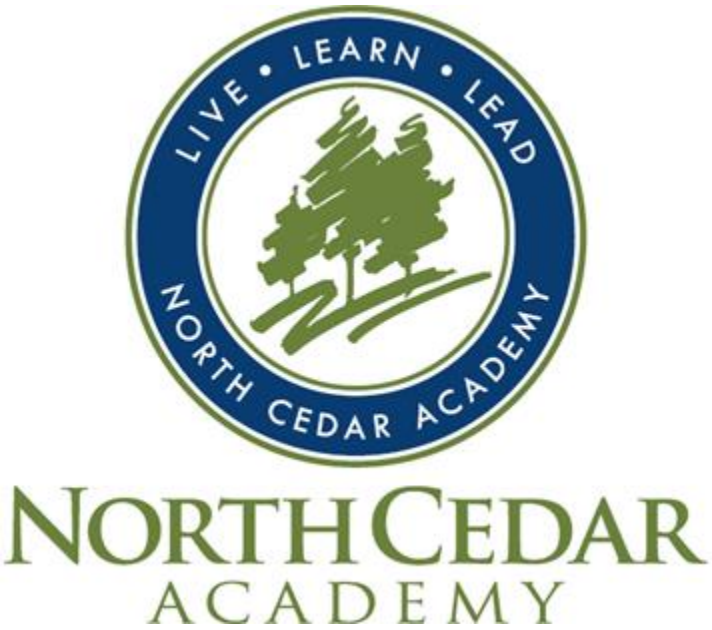
NORTH CEDAR ACADEMY



NORTH CEDAR
ACADEMY

2020-2021

Course Guide

"Live, Learn, Lead"

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Student Welcome

Dear Parents and Students:

Each day we see or hear of exciting new products, changes, procedures, or applications, employed in the world around us. A new paradigm exists in this Information Age. What was once the standard, is no longer acceptable. New innovations and approaches to problem solving are directly influencing our challenges and opportunities. Our students must be ready to meet these challenges as they enter the post-secondary world. Business and industry are looking for dedicated, critical thinkers who are able to adjust as situations arise. The challenges and changes they encounter will provide each of them with opportunities for growth and success. It is not enough to recognize the opportunities; action will be required which will be dependent upon preparation. This means, individuals have to be proactive in the pursuit of educational excellence. Expect and accept only the very best from one's efforts. Competition for life's opportunities will be intense and only those individuals who have prepared wisely will reap the most. History has shown time and again that there is a direct correlation between the quantity and quality of life's opportunities and the quality and effort of one's education. North Cedar Academy is committed to providing excellent educational opportunities for all our students. Remember, today's lost chances impair tomorrow's choices.

This Course Planning Guide provides helpful information necessary in making meaningful course selections. Each student has the opportunity to select courses to meet individual needs, to explore new information, to pursue interests, and to challenge limits. Preparation for life after high school is a goal directly related to the courses that students select throughout their 9-12 education. Students are encouraged to work with their North Cedar Academy staff to address questions related to the selection of a course, as our staff are valuable resources. Prior to selecting courses, students are asked to review their four-year plan and past academic achievements. This process is very important. Staff assignments and class sections are determined by the commitments from the students. NCA administration reserves the right to organize the master schedule of courses and may need to alter a student's course selection based on insufficient enrollment in a particular course. If a course selection is not offered, students will be enrolled in one of their alternate course selections.

The administration, faculty, and staff of North Cedar Academy are devoted professionals who care that each student receives a world-class education. We look forward to assisting each student on the road to success.

Sincerely,

North Cedar Academy Administration

NCA GRADUATION REQUIREMENTS

All students must complete the graduation requirements as established by the North Cedar Academy Board to be eligible for the North Cedar Academy Diploma. Students must obtain approval from the principal prior to enrolling in courses for credit which are not offered by North Cedar Academy. Students will not be permitted to participate in commencement exercises until all requirements and obligations are completed, (this includes fees, fines, and classroom materials and detention time owed). The following are the specific graduation requirements:

Academic Requirements for Graduation:

4.0 credits of English

0.5 credit of Public Speaking

3.0 credits of Mathematics

3.0 credits of Science

1.0 credit of Chemistry/Physical science
1.0 credit of Biology/Life sciences
1.0 credit of additional science

3.0 credits of Social Studies

1.0 credit of World History
1.0 credit of United States History
0.5 credit of United States Government
0.5 credit of additional social studies

1.0 credit of Fine and Performing Arts

0.5 credit of Health

1.0 credits of Physical Education

10.5 credits of Electives

Total Number of credits required for graduation = 26 credits

Non-Academic Requirements for Graduation:

20 hours of Community Service

Scheduling Information

COMMENCEMENT

In addition to completing the minimum requirements for a diploma, students must pay all fees and fines, return all books, school equipment, materials and complete any detention time owed. Students who have outstanding fees final transcript and diploma will be held until all remaining fees have been paid.

STUDENT BOOK/CLASS MATERIAL FEES:

In most classes students will be issued a class textbook and other class materials to be used by the student for the duration of the class. Students are responsible for returning all books and class materials issued to them at the end of the year in mint condition. If items returned are damaged, or not returned students will be billed for the replacement book and/or materials.

STUDENT SCHEDULES

All students must be scheduled for and maintain a minimum of seven courses. Students are not allowed to schedule more than two study halls per semester. Students are strongly encouraged to enroll in seven courses. In extreme cases, a waiver of the above rules may be issued by the Academic Dean or the Executive Director. Students may enroll as a Teacher or Administrative Assistant in lieu of one of their study halls, with the permission of the teacher and the Academic Dean. **ALL INTERNATIONAL STUDENTS MUST MAINTAIN A MINIMUM OF SEVEN CLASSES IN ORDER FOR THEIR VISA TO REMAIN IN FULL STATUS**.

COURSE WITHDRAWALS & SCHEDULE CHANGES

Students are encouraged to plan their schedules carefully. Selecting a course is a commitment on the part of the student to the teacher and school. Staff assignments and class sections are determined by the commitments from the students. Dropping classes is time consuming, expensive, and disruptive to the entire educational process. For these reasons and more, students are discouraged from dropping a course. Therefore, all course withdrawals will be refused unless there are extenuating circumstances which warrant a schedule change. The following reasons are examples which would warrant a scheduling change:
The student:

* failed a course which would affect the scheduling sequence.
* needs a course to meet graduation requirements.
* had scheduling or placement errors.
* had a schedule with class section balancing problems.
*change in college major, adding course rigor, no study hall.

All schedule change requests will be evaluated by the Academic Dean. Students have until the fifth day of each semester to make changes to their schedule without penalty. After this date, students will need to schedule a meeting with the Academic Dean and the teacher of the class they wish to drop. Students must have written parent permission to make any alterations to their schedule. Students who drop after the fifth day of the class will have a withdraw recorded on their transcript. Students are reminded they are required to enroll in and finish a MINIMUM of seven full credit courses each year. The minimum academic schedule each semester is seven courses.

Post-Secondary School Information

TECHNICAL COLLEGE ADMISSION

Technical college programs have admission standards and placement testing. Some popular programs have waiting lists for entry into them. Students are encouraged to apply early and seek advice from your NCA counselor as well as the college admissions office regarding your program options. Technical college preparation should include a comprehensive high school curriculum to better ensure success. English credits should reflect an emphasis in work-related writing skills.

Recommended preparatory coursework for Technical College Admissions:

COURSE	CREDITS
English	4
Math	2-3
Science	2-3
Social Studies	3
Tech Courses	3-4

UNIVERSITY OR COLLEGE ADMISSION

Most four-year colleges and universities have admission standards which include grade point average, class rank, standardized test scores (SAT/ACT), an English proficiency test (TOEFL/IELTS), and the student's high school transcript. Students are encouraged to apply early and seek advice from your NCA counselor or academic advisor as well as the college admissions office regarding your program or major options. College preparation should include a comprehensive or college prep high school curriculum to better ensure success. Students are encouraged to look at each schools' admissions requirements, as each school can vary. The list below is the minimum recommendation for most schools; not all.

Minimum recommended preparatory coursework for admissions to four-year colleges/universities:

COURSE	CREDITS
English	4
Math	3
Science	3
Social Studies	3
College Prep Electives	3-4
Foreign Language	2-3
Fine Arts	1

Students are encouraged to check for specific requirements from the post-secondary institution of their choice. Students are strongly encouraged to take the ACT or SAT Assessment Test including the writing component in April or June of their junior year. Student Services is always available to answer questions and help students plan for their future. *NCA graduates who have successfully completed their Associate's degree wanting to enroll into a University of Wisconsin 4 year school do NOT have to take an ACT or SAT for admission. Upon successful completion they are guaranteed acceptance into their university of choice provided they meet the academic standards for admission. **As a reminder NCA graduates are who participate in the UW-transfer program, will transfer as incoming junior not freshmen!**

NAVIANCE

North Cedar Academy utilizes Naviance. Naviance is a comprehensive college and career readiness solution that helps schools align student strengths and interests to postsecondary goals, improving student outcomes and connecting learning to life. Students are strongly encouraged to take advantage of this software program as they investigate their future plans. Students who need assistance with this should seek help from the College Counselor or Student Services Office.

COURSE DESCRIPTIONS

Art

DRAWING

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7325*	*None*

This course is for students who want to improve and explore different drawing techniques and skills. Students will learn various techniques and explore drawing fundamentals and how it is incorporated into the creative process. Students will do various pieces while exploring different mediums from charcoal to 3D drawings.

CERAMICS

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7345*	*None*

This introduction course provides students with an experience in clay. The course will cover various techniques in hand-building, wheel throwing, and tile making. Students will explore throwing functional ware on the Potter's wheel, coil method, slab construction, and sculpting. In addition, students will learn proper studio use and maintenance, and beginning glazing and firing techniques.

GRAPHIC DESIGN

Grades	*Credit*	*Course Number*	*Prerequisites*
9,10,11,12	*0.5*	*7330*	*None*

This course explores and engages students in the essential fundamentals and tools used by professionals in the business world today for effective visual communication. Topics of study include operating systems, vector vs. raster graphics, elements and principles of design, typography, and logo design. The central focus throughout this course will be on finding creative visual solutions to communication problems using technical skills.

INTRODUCTION TO THE FUNDAMENTALS OF 2D & 3D ART

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7315*	*None*

This course is for students who are just beginning their high school art experience. Students must be interested in improving their general art skills. This course will introduce students to the fundamentals of 2-D design and 3-D design. Students will investigate basic two-dimensional and three-dimensional aesthetic and design concepts through the use of a variety of mediums. Students will learn how to effectively and expressively apply the various Elements and Principles of Design, and will develop problem-solving skills to create abstract, non-objective and representational compositions through hands-on classroom projects. This class is designed to give students a solid foundation for further study.

PAINTING

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7340*	*None*

This course is for students who want to improve and explore different domains of painting. Students will learn various techniques, explore drawing fundamentals and learn how they are incorporated into the painting process. Students will do various painting pieces while exploring different mediums from water-colors to oil painting.

English & Literature

ADVANCED COMPOSITION

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*0.5*	*1350*	*English I, or instructor consent*

This course is intended to help students continue developing close reading, writing, and critical thinking skills as they prepare for advanced high school and college writing. Students will generate a variety of academic texts including a Research Proposal, Annotated Bibliography, Research Review, and a Research Argument Essay. Emphasis will be on *audience* and *purpose*, identifying credible research sources, planning, drafting, and revision, editing, and MLA citation format. ***Advanced Composition is strongly recommended for all college bound students and for students planning to participate in the UW Early Pathways program***.

SELECT SURVEY OF AMERICAN LITERATURE

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*0.5*	*1360*	*English I, English II or instructor consent*

This course will look at novels, short stories, poetry, drama, essays, and biographies of 3-5 American authors. The authors may be chosen by the instructor or the students. The survey will follow some theme or explore a specific context. The course will include analysis, discussion, research, and composition. The class is designed to develop an appreciation for American literary and study the events which have influenced American writers.

ENGLISH I

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10,11	*1.0*	*1000/1005*	*None*

English I is a reading-intensive writing course that introduces students to strategies for critical reading, personal, and academic writing. Students will read a variety of fiction and nonfiction and will learn strategies to help them write a variety of well-organized essays including personal, descriptive, creative, compare-contrast, process, and argumentative essay, as well as review the basics of grammar and mechanics. Additional goals include vocabulary building and raising rhetorical awareness. Assignments and course learning outcomes emphasize all aspects of the writing process from brainstorming, prewriting, drafting, revision, to final editing. English I prepares students to write in a variety of genres, and helps prepare them for more challenging reading, writing, and research tasks in English II.

ENGLISH II

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*1050/1055*	*English I or equivalency*

Students continue to hone critical thinking, reading, writing, and research skills through a variety of tasks including rhetorical analysis, synthesis, and argument. Readings will include both works of fiction and nonfiction, ranging from short pieces (articles, poetry, and short stories) to novels. Writers will learn to effectively support a central claim, or thesis, based on their *audience* and *purpose*. Students will also learn to evaluate credible textual and web-based research, use appropriate MLA citation, and apply ethical skills when writing to inform, persuade, or make a strong argument using credible research-based texts. Additional goals include vocabulary building and increased rhetorical awareness. English II is designed to help students become successful readers, writers, and researchers and prepare them for success in higher-level reading and writing-intensive courses

PUBLIC SPEAKING

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*1150*	*None*

Public Speaking is a practical course designed to offer the novice speaker a number of opportunities to deliver interesting, effective, and persuasive speeches. Emphasis is on effective topic selection, research, organization, preparation, and delivery, as well as evaluation of informative, persuasive, and special-occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussions with appropriate audiovisual support. Students should also demonstrate speaking, listening, and interpersonal skills necessary to be effective communicators in academic settings, the workplace, and the community.

English as a Second Language/English Language Learners

ENGLISH AS A SECOND LANGUAGE I (ESL)

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7900/7910*	*None, class can be repeated for credit*

This course is intended to help students who have a difficult time communicating and expressing themselves using English in an academic setting. Students will not only focus on individualized plans based on their needs, but also group discussions and activities to build skills such as: speaking and listening skills, pronunciation, vocabulary, and basic grammar. The objective of this course is to provide intensive English instruction in academic and conversational English in order to be successful in high school. Material will be chosen based on and dictated by the needs of the learners. Students enrolled in ESL I may be concurrently enrolled in ESL World History and ESL English, when offered. Material from these classes will be used to facilitate the speaking, listening, and vocabulary components of ESL I. As in all levels of ESL, students will take one TOEFL test at the beginning and end of each school year to measure their language progress. In addition to the TOEFL, they will also be given a placement interview by the ESL instructor to ensure they are placed correctly. *There is an additional fee associated with this class.*

ENGLISH AS A SECOND LANGUAGE II (ESL)

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7920/7925*	*None, class can be repeated for credit*

ESL II is designed for students who are at intermediate levels of English proficiency. This class will focus on building proficiency in reading and writing as well as continuing to develop listening and speaking skills. Pronunciation will also be a larger area of emphasis at this level as dictated by the needs of the learners. This class is focused on building the capacity of intermediate English learners to be successful not only in speaking but also in academic reading and writing. *There is an additional fee associated with this class.*

ENGLISH AS A SECOND LANGUAGE III (ESL)

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7930/7935*	*None*

ESL III is designed for students who are at advanced levels of English proficiency. Students enrolled within this class will focus on fine tuning all of their English language skills. There will be a heavy emphasis on accuracy, including spoken and written accuracy. In addition, students will be provided with opportunities to receive one on one support from the instructor to facilitate their success in content area classes. This may include studying for tests, improving note-taking skills, etc. Students enrolled within this class are expected to have a more advanced knowledge of English but may need more support within the academic setting. *There is an additional fee associated with this class.*

ENGLISH AS A SECOND LANGUAGE UNITED STATES HISTORY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*9200/9205*	*Concurrently enrolled in ESL I or ESL II*

This course delivers a general survey of United States history from colonial times through the end of the 20th century. This course will provide a global view of the significant and central people and events that shaped the United States of America as it exists today, with a focus on domestic, international, social, economic, and political issues and outcomes that influenced and contributed to the United States' emergence as a lasting, multi-century world power. Because this is an ESL course, instruction and reading will be heavily scaffolded to enable students to grasp content material as well as develop language skills. The pace of the class will be slower than a traditional US History class, covering fewer chapters throughout the school year.

Health and Wellness

HEALTH

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*8405*	*None*

The purpose of this course is to promote positive decision making and practices for healthy living in today's world. The health information presented and discussed throughout the semester will enable students to assume responsibility for their own health. Students will be expected to discuss issues with others and to use what they learn by practicing, applying, and acting in a responsible health-conscious manner. Some of the issues studied are goal setting, Red Cross C.P.R., first aid, nutrition, alcohol and drug abuse prevention, violence prevention, conflict resolution, human growth and development and effective communication.

FITNESS FOR LIFE

Grades	*Credit*	*Course Number*	*Prerequisites*

9, 10, 11, 12	*0.5*	*8100*	*None, class can be repeated for credit*

This class emphasizes personal fitness and goal setting. Activities will include speed workouts, weight-lifting, snowshoeing, cross-country skiing, step aerobics, hiking, biking, and jogging. With the help of instructor, students will set fitness goals and objectives. This course may be repeated for credit

Mathematics

GEOMETRY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*3650/3655*	*Algebra*

The Geometry course is designed to cover traditional high school geometry concepts. Topics covered in this course include: Basics of Geometry, Reasoning & Proofs, Parallel & Perpendicular Lines, Transformations, Congruent Triangles, Triangle Relationships, Quadrilaterals & Polygons, Similarity, Right Triangle Trigonometry, Circles, Volume/Area. The textbook to be used in this course is: *Geometry, 2015 Edition* by Larson and Boswell. Students are expected to take class notes and to complete all assigned work.

PRECALCULUS

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*3700/3705*	*Algebra, Geometry*

The Pre-Calculus course is designed to cover traditional high school advanced Algebra and Trigonometry concepts with an emphasis on preparation for a course in calculus. Many higher order mathematical topics are covered, such as, solving and graphing quadratics, higher degree polynomials, graphing trigonometric functions, proving and applying trigonometric identities, matrix operations and applications, and graphing parametric equations and polar coordinates. The textbook anticipated to be used in this course is: *Precalculus with Limits, 4th Edition* by Larson & Battaglia. Students are expected to take class notes and to complete all assigned work. *Graphing calculators are used in this course and students are encouraged to purchase their own.*

COLLEGE MATH CONCEPTS

Grades	*Credit*	*Course Number*	*Prerequisites*
11, 12	*1.0*	*3720/3725*	*Algebra, Geometry*

College Math Concepts is a course designed to prepare the student for the Quantitative Reasoning Requirements of Non-STEM majors. This class is designed for students who are pursuing non-STEM majors and will not be pursuing AP Calculus AB. The class will allow students to keep their math skills fresh and ready for college math placement testing. The class will investigate Quantitative Reasoning (QR), the process of forming conclusions, judgments or inferences from numerical information. QR include the recognition and construction of valid mathematical models; the analysis and manipulation of these models; the drawing of conclusions, predictions or inferences on the basis of this analysis; and the assessment of the reasonableness of these conclusions. The textbook anticipated to be used in this course is: "Using and Understanding Mathematics: A Quantitative Reasoning Approach", 6th Edition by Bennett and Briggs. The students are expected to take class notes and to complete all assigned work.

AP CALCULUS AB

Grades	*Credit*	*Course Number*	*Prerequisites*

11, 12	*1.0*	*3650/3655*	*Must have a B or higher in Precalculus or teacher consent*

The Advanced Placement Calculus course is designed to cover the traditional first year college calculus concepts. Calculus is generally offered to incoming college freshman majoring in engineering, mathematics, or science related fields. Topics covered provide students with the skills needed to solve a variety of advanced mathematical problems. Topics covered in this course include the formal definition of a limit, differentiation strategies, integrations techniques, and applications of derivatives & integrals. College credit may be earned upon by taking and achieving the necessary score on the Advanced Placement Calculus Exam. *Students will be expected (but not required) to take the AP Calculus AB Exam, which is given in May of the school year.* The textbook anticipated to be used in this course is: *Calculus, 11th Edition* by Larson & Edwards
. Students are expected to take class notes and to complete all assigned work. *Graphing calculators are used in this course and students are encouraged to purchase their own.*

AP STATISTICS

Grades	*Credit*	*Course Number*	*Prerequisites*
11, 12	*1.0*	*3220/3225*	*Must have a B or higher in Precalculus or teacher consent*

The Advanced Placement Statistics course is designed to cover the traditional introductory college statistical concepts. Statistics is generally offered to incoming college freshman majoring in engineering, mathematics, or science related fields. This course will provide students with the skills needed to solve a variety of statistical problems. Topics covered in this course include Descriptive Analysis & Presentation of Single Variable Data & Bi-Variate Data, Probability Distributions, Normal Distributions, Statistical Inferences, Linear Correlation & Regression Analysis, and Nonparametric Statistics. College credit may be earned upon by taking and achieving the necessary score on the Advanced Placement Statistics Exam. *Students will be expected (but not required) to take the AP Statistics Exam, which is given in May of the school year.* The textbook anticipated to be used in this course is: *The Practice of Statistics, 5th Edition* by Starnes, Tabor, Yates & Moore. The students are expected to take class notes and to complete all assigned work. *Graphing calculators are used in this course and students are encouraged to purchase their own.*

Performing Arts

BEGINNING BAND

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7600/7605*	*None, course may be repeated for credit*

This full-year class is for students who have never been in band but would like to learn to play a band instrument. Students may choose to study the flute, clarinet, saxophone, trumpet, trombone, baritone, tuba, or a percussion instrument. In order to enroll, students must rent or own a band instrument, which can be facilitated through the school. The goal of this class is for students to play instruments at a gradually increasing level of proficiency, made possible through regular practice. A performance will be presented at the conclusion of the semester, and at the end of the year.

INSTRUMENTAL ENSEMBLE

Grades	*Credit*	*Course Number*	*Prerequisites*

9, 10, 11, 12	*1.0*	*6550/6555*	*Previous knowledge of how to play an instrument, or teacher consent; course may be repeated for credit*

Instrumental Ensemble is a full-year performance-based course which offers students diverse musical experiences through the study and performance of music in a group setting. This class familiarizes members with various musical genres, including pop, jazz, classical, rock, and more. Traditional and non-traditional genres are studied. All instruments of the band are welcome, as well as rhythm section instruments, and string instruments. Throughout the year, the ensemble performs at assemblies and other school events such as formal concerts.

CONCERT CHOIR

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7761/7762*	*None, course may be repeated for credit*

Students in concert choir will develop basic vocal and musicianship skills including tone quality, range, intonation, balance, diction, and sight-reading skills. They will study and perform a wide range of choral literature. Students will also develop and experience the aesthetics of musical expression. Students will perform two or more concerts during the school year. Concert Choir meets both semesters.

PIANO I

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7721*	*None, course may be repeated for credit*

This course is designed to be an individualized approach to the piano keyboard for students with beginning to advanced piano skills. For the beginner pianist the course includes playing in five-finger patterns and triads in some major keys, scales and chord progressions in some major keys, legato and staccato technique, and basic note reading. Intermediate and advanced students will be expected to perform the above tasks, as well as learn additional major scales and chords, along with learning piano literature at their skill level. Performances for class or individually for the teacher are expected. Instruction will be individual (intermediate and advanced students) and small group (beginner level).

PIANO II

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7731*	*None, course may be repeated for credit*

This course is the same as Piano I, except that it is offered second semester and includes additional coursework for continuing students. Additional coursework for the beginner pianist includes continuation of major scales and chord progressions, harmonization of a given melody with a block chord accompaniment, playing various rhythms and performing simple sight reading tasks for two hands in treble and bass clef, as well as performing for a class. Intermediate and advanced students will be expected to perform the above tasks, as well as learn and memorize two pieces of literature at their skill level, and perform one or more pieces for an audience. Instruction will be individual (intermediate and advanced students) and small group (beginner level).

Science

ASTRONOMY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*4450*	*Enrolled in or completed Algebra*

Astronomy is one of the two basic divisions of Earth Science. As long as humans have walked the earth, they have gazed up at the stars and wondered. No other science speaks so powerfully to the commonality of human experience. Topics covered include the history of astronomy, constellations (composition and cultural background), the solar system, the Sun, the Moon, the inner and outer planets, comets, meteors, asteroids, the nature of light, the stars, the galaxies, the cosmos, the history and future of the universe, Kepler's laws, telescopes, observatories, and navigation of the night sky. The course includes several night-time star parties on the campus lawn, with and without the use of our high-tech telescope, as well as potential field trips to observatories and planetariums. This course requires proficiency in algebra, as the mathematical relationships relating to the nature of waves and light will be studied. Selected laboratory exercises will be used to emphasize and reinforce classroom theory and to promote analytical thinking through application of the scientific method. Offered intermittently based on interest and availability.

BIOLOGY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*4050/4055*	*Be enrolled in or have completed Algebra*

Biology is the fundamental life science course. This course provides an overview of the living world and how it functions. Areas of study include characteristics of life, basic biochemistry, the cell, photosynthesis, respiration, energy flow in living systems, genetics, evolution, plant and animal systems, and human biology. Students will perform hands-on laboratory experiments and projects while learning about the living world.

BOTANY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*4070*	*Be enrolled in or have completed Biology*

This course is an introduction to the biology of plants. It is recommended for students considering careers in agriculture, environmental science, forestry, or related fields. Topics include plant classification, morphology, anatomy, physiology, diversity, organic gardening, and evolutionary/ecological relationships. The course includes both laboratory and field exercises.

CHEMISTRY

Grades	*Credit*	*Course Number*	*Prerequisites*
9 ,10, 11, 12	*1.0*	*4150/4155*	*C or better in Algebra or instructor consent*

Chemistry is the study of matter and its interactions and is one of the physical sciences. It is one of the fundamental courses for a career in medicine, engineering, technology or any other scientific field. Topics covered include classification of matter, chemical and physical properties/changes, atomic theory, atomic structure, bonding, ions, isotopes, chemical reactions, moles, balancing equations, stoichiometry, thermodynamics, the periodic table, VSEPR theory, nuclear chemistry, solutions, acids/bases, and basic organic chemistry. This course requires proficiency in mathematics, as the mathematical relationships involving structure and chemical

changes will be studied. Laboratory exercises will be used to emphasize and reinforce classroom theory and to promote analytical thinking through application of the scientific method.

GENETICS

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*4072*	*Be enrolled in or have completed Biology*

This course delves deeply into the science of genetics. The course begins with a review of meiosis and Mendelian genetics, then covers non-Mendelian patterns of inheritance, such as incomplete dominance, codominance, sex-linked inheritance, polygenic inheritance, and more. Also included are karyotyping, types of mutations, genetic disorders, genetic treatments, GMOs, the ethics of genetic technology, and the human genome. Includes laboratory exercises. Class will be offered based on student interest.

PHYSICS

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*4250/4255*	*Algebra and enrolled in or completed Precalculus; or instructor consent*

Physics is the study of energy and motion. Topics covered include the scientific method, measurement, vectors, mechanics (kinematics, circular motion, Newton's Laws, forces, machines, simple harmonic motion, and fluid mechanics), gravitation, wave mechanics, heat, light, and sound. Physics is essential to those students who wish to pursue engineering careers or other math/science related fields. Periodic laboratory exercises will allow students to confirm and verify classroom theory. A sound mathematical background is assumed (students will be required to solve a variety of problems using algebra and basic trigonometry). Projects will include a Rube Goldberg Machine for the regional contest. *Note: Students preparing for careers in engineering, trade/technical occupations, or post-secondary science related fields are encouraged to take Physics prior to graduating high school.*

Social Studies

AP UNITED STATES GOVERNMENT AND POLITICS

Grades	*Credit*	*Course Number*	*Prerequisites*
11, 12	*1.0*	*2150/2155*	*Completed or concurrently enrolled in United States History or by instructor consent*

AP United States Government and Politics is a year-long course examining the history and workings of American government from the nation's founding through the present. Topics of study include: the American Constitution, interdependency and powers of the three branches of American government, Federalism as an institution (including the role of state governments), the making and execution of policy, and the American electoral process. The course will culminate with students taking the AP exam in May. *AP United States Government and Politics students are expected to take the AP exam given in May*.

CHINESE THOUGHTS

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*2700*	*None*

The major goal of this course is to expose students to major Chinese Thoughts of Confucianism, Daoism and Buddhism through reading and understanding the major Texts. Over the course, those finishing the course will have acquired the following skills: Basic knowledge and understanding of Confucianism, Daoism and Buddhism.

UNITED STATES HISTORY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*2000/2005*	*None*

This course delivers a general survey of United States history from the Age of Colonization through the end of the 20th century. This course will engage students with a global view of the significant and central people and events that shaped the United States of America as it exists today, with a focus on domestic, international, social, economic, and political issues and outcomes that influenced and contributed to the United States' existence as a lasting, multi-century world power.

UNITED STATES GOVERNMENT

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*2111*	*None*

This course examines American government from colonial times through the present. Students will learn about the nature of divided, republican government, and explore the United States' executive, legislative, and judicial branches on an interactive level. Topics of study include the Constitution, federalism, civil liberties, the electoral process, landmark Supreme Court cases, the making of foreign policy, and a closer look at the inner workings of state and local governments. Additionally, this course compares the American political system to others throughout the world. Current events are an integral part of this course.

WORLD HISTORY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*2080/2085*	*None*

This course engages students in an exploration of world history from the origins of civilization through the present. This course highlights the nature of changes inside global frameworks along with their causes and consequences. This course requires extensive outside reading.

World Languages & Literature

CHINESE I

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7200/7205*	*None*

This is the first-year introduction to the modern Chinese language. The major goal of this course is to introduce elementary Mandarin pronunciation, grammar and orthography (in both Romanized and character forms) to beginners with no exposure to the language. This course consists of lectures every week, plus recitation practices on a daily basis.

CHINESE II

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*7600/7605*	*Chinese I*

This course builds upon the fundamentals established in Chinese I. Students will expand their knowledge and application of Mandarin vocabulary, grammar and orthography (in both Romanized and character forms). Chinese II consists of lectures every week, plus recitation practices on a daily basis with Chinese native speakers. Over the course of the year, those who have completed the course will have acquired skills in the following areas: Conversation, Reading, Listening, and Character recognition.

CHINESE III

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*7610/7615*	*Chinese II*

This course builds upon the fundamentals and solid foundation established in Chinese I and II. Students will utilize their knowledge and application of Mandarin vocabulary, grammar and orthography (in both Romanized and character forms), to apply it to literature, and written concepts.

CHINESE POETRY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7450, 7455*	*Proficiency in the reading and writing of the Chinese language*

This is a one-year Chinese Poetry course. The major goal of this course is to learn through different themes (such as, Missing Home, Grieving over the Advent of Autumn, and Love, etc.) Poetry read will come from Chinese classical poems.

CHINESE DRAMA

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*		*Proficiency in the reading and writing of the Chinese language*

This is a one-semester Chinese Drama course. The major goal of this course is to expose students to different Chinese dramas, with a focus on Peking Opera and Kunqu Opera. The students will learn to sing (or perform) classical pieces in different roles.

SPANISH I

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*7000/7005*	*None*

This course stresses the mastery of basic conversational Spanish through the skills of listening, speaking, reading, and writing. Videos and materials from Latin America provide practice using the Spanish language. Students will also be exposed to Spanish culture.

SPANISH II

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*7020/7025*	*Spanish I*

This course reviews all grammatical forms studied in Spanish I. In addition, verb forms and a wider variety of vocabulary will be studied, along with the countries of Latin America. Increased emphasis will be placed on conversation, as well as expanding the student's writing in Spanish. Class is conducted mainly in Spanish.

SPANISH III

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*7030/7035*	*Spanish II*

This course reviews all grammatical forms and vocabulary studied in Spanish I and Spanish II. In addition, verb forms and a wider variety of vocabulary will be studied, along with the countries of Latin America. Increased emphasis will be placed on conversation, literature, and continuing to expand the student's ability to write in Spanish. Class is conducted in Spanish.

Courses Currently not Offered:

CLASSICAL MYTHOLOGY

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*0.5*	*1370*	*English I or by instructor consent*

Strange and intriguing tales of creation, love, hate, war, jealousy, and pride, tensions between good/evil, mythical beings, mythical journeys, and the spirit-world and afterlife have engrossed us for thousands of years. The primary focus in this course is classical mythology (ancient Greek and Roman gods/goddesses) and the cultural contexts in which they arose, as well as their enduring relevance in our modern world. In the final project for the course, students will explore/compare mythologies of the world (e.g., Norse, Chinese, African, Native American, and Polynesian). We will discover how myths address essential questions about the *human condition* while revealing our cultural values, examine the ways in which we shape myths and how we are shaped by myths, and learn how myths reflect humankind's innate desire to tell stories.

LITERATURE AND THE HUMAN EXPERIENCE

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*0.5*	*1340*	*English I or by instructor consent*

Students in Literature and the Human Experience will continue to sharpen communication skills (reading, writing, speaking, and listening) while exploring the genres of short story, poetry (and song), essay, and drama. Students will study both classical and modern literature, reading and writing about the literature they've read, and trying their hand at writing their own original pieces in the various genres. This course is designed to provide a solid base for future courses (both high school and college) in critical thinking and literary analysis as students learn to read, write, and speak about literature using correct terminology.

ENGLISH AS A SECOND LANGUAGE WORLD HISTORY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*9210/9215*	*Concurrently enrolled in ESL I*

This course surveys world history from the origins of civilization through the present. This course highlights the nature of changes inside global frameworks along with their causes and consequences. This course requires extensive outside reading, which will be heavily scaffolded. Instruction will be heavily focused on learning and utilizing vocabulary as it relates to World History. Students will not only develop a knowledge of World History, but also develop stronger language skills in all areas (reading, listening, speaking, writing). In addition, because this is an ESL course, pace will be slower and will cover fewer chapters than a traditional World History course.

ENGLISH AS A SECOND LANGUAGE ENGLISH

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*9100/9105*	*Concurrently enrolled in ESL I*

English as a second language English is a reading and writing course that introduces students to strategies for critical reading, personal writing, and academic writing. Students will read a variety of fiction and nonfiction and will learn strategies to help them write a variety of well-organized essays including personal, descriptive, compare-contrast, and process as well as review the basics of grammar and mechanics. An additional goal includes vocabulary building. Assignments and course learning outcomes emphasize all

aspects of the writing process including brainstorming, prewriting, drafting, revision, and final editing. English as a second language English prepares students to write in a variety of genres, and helps prepare them for more challenging reading, writing, and research tasks in future English classes.

MUSIC APPRECIATION I

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7741*	*None*

This course will be offered first semester. It is the study of basic music theory elements, along with a brief overview of the history of western music (Renaissance, Baroque, and Classical eras) and the corresponding music literature of those eras. Included in the theory portion will be basic note writing, rhythms, time signature, flats and sharps, basic elements of music, such as dynamics, tempo, and articulation, major scale construction, and key signatures. Intervals may also be included. Simple forms, such as rondo and waltz, will be studied.

MUSIC APPRECIATION II

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.5*	*7742*	*Music Theory I or teacher consent*

This course is a continuation of Music Appreciation I and will be offered second semester. Students will build upon the knowledge gained in Music Appreciation I and will continue their study of music theory, history of western music (romantic and modern eras), and the corresponding music literature of those eras. The theory portion will include the study of intervals, as well as the study of triads, standard chord progressions, introduction to minor scales, harmonization of a simple melody, and 3/8 and 6/8 time signature. Various forms, such as rondo, binary, and ternary forms will be studied.

THEATRE ARTS I

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.00*	*7780/7785*	*None, course may be repeated for credit*

This course is designed to introduce students to the various elements of the amazing world of theater and to encourage students in further participation. Theater Arts I will include various units of study including, but not limited to: scene study, monologue, musical theater, mime, rhyme, rap, improvisation, the writing of scenes or short plays, historical perspective, and more. Students will grow from reflecting and evaluating personal work and the work of others. Each semester will culminate in performance.

WORLD MUSIC

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.00*		*None*

This course will include the study of diverse music traditions from around the world through listening, viewing, the reading of scholarly articles, and the occasional playing of instruments and/or singing. Students will learn methods by which to evaluate musical compositions, arrangements, and performances. Individual and partner presentations on student-chosen particular types of music will be presented each quarter. Students who do not play an instrument or sing are entirely welcome to take this course!

AP BIOLOGY

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*4060/4065*	*Algebra, and a B or better in Biology, or teacher consent*

AP Biology is a rigorous life science course designed to prepare students for the AP exam for college credit. It is particularly recommended for anyone aspiring toward a career in medicine, biotechnology or any other scientific field. The course focuses on the four Big Ideas of Biology: Evolution, Use of Free Energy by Biological Systems, Information Storage/Retrieval/Transmission in Biological Systems, and Interaction of Biological Systems. Instruction will rely heavily on inquiry and critical thinking activities. This course requires proficiency in mathematics, as the mathematical relationships involving systems and their interactions will be studied. Laboratory exercises and formal lab write-up's will be used to emphasize and reinforce classroom theory and to promote analytical thinking through application of the scientific method. *AP Biology students are expected to take the AP exam given in May. Course offering depends on student interest and availability.*

AP CHEMISTRY

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*4160/4165*	*Must have a B or higher in Chemistry, and have completed or be concurrently enrolled in Precalculus or teacher consent*

AP Chemistry is a rigorous course designed to prepare students to take the AP Chemistry exam and for college or technical school, particularly for anyone aspiring toward a career in medicine, engineering, technology or any other scientific field. The course focuses on the six Big Ideas of Chemistry: Structure of Matter, Properties of Matter, Chemical Reactions, Rates of Reactions, Thermodynamics, and Equilibrium. Instruction will rely heavily on inquiry and critical thinking activities. This course requires proficiency in mathematics, as the mathematical relationships involving structure and chemical changes will be studied. Laboratory exercises will be used to emphasize and reinforce classroom theory and to promote analytical thinking through application of the scientific method. *AP Chemistry students are expected to take the AP exam given in May. Course offering depends on student interest and availability.*

AP ENVIRONMENTAL SCIENCE

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*1.0*	*4196/4199*	*Must have a B or higher in Biology or teacher consent*

The AP Environmental Science course is a rigorous science course designed to prepare students for taking the AP exam for college credit. The course stresses scientific principles and analysis and includes a laboratory component; as such, it is intended to enable students to undertake a more advanced study of topics in environmental science. Topics include: Environmental Problems (Causes and Sustainability), Environmental History, Matter and Energy, the Living World, Population, Land & Water Use, Earth Systems, Pollution, Earth Resources, Energy Resources/Consumption, Global Change, Ecological and Human Health, and other topics of interest. Laboratory exercises will be used to emphasize and reinforce classroom theory and to promote analytical thinking through application of the scientific method. This course also includes a study of organic growing practices, care of the school's organic gardens, and field work in outdoor settings. *AP Environmental Science students are expected to take the AP exam given in May. Course offering depends on student interest and availability.*

GEOLOGY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*1.0*	*4455*	*None*

This course offers a general survey of the rocks and minerals composing the earth, its surface features and the agents that form them, and the dynamic forces of plate tectonics. Specific topics include: Earth in the Solar System, Geologic Time & Dating, Plate Tectonics, Rock Types, the Rock Cycle, Minerals & Gemstones, Crystallization, Weathering & Erosion, Soils, Radioactive Dating, Earth's Interior, Historical Geology, Glaciers & Ice Ages, and other topics of interest. Selected laboratory exercises will be used to emphasize and reinforce classroom theory and to promote analytical thinking through application of the scientific method. Class will be offered based on student interest.

GEOGRAPHY

Grades	*Credit*	*Course Number*	*Prerequisites*
9, 10, 11, 12	*0.50*	*2850*	*None*

Geography is a yearlong course that focuses on the distribution, processes, and effects of human populations on the planet. Units of study include population, migration, culture, language, religion, ethnicity, political geography, economic development, industry, agriculture, and urban geography. Emphasis is placed on geographic models and their applications.

BROADFIELD PSYCHOLOGY

Grades	*Credit*	*Course Number*	*Prerequisites*
10, 11, 12	*0.5*	*2710*	*None*

This course investigates human behavior. Topics covered include memory, the brain, aging, child development, mental illness, intelligence, learning, and psychological research. Content is presented in a number of ways including lectures, video presentations, oral reports, and written projects**.**