soils and hydroponics
- plant diseases
- crop production and marketing
- leadership development and entrepreneurial skills.

While surveying the opportunities available in horticulture, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning.

## **Forestry and Natural Resources**

*Grade: 9, 10, 11, 12*

*Prerequisites: Introduction to Agriculture, Food and Natural Resources*

In the Forestry and Natural Resources course students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts.

- soil and water conservation
- basic wildlife management
- environmental law and regulations and government agencies
- basic forestry
- renewable energy
- environmental systems

While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning.

**Machining**

Grade: 9, 10, 11, 12

Prereq: Contract

This class covers basic principles, procedures, and safety in using oxy-acetylene equipment. We will study basic principles, procedures, and safety in the use of welding equipment. We will be using mild steel rod, brazing rod, soldering, temperatures, metal testing, fluxes, expansion, contraction and dry cutting. Projects are assigned to give practice in making basic welds and develop student skills. Students must complete satisfactory vertical, flat, horizontal, and overhead welds using E6010.

**Animal Science**

*Grade: 10, 11, 12*

*Prereq: Introduction to Agriculture, Food and Natural Resources*

Students will attain academic skills and knowledge related to animal systems in regards to career opportunities, entry requirements, and industry standards. This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of animal science through field and laboratory experiences.



## **Elective Activities**

### **Leadership**

*Grade: 9, 10, 11, 12*

*Prereq: Required for elected ASB and class officers. All other student must apply.*

This course will develop skills of leadership including communication, organization, planning and goal setting. Students will explore leadership and leadership styles in order to identify their personal leadership style. By incorporating leadership skills, the student will improve the environment for the student body, staff and community relative to Rainier Jr/Sr High School.

### **Youth Transition Program**

*Grade: 10, 11, 12*

*Prereq: Teacher Approval*

The Youth Transition Program is designed to serve high school students with varying abilities who have potential for competitive employment after they leave high school. The program will provide on-the-job training, classroom instruction, assistance with transition planning and follow-up services to ensure a successful transition from school to community life.

### **Teacher Assistant**

*Grade: 11, 12*

*Prereq: On track for graduation and teacher approval*

The Teacher Assistant program is designed for the purpose of providing an experience for students who are genuinely interested in a career in education or aiding teacher/other staff members. Teacher Assistants will be expected to run errands/messages when asked, operate copy machines, be punctual, alphabetize, have good language/writing skills and miss no more than 5 absences per semester. An application must be signed by the coordinating teacher and turned in to the counseling office for placement

### **Exceptional Child**

*Grade: 9, 10, 11, 12 based on teacher recommendation and approval*

*Prereq: Teacher Recommendation*

Students enrolled in this class will learn about disabilities as they work with the Life Skills students (K-12 as assigned) and be expected to do the following:

- Maintain confidentiality related to students and individualized programs
- Lead by example: follow school rules, specifically, related to dress code, electronics, and behavior
- Model appropriate social interactions
- Participate in class activities and projects as assigned
- Complete an awareness project and help organize the Unified Dance