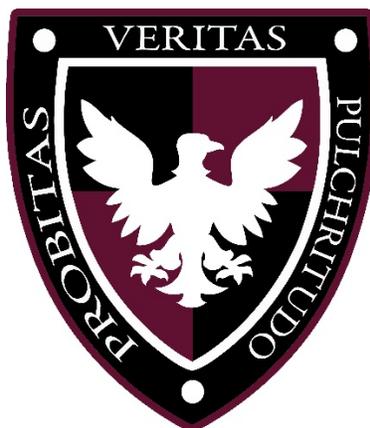


# **EAGLE RIDGE ACADEMY SCHOOL OF RHETORIC COURSE CATALOG**

Academic Year  
**2019-2020**





# TABLE OF CONTENTS

COLLEGE PREP COURSE OF STUDY.....	2
COLLEGE READINESS/ADMISSION REQUIREMENTS.....	3
AP and CIS COURSE WEIGHTING.....	4
SCHEDULE CHANGE POLICY.....	4
DROPPING A COURSE.....	4
PARTNERED LEARNING WITH NOVA CLASSICAL ACADEMY.....	5
PSEO CROWN COLLEGE HYBRID COURSES.....	5
SAMPLE FOUR YEAR PLAN SCHEDULES.....	6
HUMANITIES (ENGLISH/HISTORY).....	7
SINGLETONS.....	8
ART HISTORY.....	9
WORLD LANGUAGE.....	9
MATHEMATICS.....	11
SCIENCE.....	12
FINE ARTS.....	14
ELECTIVES.....	16

**College Preparatory Course of Study at Eagle Ridge Academy's School of Rhetoric**

**26 Credits Required for Graduation**

	University*	State of MN	Eagle Ridge Academy
English	4	4	4 (Humanities)
History	4	3-5	4 (Humanities)
Science	3 or 4	3	4
Math	3 or 4	3	4
World Language	2-4	-	4
Fine Arts	1	1	1
Art History	-	-	1
Healthy Living	-	1	0.5
Logic	-	-	0.5
Rhetoric	-	-	0.5
Eastern Thought	-	-	0.5
Economics	-	-	0.5
Electives	2	7**	1.5

\*Universities require an application along with standardized tests. The numbers here represent a general sampling of high school courses by typical university freshmen.

\*\*Several of Eagle Ridge Academy requirements count as electives by state standards, pushing students over the required state amount.

**College Readiness, College Admissions and  
Four-Year High School Course Plan**

College admissions requirements vary across all colleges, but they have similar criteria that they like to see in a student's high school transcripts upon their application in to college. **These criteria include rigor of courses taken, a grade point average of 2.5 or higher, and academic electives.** The rigor of the transcript is the most important of these three criteria. In addition, college admissions like to see student commitment to activities, clubs, and athletics, as well as leadership positions. Our college counselor meets with each student to ensure that they are taking steps to applying to colleges that meet their aspirations. As a high school student, if you have an idea of the types of schools you would like to go to, you can take steps now in your high school course planning. The following chart distinguishes schools by "types" and delineates for you the expectations that are typical or average for the freshmen who are admitted to their colleges.

Type of College	Admission Standards	Average ACT scores, Enrolled Freshmen, 2013-2014*	High School GPA Expectation	Typical ACT (36)/SAT in Math and Reading (1600)	AP Course/Exam Score Expectation
Highly Selective	Majority of freshmen in top 10% of their high school class	Ivy League-33 Vassar-31 Carleton-31 Davidson-30 Macalester-30	3.75	28+/1220+	4+ courses/ Score of 4 or 5 on exams
Selective	Majority of freshmen in top 25% of their high school class	UM-Twin Cities-27 Gustavus-27 St. Thomas-25 UM-Morris-25 UMD-24 UW-Eau Claire-24	3.5	24+/1110+ (ACT range 21-27)	3+ courses/ Score of 3, 4, 5 on exams
Traditional	Majority of freshmen in top 50% of their high school class	Winona State-23 Mankato State-22 UW-Stout-22 UW-River Falls-22 St. Cloud State-21 Bemidji-21	3.0	21+/990+ (ACT range 21-23)	Not Applicable
Open	All high school graduates are accepted	Century, Normandale Community College, St. Paul College, etc.	High School Diploma/GED	Accuplacer Test required for course placement (ACT/SAT scores could be substituted in some circumstances for the Accuplacer)	Not Applicable

The courses you take in high school can open doors to the types of colleges you can apply to. It is recommended that you take rigorous courses in which you can earn a B- or better and that fit a balanced schedule. Nova's school counselor can assist you with making these determinations.

**Information shown above is from the State of Minnesota Office of Higher Education.**

## **AP and CIS Course Weighting**

Starting with the Class of 2023, AP and CIS grades will carry an additional 1.0 to the weight of the grade. For instance, an A would be worth 5.0 instead of 4.0 and a C+ would be worth 3.3 instead of 2.3. Students whose graduating class is before 2023 receive .25 grade weighting.

## **Schedule Change Policy**

Classes were designed and teachers hired based upon your registration so our hope is that you were thoughtful about this decision.

Schedule corrections will only be considered for the following reasons:

1. The student did not meet the prerequisite for the course.
2. The student has already completed the course.
3. The academic level of the course is inappropriate.
4. The student is a senior who needs the course for graduation.

Schedule corrections WILL NOT be considered for any of the following reasons:

1. The student no longer wants to take a course that was picked during registration.
2. The student wants to move a course to a different hour.
3. The student wants a different teacher.

## **Dropping a Course**

Students should carefully plan with their parents/guardians, teachers, and counselor to avoid schedule changes and dropped courses. A course dropped after the first week of a class, for any reason not listed within the schedule change guidelines, will receive a grade of "W", and students must be able to maintain full-time enrollment. Full-time students must be enrolled in at least six academic courses each semester.

### **Partnered Learning Courses**

Nova Classical Academy and Eagle Ridge Academy are joining forces to provide our students the opportunity to take courses with traditionally low enrollments. A home school is designated to own the course and the other will participate via live-time technology, such as Zoom or Adobe Connect. Students at both sites will earn the same credit for the course upon completion.

For the 2019-2020 academic year, we will offer three classes; Greek 1, Greek 2, and Calculus BC. Nova will be the host school and ERA will be the participant school, joining in classes live time. The classes will take place during the school day, at a designated hour that works with both schools.

### **PSEO Crown College Hybrid Courses**

This program permits students to earn college credit while still in high school. Students from ERA can take classes in a hybrid format in which they meet at ERA for 3 hours face-to-face with a qualified Course Assistant. The rest of the weekly activities for classes are online and led by one of Crown's online faculty members. This option gives students the opportunity to get support from a familiar ERA teacher while taking a high-quality online course under the guidance of a credentialed faculty member from Crown. The courses are one semester in length, but are worth one full credit.

## Eagle Ridge Academy Sample Four-Year Plans

Credits: All year-long courses which a student passes earn the student one credit (1.0) and courses lasting only one semester earn the student half of a credit (0.5).

Sample Schedule #1	Grade 9	Grade 10	Grade 11	Grade 12
Humanities	Ancient World	Medieval World	Renaissance World	Modern World
Science	Chemistry	Biology	Physics	Anatomy
Math	Geometry	Algebra II	Precalculus	AP Calculus
World Language	Latin I	Latin II	Latin III	CIS Latin Prose
Fine Arts	Drawing	2D Studio Art	3D Studio Art	AP 2D Studio Art
Art History		Art History I	Art History II	
Healthy Living	Healthy Living			
Logic	Logic			
Rhetoric		Rhetoric		
Eastern Thought			Eastern Thought	
Economics				Economics
Electives	Composition	American Government	History of Theatre	Forensics

Sample Schedule #2	Grade 9	Grade 10	Grade 11	Grade 12
Humanities	Ancient World	Medieval World	Renaissance World	Modern World
Science	Chemistry	Biology	Physics	AP Chemistry
Math	Geometry	Algebra II	Functions	AP Statistics
World Language	Latin II	Latin III	Spanish I	Spanish II
Fine Arts	Concert Band	Printmaking	3D Studio Art	AP 3D Studio Art I
Art History		AP Art History		
Healthy Living	Healthy Living			
Logic	Logic			
Rhetoric		Rhetoric		
Eastern Thought			Eastern Thought	
Economics				Economics
Electives			Teacher Assistance	Personal Business Finance

## HUMANITIES (ENGLISH/HISTORY)

The Humane Letters (or Humanities) program at Eagle Ridge Academy (ERA) is perhaps the most distinctive feature of an ERA education. Successful completion of four years of Humane Letters (grades 9-12) is required of all ERA graduates. The Humane Letters program involves the serious and extensive study of the “Great Books” of the Western (Classical) Tradition. Students studying these works become familiar with many of the most important human efforts to capture what is true, good, and beautiful in the world around us and in ourselves. Specifically, the Humane Letters program pursues the important questions humans have asked regarding human nature itself, morality, politics, religion, and happiness.

We study these works (no textbooks!) in historical sequence beginning with the ancient Greeks in 9<sup>th</sup> grade and finishing in 12<sup>th</sup> grade with modern American and European history. Each course meets two hours per day using the “Socratic” seminar method of learning, which primarily involves daily discussion of the assigned readings, and calls for the very best in reading, thinking, and discussion from both student and teacher. These works are often difficult to read and understand, but with the guidance of the teacher and the consistent, serious, thoughtful participation of every student, everyone involved is brought to a much deeper understanding of the world, the human community, and especially of themselves—as intellectual, social, political, moral, psychological, even spiritual human beings. Clearly then, expectations for ERA Humane Letters students are high. We have found that students who love to read, discuss, think, and write about such issues are amply rewarded for their efforts.

The Humane Letters program is literature-based and is designed to meet the state of Minnesota graduation requirements for four years of both History and English. Thus, Humane Letters students will study the history of each relevant period and write formal essays and other written assignments. But as indicated above, students will also address issues regarding politics, ethics, economics, philosophy, religion, science, as well as other areas of human interest and discovery.

**9<sup>th</sup> Humane Letters: Foundations (2.0 credits)** This is a modified installment of the first year of Eagle Ridge Academy’s Humanities program. Using similar pedagogical techniques and a sampling of the same texts as its Humanities 9 counterpart, the Foundations course adjusts the pacing such that basic skills in writing, reading comprehension, and discussion can be addressed with greater deliberation and depth. Emphasis will be placed upon an extended treatment of select readings from course texts and structured guidance through basics of the writing process. Successful completion of Foundations does earn a full credit of the four required for the Humanities sequence.

**9<sup>th</sup> Humane Letters: The Ancient World (2.0 credits)** The first year of the Humane Letter seminar introduces students to the great texts, ideas, and events of the ancient world, specifically those of the Greek, Roman, and Hebrew cultures that form the foundation of Western civilization. Texts that students will read include Homer’s *Iliad* and *Odyssey*, Greek tragedies by Aeschylus and Sophocles, histories by Thucydides, Livy, and Polybius, philosophy texts of Plato, Aristotle, Cicero, and Lucretius, *The Aeneid* by Virgil, selections from the Hebrew Bible, and other works as time permits. The class employs the Socratic seminar method of learning, which involves daily discussion of the assigned readings. Students are also introduced to the formal analytical essay and its various modes of development.

**10<sup>th</sup> Humane Letters: The Medieval World (2.0 credits)** The second year of the Humane Letters seminar introduces the formation and early development of Europe, focusing on the history, culture, and literature of the medieval and Renaissance eras. Students typically read Boethius’ *Consolation of Philosophy*, *Beowulf* selections from Thomas Aquinas’ *Summa Theologiae*, Dante’s *Divine Comedy*, Chaucer’s *Canterbury Tales*,

Machiavelli's *The Prince*, Thomas More's *Utopia*, several plays by William Shakespeare, multiple primary sources, and other works as time permits. Students continue to develop their skills of formal essay writing and discussion.

**11th Humane Letters: The Enlightenment/Industry World (2.0 credits)** During their third year, students study great works of the Enlightenment, Industrial Age, and Romantic Era. The reading includes Shakespeare's *Macbeth*, Cervantes' *Don Quixote*, Milton's *Paradise Lost*, Austen's *Sense and Sensibility*, Shelley's *Frankenstein*, Goethe's *Faust*, Whitman's "Song of Myself," United States founding documents (i.e. The Declaration of Independence and The United States Constitution), as well as numerous other primary sources as time permits. Students continue their formal essay writing with a view toward mastery of the essay and development of critical/interpretive skills and rhetorical style.

**12th Humane Letters: The Modern World (2.0 credits)** In their final year, students will focus primarily on the emergence of modern Europe and America. Works to be read include: Dostoevsky's *Crime and Punishment*, Wilde's *The Picture of Dorian Gray*, World War I and World War II primary sources, Fitzgerald's *The Great Gatsby*, Camus' *The Stranger*, Huxley's *Brave New World*, 1950's and 1960's primary sources, Morrison's *Song of Solomon*, and other works as time permits. Students will complete the Senior Capstone Experience throughout second semester.

## SINGLETONS

**Logic: The Art of Reasoning (0.5 credit)** is one of the traditional liberal arts taught in ancient Greece. This course is designed to develop the students' reasoning and analytical skills so that their thinking, speaking, and writing become clearer, more orderly and, ultimately, more compelling. The course introduces students to various kinds of logical argumentation including an in depth study of syllogisms, and formal fallacies. As time permits, other topics such as informal fallacies are discussed.

**Healthy Living (0.5 credit)** is a semester course introduces health concepts and skills, and challenges students to apply these skills to develop a healthy lifestyle. Students will reflect on a principle centered philosophy for a life filled with values/virtue. Students will be challenged to achieve the Private Victory: The ability to take responsibility, earn independence, set and accomplish goals, and excel in personal/time management. Students will also be challenged to achieve the Public Victory: The ability to build relationships, to truly listen to others, become self-aware of their actions, collaborate, and problem solve for an effective win/win. To help us achieve these victories we need renewal. These renewal practices help us become the best version of ourselves. The focus is on the four dimensions of the Body, Mind, Heart, and Soul. Body - to exercise, eat nutritious meals, sleep well, and relax. Mind - to read, write, educate, and learn new skills. Heart - to build relationships, give service, and laugh. Soul - peaceful harmony, quality media, prayer, meditation, or time with nature. Health is for a lifetime. It starts here, but the rest is up to you.

**Rhetoric: The Art of Persuasion (0.5 credit)** **Prerequisite: Logic** is a formal discipline, developed in ancient Greece by those who sought to persuade others, especially in the realms of law and politics. Like logic, rhetoric is seen as indispensable to the formal training of a well-educated person who is able to engage others on the pressing matters of the day. This course is designed to develop the students' ability to analyze and evaluate examples of discourse as a result of reading, watching, and listening and to famous speeches and demonstrate the results of these examinations via public speech. Students also study logos, pathos, and ethos, and incorporate what they have learned into their own rhetorical presentations.

**Eastern Thought (0.5 credit)** is designed to introduce students to the origins, history, politics, philosophy, religion, geography, and culture of important and influential non-Western cultures and civilizations. Readings are drawn from a wide range of traditions, including Sumerian, Egyptian, Hindu, Zoroastrian, Buddhist, Taoist, Confucian, and Islamic texts and scriptures.

**Economics (0.5 credit)** introduces students to basic elements of the major economic theories. Students become familiar with the economic system of the United States and how it operates. They explore the roles of various components such as supply and demand, various types of firms, and fiscal and monetary policy. Students examine their roles as consumer, worker, investor and voting citizen. Topics of discussion include the comparative economic systems, globalization, and the impact of political and social decisions on the economy.

## ART HISTORY

**Art History I (0.5 credit)** is a required course covering the history of visual art from the roots of Western Civilization through the Golden Age of Greece and Rome, Medieval and Gothic Europe, to the Renaissance.

**Art History II (0.5 credit)** **Art History I is NOT a prerequisite.** This required course covers the history of visual art from the Early Renaissance through the High Renaissance; the Baroque period; Realism, Impressionism and countless other “-isms” of Modern Art.

**AP Art History (1.0 credit)** is an alternative to Art History I and II to satisfy the requirement. As stated by the College Board, this course should engage students at the same level as an introductory college art history survey. It involves critical thinking and should develop an understanding and knowledge of diverse historical and cultural contexts of architecture, sculpture, painting and other media. Students will examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. While visual analysis is a fundamental tool of the art historian, art history emphasizes understanding how and why works of art function in context, considering such issues as patronage, gender, and the functions and effects of works of art. Students should be good readers, writers, and be able to retain information without difficulty to be successful in this course.

## WORLD LANGUAGE

Eagle Ridge Academy values the study of foreign languages with an emphasis on Latin. Learning Latin develops an appreciation of the beauty and order of the language itself. It explores Roman history and culture, develops grammar and vocabulary skills in Latin and other languages, including English, develops an ability to more easily learn other languages, and develops overall analytical skills. All Eagle Ridge Academy high school students are required to successfully complete two credits of high school Latin as well as two additional credits in either Latin or Spanish.

**Latin I (1.0 credit)** is designed for students with little or no previous Latin experience. Emphasis lies in translating, working with vocabulary, and learning history and culture. Students begin the Cambridge Latin Course series, using Units 1 and 2.

**Latin II (1.0 credit)** **Prerequisite: Latin I** Emphasis lies in translating, working with vocabulary, and learning history and culture. Students continue the Cambridge Latin Course series using Unit 3.

**Latin III (1.0 credit) Prerequisite: Latin II** Students continue to develop their ability to read and understand Latin, to study aspects of Roman history and culture, and to study the distinctive features of the authors whose works we are reading. Students finish the Cambridge Latin Course series.

**Advanced Latin Poetry (1.0 credit) 2020-2021 Prerequisite: Latin III** This is a CIS (College in the Schools) concurrent enrollment course; students may earn 4 college credits through the University of Minnesota. Students further develop their translation skills by reading selections from Vergil's *Aeneid*. Students may take both the Advanced Latin prose and Advanced Latin poetry for credit.

**Advanced Latin Prose (1.0 credit) 2019-2020 Prerequisite: Latin III** This is a CIS (College in the Schools) concurrent enrollment course; students may earn 4 college credits through the University of Minnesota. Students further develop their translation skills by reading prose authors such as Caesar and Cicero. Students may take both the Advanced Latin prose and Advanced Latin poetry for credit.

**Classical Greek I (1.0 credit) Prerequisite: Students should have successfully completed at least three years of high school Latin and need instructor approval to participate.** This is a CIS (College in the Schools) concurrent enrollment course taught in partnership with Nova Academy. Students may earn 5 college credits through the University of Minnesota. This course is an introduction to the grammar and vocabulary of Classical Greek as written in Athens in the 5th and 4th centuries BCE. This course focuses on forms and simple constructions; students will read some simple, heavily adapted passages from ancient texts.

**Classical Greek II (1.0 credit) Prerequisite: Classical Greek I** This is a CIS (College in the Schools) concurrent enrollment course taught in partnership with Nova Academy. Students may earn 5 college credits through the University of Minnesota. This course is a continuation of Classical Greek I. This course focuses on more complex constructions including participles, clauses, and indirect discourse; students will read adapted passages from ancient texts.

**Spanish I (1.0 credit)** High School Spanish I students learn basic vocabulary and sentence structure in order to understand and communicate in the target language for everyday situations. Reading, writing, and listening skills are emphasized and cultural activities are included. Communicative skill development is achieved through a variety of activities and media.

**Spanish II (1.0 credit) Prerequisite: Spanish I** Spanish II expands on the grammar and vocabulary concepts learned in Spanish I. All four language modalities (Reading, Writing, Speaking, and Listening) are incorporated into weekly activities. Students will expand their cultural study through readings, reports, and use of media.

**Spanish III (1.0 credit) Prerequisite: Spanish II** This course will start with a review of the vocabulary and grammar concepts taught in Spanish I and II and then will expand into more advanced grammar concepts. There will be an emphasis placed on improving all four language modalities (Reading, Writing, Speaking, and Listening) as well as continued vocabulary expansion and introduction of additional verb tenses necessary for sight translation of Spanish texts. Students expand cultural understanding through readings, presentations, and exploration of traditional folk-lore and classical works from Spanish speaking countries. Students will be expected to participate primarily in Spanish for the majority of the class.

## MATHEMATICS

**Algebra: Linear and Quadratics (1.0 credit) Prerequisite: Algebra 1** ALQ includes topics typically addressed in Algebra I, as well as topics typically addressed in Algebra II, with particular emphasis on working with linear and quadratic equations and functions. Additional topics often include exponential, square root, polynomial, and rational functions, as well as data analysis and display methods.

**Algebra II (1.0 credit) Prerequisite: Geometry** Algebra II reviews linear functions and systems, providing a foundation for exploring quadratic, polynomial, exponential, logarithmic, rational and radical functions. Matrix methods are introduced, while trigonometry, probability, and statistics concepts are reinforced and extended. Graphing calculator and computer labs, explorations and investigations provide opportunity to refine mathematical modeling techniques. Real-world problems are addressed via a broad range of applications, including economics, science, and sports. Successful completion of Algebra II prepares students for both Precalculus and AP Statistics. This is a required course for graduation.

**AP Calculus AB (1.0 credit) Prerequisite: Precalculus** Calculus AB is primarily concerned with developing students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. The connections among these representations are highlighted. Students completing this course may qualify for college credit based on the College Board advanced placement test. A graphing calculator is required.

**AP Calculus BC (1.0 credit) Prerequisite: AP Calculus AB** AP Calculus BC is taught in partnership with Nova Academy. It is a college-level Calculus course primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. Students will not only learn the fundamentals of Calculus, but will also learn how to apply what they have learned in the field of physics, business, economics, biology, engineering, and probability. The course will cover the following main areas: 1) Functions, Graphs and Limits; 2) Derivatives; 3) Integrals; 4) Polynomial Approximations and Series. Emphasis will be placed on the development of better understanding of mathematical concepts and their applications, as well as on proficiency in problem solving, mathematical reasoning, and higher-order thinking. Extra-challenge and problem-solving exercises are drawn from the textbook; the history of mathematics is included where appropriate. The course will prepare all students' to become successful on the AP Calculus BC exam in May each year. Students will participate in various Calculus related seminars, work on different Calculus discovering projects, and tackle multivariable Calculus after the AP exam.

**AP Statistics (1.0 credit) Prerequisite: Algebra II** Students will develop analytical and critical thinking skills by describing data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences. Students completing this course may qualify for college credit based on the College Board advanced placement test. A graphing calculator is required.

**Functions (1.0 credit) Prerequisite: Algebra II** This yearlong course will provide a solid background in the areas of probability and statistics coupled with a review of essential algebraic concepts, with an emphasis in describing data, sampling, distribution, graphical representations, and probability. This course is intended to provide an alternative for students who wish to continue to take math and would prefer an option other than Precalculus or AP Calculus upon completion of Algebra II.

**Geometry (1.0 credit) Prerequisite: Pre-Algebra** Geometry includes all topics of a high school geometry course, including perspective, space, and dimension associated with practical and axiomatic geometry. Students learn how to apply and calculate measurements of angle lengths, perimeter, areas, and volumes. Geometry introduces students to trigonometry and transformations. Students use logic to create proofs and constructions and work with key geometry theorems and proofs. This is a required course for graduation.

**Precalculus (1.0 credit) Prerequisite: Algebra II** This course fully integrates topics from algebra, geometry, trigonometry, discrete mathematics, and mathematical analysis. Word problems are developed throughout the problem sets and become progressively more elaborate. With regular practice, students will be able to solve challenging problems such as rate problems and those involving abstract quantities. Conceptually oriented problems help prepare students for college entrance exams such as the ACT and SAT.

## SCIENCE

**Anatomy and Physiology (1.0 credit) Prerequisites: Chemistry and Biology** This year long course is recommended for students interested in pursuing college majors in health, life science, and physical education, or just having an interest in how the body works. It explores the essential principles of the anatomy (structure) and physiology (function) of the human body. Through lecture, lab, and discussion of the body systems, students will gain an understanding of the human body and how each system is integrated to maintain overall functioning of the body. Units will include the skeletal, muscular, and nervous systems, as well as the cardiovascular, respiratory, digestive, and urinary systems. Cats or fetal pig dissection is the culminating activity.

**AP Biology (1.0 credit) 2020-2021 Prerequisites: Chemistry and Biology** The primary emphasis in the AP Biology course is on developing an understanding of concepts rather than on memorizing terms and technical details. Essential to this conceptual understanding are a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. The major themes covered will be: science as a process, evolution, energy transfer, continuity and change, relationship of structure to function, regulation, interdependence in nature, and science, technology and society. Students completing this course may qualify for college credit based on the College Board advanced placement test.

**AP Chemistry (1.0 credit) Prerequisite: Chemistry** AP Chemistry is a college-level chemistry course which involves hands-on labs. Advanced concepts include atomic structure, bonding theories, nomenclature, mole concepts, kinetics, thermochemistry, stoichiometry, equilibrium, and acid based concepts.

**AP Physics (1.0 credit) Prerequisites: Chemistry, Biology, Algebra II, and current enrollment in Pre-Calculus or teacher approval.** AP Physics is an intensive, full study of introductory topics in physics including Newtonian mechanics, waves and optics, thermal and fluid physics, electricity and magnetism, and modern physics. The course will prepare students for taking the AP Physics exam. It will place a large emphasis on developing the scientific method through extensive and frequent laboratory experiences. The entirety of the AP Physics curriculum will be covered before the exam. We will spend about two weeks before the exam reviewing topics and practicing. We will then have about a month of time remaining after

the AP Physics exam, during which time we will decide as a class the direction of the remainder of the course. This could include studying topics such as relativity or completing an in-depth project. This (or regular Physics) is a required course for graduation.

**Astronomy I (0.5 credit) Prerequisite: Logic** This semester-long course is designed to introduce students to some of the key concepts of astronomy for understanding our own little part of the universe. We will begin with a broad look at some of the most fundamental laws from physics and chemistry that govern our knowledge. We will then look outward to the stars to reveal the incredible variation that we see in terms of stellar birth, life, and death. Our view of the night sky will follow, focusing on telescopes, celestial navigation, constellations, planets, comets, asteroids, the moon, and the like. We will get a chance to discover how other cultures have viewed and used the night sky since before written history. If time remains, we will conclude the semester with a look at the possibilities for life elsewhere in the universe and human survival of the evolution of space and time.

**Astronomy II (0.5 credit) Prerequisite: Logic** This semester-long course is intended to be taken either independently or as an extension of Astronomy 1. We will briefly review the fundamental laws of classical physics that shape our universe. We will then investigate the non-classical regime of cosmology including relativity, the stellar graveyard, quantum effects, the big bang theory, and the observable consequences of the aforementioned topics. We will also investigate the basics of telescopes and their capabilities. We will conclude the course with studying the limits of human capabilities of knowing and exploring the cosmos. This will include learning about the newest research being done in cosmology and prospects for technological development for travel to other parts of the universe.

**Biology (1.0 credit) Prerequisite: Chemistry** This class is designed to survey topics ranging from zoology, botany, and physiology of living systems; to the interaction of organisms in ecosystems. It will also prepare students for advanced biology classes if they wish to take them in later years. This course involves laboratory work and written lab reports. This is a course required by the state of Minnesota.

**Chemistry (1.0 credit)** Topics covered include: matter and energy, atomic structure, bonding, the periodic table, the mathematics of chemistry, kinetics and equilibrium, acid-base theories, redox and organic chemistry. Chemistry requires extensive laboratory work and written lab reports. This is a course required by the state of Minnesota.

**Introduction to Forensic Science (0.5 credit) Prerequisite: Successful completion of Chemistry and Biology.** This course is lab-intensive and experience based. Students will explore how science is applied to the law. Students will gain hands-on experience with how critical thinking and scientific problem solving produce evidence to solve crimes as well as non-criminal activities such as forgeries, structural failures, and mass destruction. Students will also be expected to write and communicate lab report results and conclusions effectively.

**Physics (1.0 credit) Prerequisites: Chemistry, Biology, and Algebra II** This course will teach the rules of nature, but emphasizes comprehension before computation. A conceptual way of looking at physics shapes the analytical thinking of all students. The concepts will be presented through reading assignments, lectures, demonstrations, videos, mathematics and graphing, hands-on lab work and written assignments. This (or AP Physics) is a required course for graduation.

## FINE ARTS

**AP Studio Art: 2D (1.0 credit) Prerequisites: 2D plus two additional art courses.** As stated by the College Board; The AP studio art portfolios are designed for students who are seriously interested in the practical experience of art. AP studio art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP studio art program consists of three portfolios — 2D design, 3D design and drawing — corresponding to the most common college foundation courses. 2D design will include: 5 actual works that demonstrate mastery of design in concept, composition and execution; 12 digital images; some may be details works describing an in-depth exploration of a particular 2D design concern; 12 digital images; 1 image each of 12 different works a variety of works demonstrating understanding of the principles of 2D design.

**AP Studio Art: 3D (1.0 credit) Prerequisite: 3D plus two additional art courses.** 3D design is a studio art course where students will design and implement three dimensional concepts. This is an intensive, product based course. In addition to multiple sculptures and working models, students will document their works, and create a digital portfolio. This class will prepare students to work three dimensionally in a variety of mediums, including clay, plaster, paper, wire, and more, and to develop ideas and maquettes for large scale sculpture and installations. Students will be evaluated on the breadth and depth of their portfolio, which will be submitted to the AP review board for approval of AP credit.

**Ceramics I (0.5 credit)** is semester long course is designed to explore basic hand building techniques in clay while learning technical skills needed in Ceramics II. Students will study and critique historical and contemporary artists' work to inform the creation of their own artwork. Emphasis is placed on the elements of art and design with a strong focus on form and texture. Students will explore a variety of clay hand building techniques that will include but are not limited to: coil, slabs, and extruding.

**Ceramics II (0.5 credit) Prerequisite: 3D Art.** This semester long course is designed to explore basic throwing techniques in clay using the potter's wheel. Students will study and critique historical and contemporary artists' work to inform the creation of their own artwork. Emphasis is placed on the elements of art and design with a strong focus on form and texture. Students will explore a variety of clay thrown forms that will include but are not limited to: cylinders, bowls, cups, mugs, plates, and stems.

**Choir (0.5 credit)** Eagle Ridge Chorale is a high school singing ensemble designed to help students develop a deeper awareness and appreciation of music theory, singing techniques, music history, and performance. The choir curriculum at Eagle Ridge Academy is an extension of the Core Knowledge Curriculum, as well as national and state level music learning standards. This course will explore choral music from many different viewpoints. Our studies will emphasize the application of music theory, examine choral literature from various historical time periods, teach proper singing technique, and establish performance methods. No audition is required.

**Concert Band (0.5 credit)** Concert Band emphasizes continued instrumental technique and music literacy skills. Concert Band includes both wind and percussion instruments. Performances include two concerts per year plus a performance at the Veteran's Day assembly. Students will be evaluated on music literacy skills and playing ability. This course may be repeated for credit. No audition is required for this course.

**Drawing (0.5 credit)** is a semester course designed to give students in-depth experience with different approaches to drawing a variety of subjects including the figure while also developing skills and

sensitivity to line, shape, color, value, texture, and composition. A variety of drawing media will be explored and mastered. Including, but not limited to: charcoal, graphite, conte crayon, India ink, chalk and oil pastel, and colored pencil.

**Printmaking (0.5 credit) Prerequisite: Drawing or 2D Studio Art** Printmaking is a semester long course designed to explore basic printmaking techniques and processes including but not limited to: monotype, collagraph, block printing, etching, screen printing, and photocopy printing. Students will study and critique historical and contemporary artists' work to inform the creation of their own artwork. Emphasis is placed on the elements and principals of art and design with a strong focus on composition, line quality, and color intensity.

**String Orchestra (0.5 credit)** No audition is required for this course. Students who participate in String Orchestra will further their musical skills through a large ensemble experience with other string players. Orchestra students play one of four instruments: violin, viola, cello, or double bass. Performances include two concerts per year plus a performance at graduation. Private lessons are not required to participate in the orchestra program, though are encouraged outside of school. Students will be evaluated on music literacy and playing ability. This course may be repeated for credit.

**2D Studio Art I (0.5 credit)** is semester long art course is designed to explore the basic concepts in drawing, painting, and printmaking while learning technical skills used in the 2D Studio Art 2 advanced course. Students will study and critique historical and contemporary artists' work to inform the creations of their own artwork. Emphasis is placed on building students' skills in sighting drawings and paintings and on the use of elements and the principals of art and design. Students will explore a variety of media that includes but is not limited to: graphite, India ink, charcoal, chalk pastel, colored pencil, acrylic paint, and printmaking inks.

**2D Studio Art II (0.5 credit) Prerequisites: 2D Studio Art plus one additional art course.** This semester long course is designed to explore advanced concepts in drawing and painting while building on technical skills learned in the 2D Studio I course. Students will study and critique historical and contemporary artists' work to inform the creation of their own work. Emphasis is placed on building students' skills increasingly complex media including but not limited to: oil pastel, oil paint, watercolor pencil, watercolor paint, and mixed media.

**3D Studio Art I (0.5 credit)** is semester long art course is designed to explore the basic concepts in sculpture while learning technical skills used in the 3D Studio II advanced course. Students will study and critique historical and contemporary artists' work to inform the creation of their own artwork. Emphasis is placed on the elements and principals of art and design with a strong focus on form and texture. Students will explore a wide variety of sculptural media that includes but is not limited to: clay, cardboard, wire, and found objects.

**3D Studio Art II (0.5 credit) Prerequisites: 3D Studio Art plus one additional art course.** This semester long course is designed to explore advanced concepts in sculpture while building on technical skills learned in the 3D Studio Art I course. Students will study and critique historical and contemporary artists' work to inform the creation of their own artwork. Emphasis is placed on problem solving and how to develop personal art while following general guidelines. Students will explore a variety of sculptural media that will include but is not limited to: foam, plaster, cardboard, and wire.

## ELECTIVES

**AP Computer Science (1.0 credit) Prerequisite: C or higher in Algebra II.** AP Computer Science embraces problem solving, hardware, algorithms and perspectives that help people utilize computers to solve real-world problems in everyday life. The AP Computer Science course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for development solutions that can scale up from small, simple problems to large, complex problems.

**American Government: The Founding (0.5 credit)** Through an exploration of primary documents and correspondence by the founders, this course will develop student understanding of the form and function of the government of the United States. Including but not limited to are: Federalist and anti-Federalist writings, letters between founders, notes of the Constitutional Convention, exploration of written work by John Locke, and if accessible Roman Republic writings or those of the earliest democracies in Greece/Rome. Also key points of contention such as the debates leading up to the Connecticut Compromise will be explored.

**Competitive Sports (0.5 credit) Prerequisite: Healthy Living** This course will offer a variety of sports that will allow students to further develop life-long passion for activity, teach self-discipline, instill the need for respect on and off the field/pitch/court, and encourage perseverance during physical activity. Students will discover the beauty of sport and develop a sense of the goodness that comes along with participating in sports competitively. Students will participate outside or in the gym for the entire semester in sports that may include basketball, badminton, soccer, flag football, broomball, snow shoeing, and boot hockey.

**Composition (0.5 credit)** English Composition is primarily a writing course. Students work on specific writing skills such as sentence structure/combining, paragraph development, punctuation, capitalization, grammar, and usage. The focus of the writing assignments is the assignments given in humanities. This is a highly recommended elective for all high school students.

**Creative Writing (0.5 credit) Prerequisite: Composition or by teacher recommendation.** This course is designed to give students exposure to the realm of creative writing. Students will analyze and create pieces from the following genres: poems, short stories, creative non-fiction, and entertaining drama. The final project of this course will be creating an all class anthology with a common theme.

**History of Theatre (0.5 credit)** is a semester long course is designed to give students exposure to the history of theatre. Students will study the key time periods and movements in the history of theatre. This study will be enriched through reading representative texts throughout the course of the semester.

**Introduction to Computer Science (1.0 credit)** is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including AP computer science principles and AP computer science courses.

**Personal Business Finance (1.0 credit)** During this PSEO hybrid course partnered with Crown College, students will practice techniques of responsible financial management including comprehension and use

of common financial terminology, budgeting, debt management, giving, earning, saving, tracking expenses, planning for retirement, developing personal financial plans, short and long-range goals, and specific strategies to reach those goals.

**Psychology (1.0 credit)** is a PSEO hybrid partnered with Crown College, introducing the discipline of psychology, including the principles, methods, vocabulary, and major theories in the study of human behavior. Students will recognize theories of personality, compare and contrast the relationships and concepts of the different schools of psychology, understand general biological reasons for psychological behavior, explain theories of learning, memory, motivation and intelligence, and prepare a foundation for further psychological disciplines.

**Strength and Conditioning (0.5 credit) Prerequisite: Healthy Living** This elective course is designed to allow students to take control of their physical wellness through personal fitness instead of sport. During this course, students will learn exercises that focus on strength, cardiovascular, and flexibility training and determine the benefits of attaining personal excellence. Student will be expected to develop and implement a personal exercise program over the course of the semester. Through planning and personal fitness, students will experience the benefits that are gained through dedication to living a healthy lifestyle.

**Teacher Assistance (0.5 credit)** Students of junior or senior standing will choose if they would like to assist a classroom teacher in the School of Grammar, School of Logic, or School of Rhetoric. Duties are dependent on age level of the students in the class.

**Yearbook (0.5 credit)** is a semester long course in where students receive guided instruction in the fundamentals of, photojournalism, graphic design, advertising, and organizational skills. Students will work with advanced technology, strengthen their analytical and problem-solving skills, and improve their communication skills. Please note: students will be expected to attend school events outside of the class period with the purpose of taking photos for the yearbook. Students do not need to provide their own cameras.

