

CHRISTIAN EDUCATION

Called to Believe [110011 11.001]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10

Sections: 1

Description: Called to Believe is designed to engage students to discuss the Christian faith through the lens of John's Gospel. The course will begin with an introduction to the gospels followed by an interactive dialogue and probing of the claims of Christ. Students will examine the relevancy those claims have toward history, culture and individuals. There will be a practical emphasis placed on how belief transforms relationships with God and others. Students will discuss weekly their Bible reading plan covering the four gospels. And lastly, in light of their readings, the course will examine Christ-honoring friendships, purity, dating, marriage, parenting, accountability, character, integrity, speech and actions.

Called to Know [110002 11.002]

Prerequisites: Called to Believe

Maximum Class Size: 25

Credits: 0.50

Grades: 10

Sections: 1

Description: Called to Know will first engage students to discern, compare and contrast contemporary culture's portrayal of the major tenets of the Christian faith and attributes of God with a Biblical basis. Secondly, through a Biblically-based lens, the course will address and students will discuss the common doubts and criticisms toward Christianity in the 21st century such as: The issues of pain and suffering; Atrocities in the name of Christianity; Hypocrisy; the identity of Christ; Miracles and the Supernatural; Faith and science; can there only be one way to God; and the reliability of Scripture. There will be a practical emphasis placed on knowing God through prayer, Scripture, and discipleship coupled with discussion and applications drawn from their Genesis-2 Chronicles Bible reading plan. Lastly, students will be challenged to know what they believe and why.

Called to Serve [110003 11.003]

Prerequisites: Called to Believe, Called to Know

Maximum Class Size: 25

Credits: 0.50

Grades: 11

Sections: 1

Description: Called to Serve is a hands-on course for students to examine and apply a Biblically-based servant-leadership model, which identifies and utilizes their strengths, gifts and abilities. Students will collaborate, develop and implement weekly service opportunities at King's Ridge, locally and globally. Within the servant leadership model, a practical emphasis will be placed on ministry, missions, evangelism, and giving. At the conclusion of this course, students will have completed an internship at King's Ridge, a local community service portfolio, a global grant initiative and will have read, discussed and applied servant leadership principles from their Isaiah-Malachi Bible reading plan.

Chapel Leadership [111002 11.CE002]

Prerequisites: Teacher Approval, Called to Believe, Called to Know, Called to Serve

Maximum Class Size: 25

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: The class will incorporate preparation for High School Chapel, music, content, programming and presentation. Also, special events (i.e. Christmas at the Ridge), mission trips, retreats, etc. This is not an optional study hall and attendance is required. This class will be a Christian Life credited course that will be taught by Robert Vore, Instrumental Arts Teacher, and Callan Sims, Christian Life Associate.

Special Note: Grades 9, 10, 12 may use this as an elective, not a substitute for the grade level CE course. Grade 11 may substitute for Called to Serve.

Faith & Culture [110004 11.004]

Prerequisites: Called to Believe, Called to Know, Called to Serve

Maximum Class Size: 25

Credits: 0.50

Grades: 12

Sections: 1

Description: Faith and Culture in the 21st century will examine the predominant worldviews of the 21st century set in today's cultural context of secularization and pluralism. Students will have an understanding of a coherent Biblical worldview, will begin to develop and articulate their own personal worldview and be able to speak into the prevalent contemporary issues of today. The course will include an in depth study of the book of Romans and a Bible reading plan that surveys the Epistles. Lastly, the course will conclude with a charge as that relates to the school mission and vision statements, leadership, service, involvement in the local church and body of Christ, making a mark on culture, gratitude, worship, excellence in work, and perseverance.

ELECTIVES

AP Computer Science A [114710 11.47100]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11, 12

Sections: 1

Description: Computer science embraces problem solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. As the study of computer science is evolving, the careful design of the AP Computer Science A course and exam continues to strive to engage a diverse student population, including female and underrepresented students, with the rigorous and rewarding concepts of computer science. Students who take the AP Computer Science A course and exam are well-prepared to continue their study of computer science and its integration into a wide array of computing and STEM-related fields. The AP Computer Science A curriculum provides resources, such as application-related labs, that connect with students with diverse interests. The course is engaging and underscores the importance of communicating solutions appropriately and in ways that are relevant to current societal needs. Thus, a well-designed, modern AP Computer Science A course can help address traditional issues of equity, access, and broadening participation in computing while providing a strong and engaging introduction to fundamental areas of the discipline. This 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 also emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CSI courses in colleges and universities. Some colleges and universities may organize their curricula in alternative ways, so that the topics of the AP Computer Science A course are spread over several college courses, with other topics from computer science interspersed.

Debate [700082 KR.0082]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: This semester course provides instruction and practice in the art of public speaking with an emphasis on debate. Students train to compete in tournaments in the monthly events of Atlanta Urban Debate League (fall), or craft their own policy statement, research and defend it, and present a formal debate in front of the high school student body (spring). Most of the course focuses on the in-class debating of major political and ethical issues. Students are taught research skills, case-writing, rebuttals, cross-examination skills, analytic thinking, and political and moral philosophy. Students are required to participate in all competitions to which they are assigned with exceptions given on a case-by-case basis.

Internship [100100 10.0100]

Prerequisites: Teacher Approval

Maximum Class Size: 25

Credits: 0.50

Grades: 12

Sections: 1

Description: Internship with HS teacher

Lunch Study Hall [800010 00.LnchSH]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Public Speaking [700083 KR.PS83]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: The primary purpose of Public Speaking is to prepare students to deliver a variety of well-prepared presentations confidently and in a way that resonates with the audience. Students will learn the methods of preparing and delivering the following types of speeches: Informative; Persuasive; Extemporaneous; Small Groups; Panel and Symposiums; Declamations; Homilies; Interviews; and Special Occasion speeches such as introductions, award recipients, eulogies and commemorative. The secondary

purpose is to prepare high school students to articulate and communicate successfully in college level classes, job interviews, service ventures, community and global initiatives and the workplace.

Study Hall [800000 00.SH]

Prerequisites: None
Maximum Class Size: 25
Credits: 0.50
Grades: 9, 10, 11, 12
Sections: 1

Study Hall 2nd [802000 02.HS]

Prerequisites: None
Maximum Class Size: 25
Credits: 0.50
Grades: 9, 10, 11, 12
Sections: 1

ENGLISH

AP Literature [230650 23.065]

Prerequisites: Honors British Literature or CPBL with an 'A' Average
Maximum Class Size: 25
Credits: 1.00
Grades: 12
Sections: 1

Description: The College Board defines AP English Literature and Composition as a college-level course which "engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone." To prepare for the AP English exam in May, students will analyze major pieces from various genres and literary periods, write expository, analytical, and persuasive essays, and refine their understanding of literary and rhetorical devices. In addition to poetry and short fiction, students will read the following major works: *Oedipus Rex*, *Tartuffe*, *Wuthering Heights*, *The Awakening*, *Great Expectations*, *A Doll's House*, *Hamlet*, *Brave New World*, *Things Fall Apart*, *The Road*, *The Poisonwood Bible*, and *Crime and Punishment*.

CP American Literature [230501 23.0501]

Prerequisite: Literary Genres
Maximum Class Size: 25
Credits: 1.00
Grades: 10, 11
Sections: 1

Description: Tenth grade English is devoted to the chronological study of American literature from the Puritan to Postmodern periods, and an important objective of the course is to introduce students to the connection between history and literature. Major works to be studied include *The Crucible*, *The Scarlet Letter*, *Huckleberry Finn*, *The Great Gatsby*, and *The Catcher in the Rye*. The primary focus of the course is on augmenting students' critical reading and writing skills. All assigned essays will stem from the works read

in class; students will use quotations from the texts to persuade, analyze, compare, and contrast. During 3rd quarter, students will write a formal research paper using MLA documentation.

CP British Literature [230512 23.0512]

Prerequisites: CP American Literature

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Beginning with the Anglo-Saxons and culminating with the 20th century, eleventh grade English is a survey of British literature. Works will be studied both as products of historical periods as well as works of literary art. Major pieces to be studied include *Beowulf*, *The Canterbury Tales*, *Paradise Lost*, *Macbeth*, *Pride and Prejudice*, and *The Importance of Being Earnest*. This year, students will refine their use of language and hone their skills in literary analysis as they write persuasive, expository, comparison, and research essays.

CP Literary Genres [230610 23.061]

Prerequisites: 8th English

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: Students will analyze the unique characteristics of literary genres including poetry, the short story, legends, nonfiction, drama, and the novel. Major works to be studied include *Julius Caesar*, *Antigone*, *A Separate Peace*, *Fahrenheit 451* as well as the Arthurian legend. Strong emphasis will be placed on critical reading and analytical writing, and students will write persuasive, comparative, narrative, and expository essays. Additionally, students will complete a research essay employing MLA documentation.

CP World Literature [230621 23.0621]

Prerequisites: CP British Literature

Maximum Class Size: 25

Credits: 1.00

Grades: 12

Sections: 1

Description: World Literature prepares students for the reading and writing that will be expected at the collegiate level. Major works to be studied are *1984*, *Brave New World*, *Oedipus Rex*, *Allegory of the Cave*, *The Screwtape Letters*, *Things Fall Apart*, *The Color of Water*, *The Metamorphosis*, *Night*, and *A Doll's House*. In addition, the class will examine world poetry and short stories. After each unit of study, students will write literary analysis essays of varying length using secondary sources.

ESL English American Literature (Puritan to Post-Modern Period) [239200 23.92]

Prerequisites: Literary Genres; Teacher Recommendation with Academic Dean/Principal Approval

Maximum Class Size: 25

Credits: 1.00

Grades: 10

Sections: 1

Description: In this course, English language learners discover how to use and extend their vocabulary, grammar, and communication skills more effectively for academic purposes. Students attend mainstream classes and are provided with English language support as needed. This course is similar to a mainstream American Literature course in that students analyze classic literary works, and learn to write multi-draft

essays on related literary topics. Students also participate in whole class and small group discussions with other English speaking classmates. Major works to be studied are *The Crucible*, *The Scarlet Letter*, *The Adventures of Huckleberry Finn*, *The Great Gatsby*, and *The Catcher in the Rye*. During the third quarter, students will write a formal research paper using MLA format.

ESL English British Literature (Anglo-Saxon to Twentieth Century) [239300 23.93]

Prerequisites: American Literature; Teacher Recommendation with Academic Dean/Principal Approval

Maximum Class Size: 25

Credits: 1.00

Grades: 11

Sections: 1

Description: In this course, English language learners discover how to use and extend their vocabulary, grammar, and communication skills more effectively for academic purposes. Students attend mainstream classes and are provided with English language support as needed. This course is similar to a mainstream World Literature course in that students analyze classic literary works, and learn to write multi-draft essays on related literary topics. Students also participate in whole class and small group discussions with other English speaking classmates. Major works to be studied are *Oedipus Rex*, *Allegory of the Cave*, *1984*, *Brave New World*, *The Screwtape Letters*, *Things Fall Apart*, *The Metamorphosis*, *Night*, and *A Doll's House*. After each unit of study, students will write a literary analysis essays of varying length using secondary sources.

ESL English 9 Literary Genres

Prerequisites: Teacher Recommendation with Academic Dean/Principal Approval

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: In this course, English language learners discover how to use and extend their vocabulary, grammar, and communication skills more effectively for academic purposes. Students attend mainstream classes and are provided with English language support as needed. This course is similar to a mainstream Literary Genres course in that students analyze the unique characteristics of literary genres including poetry, the short story, legends, nonfiction, drama and the novel. Students also participate in whole class and small group discussions with other English speaking classmates. Major works to be studied are *Julius Caesar*, *Antigone*, *A Separate Peace*, *Fahrenheit 451*, as well as the Arthurian legend. Strong emphasis will be placed on critical reading and analytical writing, and students will write persuasive, comparative, narrative, and expository essays. Students will also be required to write a research essay using MLA format.

ESL English World Literature [239400 23.94]

Prerequisites: British Literature; Teacher Recommendation with Academic Dean/Principal Approval

Maximum Class Size: 25

Credits: 1.00

Grades: 12

Sections: 1

Description: In this course, English language learners discover how to use and extend their vocabulary, grammar, and communication skills more effectively for academic purposes. Students attend mainstream classes and are provided with English language support as needed. This course is similar to a mainstream World Literature course in that students analyze classic literary works, and learn to write multi-draft essays on related literary topics. Students also participate in whole class and small group discussions with other English speaking classmates. Major works to be studied are *Oedipus Rex*, *Allegory of the Cave*, *1984*, *Brave New World*, *The Screwtape Letters*, *Things Fall Apart*, *The Metamorphosis*, *Night*, and *A Doll's House*. After each unit of study, students will write a literary analysis essays of varying length using secondary sources.

Honors American Literature [230502 23.0502]

Prerequisites: Honors Literary Genres or CPLG with an 'A' Average

Maximum Class Size: 25

Credits: 1.00

Grades: 10

Sections: 1

Description: In addition to the standard tenth grade English course requirements and in place of *The Catcher in the Rye*, honors students will study *Ethan Frome* and *Anthem*. Also, there will be more opportunities for students to conduct research on major authors and the historical periods from which literary pieces come.

Honors British Literature [230520 23.052]

Prerequisites: Honors American Literature or CPAL with an 'A' Average

Maximum Class Size: 25

Credits: 1.00

Grades: 11

Sections: 1

Description: Beginning with the Anglo-Saxons and culminating with the 20th century, eleventh grade English is a survey of British literature. Works will be studied both as products of historical periods as well as works of literary art. Major pieces to be studied include *Beowulf*, *The Canterbury Tales*, *Paradise Lost*, *Macbeth*, *Frankenstein*, *Pride and Prejudice* and *Heart of Darkness*, and *The Importance of Being Earnest*. This year, students will refine their use of language and hone their skills in literary analysis as they write persuasive, expository, comparison, and research essays.

Honors Literary Genres [230611 23.0611]

Prerequisites: Honors 8th English

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: In addition to the standard ninth grade English course requirements, honors students will read *A Tale of Two Cities* and conduct additional research on novels to be studied.

FINE ARTS

Beats [700200 KR.BD200]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Robert Vore, percussionist and instrumental arts teacher, will be leading this comprehensive semester of exploring the basics of various aspects of percussion, including snare drum, mallet instruments, drum set, and more. No experience required. One semester course.

Ceramics I [700301 KR.301]

Prerequisites: Introduction to Art or any art course taken in high school prior to this year with teacher permission.

Maximum Class Size: 15

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: Ceramics introduces and develops fundamental hand building techniques by way of coils, pinch pots and slab methods. Both functional clay pieces and decorative are studied and produced within this one semester course. Additionally, students will learn the basics of throwing on the wheel, glazing and firing their clay work. Students may take many levels of this course with development of challenges in building and glazing techniques. This is a one semester course. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Ceramics II [700302 KR.302]

Prerequisites: Introduction to Art, Ceramics I, or any art course taken in high school prior to this year with teacher permission

Maximum Class Size: 25

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: Students may take many levels of this course with development of challenges in building and glazing techniques. This is a one semester course. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Ceramics III [700303 KR.303]

Prerequisites: Introduction to Art, Art I, Ceramics II, or any art course taken in high school prior to this class with teacher permission.

Maximum Class Size: 25

Credits: 0.50

Grades: 11, 12

Sections: 1

Description: Students may take many levels of this course with development of challenges in building and glazing techniques. This is a one semester course. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Ceramics IV [700304 KR.304]

Prerequisites: Introduction to Art, Art I, Ceramics III, or any art course taken in high school prior to this class with teacher permission.

Maximum Class Size: 25

Credits: 0.50

Grades: 11, 12

Sections: 1

Description: Students may take many levels of this course with development of challenges in building and glazing techniques. This is a one semester course. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Drawing & Painting I [700111 KR.D111]

Prerequisites: Introduction to Art or any course taken in high school prior to this year with teacher permission.

Maximum Class Size: 20

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Descriptions: Drawing and Painting introduces and develops fundamental painting skills and continues to strengthen composition and drawing skills using both classical and contemporary methods. The course includes studies in value sensitivity and a wide range of media and techniques. Art history, criticism, and aesthetics are incorporated with studio production of drawing and painting. Students may take additional drawing and painting classes throughout their high school career to develop their skills. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Drawing & Painting II [700112 KR.D112]

Prerequisites: Drawing & Painting I

Maximum Class Size: 20

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: Students may take additional drawing and painting classes throughout their high school career to develop their skills. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Introduction to Art [701101 KR.101]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10

Sections: 1

Description: Drawing and Painting introduces and develops fundamental painting skills and continues to strengthen composition and drawing skills using both classical and contemporary methods. The course includes studies in value sensitivity and a wide range of media and techniques. Art history, criticism, and aesthetics are incorporated with studio production of drawing and painting. Students may take additional drawing and painting classes throughout their high school career to develop their skills. A \$20 Lab Materials Fee will be deducted from FACTS account with this course.

Musical Theatre [700101 KR.TH101]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: The purpose of this course is to produce the high school musical production in the fall. Students interested in taking this course will audition for roles at the beginning of the fall semester, and all students who accept a major role will be required to take this course. This course includes One-Act Play Competition and 3 performances in November. This is a one semester class in the fall.

Sculpture & Design I [700411 KR.411]

Prerequisites: Introduction to Art

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Sculpture introduces and develops the 3-dimensional world of art to the students. Students will study design in both Art history and contemporary artistic movements. Students will work with many media both large and small in order to experiment with the fundamentals of art. Students may take several

courses of sculpture in order to explore more complex designs and methods. A \$20 Lab Materials Fee will be deducted from FACTS account for this one semester course.

Sculpture & Design II [700511KR.511]

Prerequisites: Introduction to Art, Sculpture & Design I, or any art course taken in high school prior to this class with teacher permission.

Maximum Class Size: 25

Credits: 0.50

Grades: 10, 11, 12

Sections: 1

Description: Students may take several courses of sculpture in order to explore more complex designs and methods. A \$20 Lab Materials Fee will be deducted from FACTS account for this one semester course.

Symphonic Band & Drumline [701111 KR.B111]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11, 12

Sections: 1

Description: Band and Drumline will be combined to launch a new focus in the area of instrumental arts. Establishing quality musicianship within an ensemble inclusive of a drumline will be the focus within a fun learning environment. Performances will include, but are not limited to, two concerts per year- Christmas at the Ridge and the Black & White Gala. Second-year students and beyond will have the opportunity to participate in GISA, GHSA and GMEA sponsored competitive events. Also the drumline will have an opportunity to compete in GIPA competitions in the winter. Additional performance opportunities include Tiger Marching band (fall), the Old Soldiers Day Parade, and winter drumline competition. Field trips to Bands of America, concerts and master classes. Year-long course.

Technical Theater [701001 KR.TT001]

Prerequisites: None (only available in fall)

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: This one semester course of study will encompass set design, set construction, basic structural building skills, basic power tool usage, basic light design, and sound design. Students will be expected to serve as the technical team for any other upper school production performed during the semester they are in the course of study.

Theatre Arts Studio [700260 KR.A S0260]

Prerequisites: None (only available in spring)

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Straight acting (non-musical) will provide an overview of basic theatre concepts. Students will learn basic skills and fundamentals such as character development, stage movement, vocal techniques, and improvisation. Students will have multiple performance opportunities in class to perfect these skills. A short One-Act Play will be prepared in class along with an Improv Showcase. Field trip to Theatrical

Production in the spring (show TBD), and Black & White Gala will feature the One-Act Play and Improv Showcase. One semester class (spring).

Vocal Art Studio [702001 KR.VC 001]

Prerequisites: None (only available in spring)

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Sight-reading, tonal memory, rehearsal techniques and four-part singing will be emphasized. Class time includes sight-singing by numbers, rhythmic counting, melodic and rhythmic dictation, major, minor and chromatic scales and a varied choral repertoire ranging from spirituals and folk songs to larger choral works along with lighter, more contemporary music. Additional rehearsals and performances which are required and which will be announced with ample notice. Students will have the opportunity to participate in GISA, GHSA and GMEA sponsored competitive events. Field trip to Home by Dark concert in the spring. Black & White Gala will feature music learned during this semester. Performances at Baccalaureate and Graduation will close out the year. One semester class (spring).

Video Production I [703010 KR.VP010]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Video Production I centers on scripting, shooting, editing, and producing video clips and other projects for the King's Ridge community. News of the day, school plays, activities, and speakers will be among the subjects recorded for posterity. Students will have the opportunity to learn how to set up a shoot, conduct interviews, upload the shoot to a computer, and edit the shoot via Final Cut Studio.

Video Production II [703010 KR.VP010]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Video Production II also centers on scripting, shooting, editing, and producing video clips and other projects for the King's Ridge community. News of the day, school plays, activities, and speakers will be among the subjects recorded for posterity. Students will have the opportunity to learn how to set up a shoot, conduct interviews, upload the shoot to a computer, and edit the shoot via Final Cut Studio.

Yearbook [700700 KR.700]

Prerequisites: Teacher Approval

Maximum Class Size: 10

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: The High School yearbook class will produce the King's Ridge Christian School yearbook, *Aletheia*. Students will be introduced to the Josten's software which is used to create the yearbook. The class will be given assignments throughout the year that coincide with journalism concepts and photography. It is important to note that print production is a deadline-oriented task. The student team

has specific deadlines to meet throughout the year, and it is crucial that the deadlines are met in order to deliver the yearbook in a timely manner. The ability to keep deadlines is of utmost importance. Out-of-class time may be required in order to attend school events for reporting needs. Our primary purpose will be to create a yearbook that the entire pre-K through 12th grade student community can be proud of for years to come. A digital camera is great to have, but not required.

FOREIGN LANGUAGE

Chinese I CP [620111 62.01110]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10

Sections: 1

Description: In Chinese I College Prep, students will begin to build a foundation of basic language structure. Students will study vocabulary that will allow them to engage in simple conversations about everyday matters. In addition, students will practice key vocabulary that signifies different types of tenses and begin to develop both oral and written expression. Students will also be introduced to key concepts about Chinese culture. This is a full homework course.

Chinese 2 CP [620112 62.01120]

Prerequisites: Chinese I

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: Chinese 2 College Prep builds upon the basic skills learned in Chinese I. The course will continue to emphasize language application, i.e. the development of listening and speaking skills, while giving increased attention to the development of reading and writing. The goal will be for students to communicate in Chinese at a level comprehensible to a native speaker on topics previously studied in Chinese I. More characters are introduced through literary texts and written composition to enhance students' reading and analytical skills. This is a full homework course.

French I CP [600111 60.0111]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10

Sections: 1

Description: French I College Prep is the introductory course for those seeking instruction in the French language at the high school level. It is open to both new students transferring from another school and to current students who would like to begin a new language. French I covers the bedrock linguistic skills needed to understand written and spoken French. Students become proficient in common expressions, verb morphologies, noun-adjective agreement, gender of nouns, word order, and important vocabulary. Cultural projects emphasize the importance of global agility in the Francophone world, and the course serves as a springboard for all advanced study of French. 70% to 75% of the course is conducted in French.

French II

Prerequisites: MS French IA & IB, HS French I, or equivalent.

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11

Sections: 1

Description: This 2nd year French course builds upon the basic skills learned in French I in all four areas of a language – reading, writing, speaking, and listening – with additional skills comprising past, imperative, near future, and imperfect tenses. Students study travel, daily life, activities, and school life found in France and other francophone countries. Focus on language shifts to more grammar usage as students study reflexive verbs, object pronouns, and adverbs. Cultural differences and communication skills remain a vital part of each unit. Additionally, students will learn to describe famous artworks in French and practice reading and listening to authentic language. 80% to 85% of the course is conducted in French, and students are expected to ask questions in French at all times. This is a full homework course.

French II Honors

Prerequisites: MS French IA & IB, HS French I, or equivalent.

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11

Sections: 1

Description: This honors course provides advanced study for students who have excelled in French IB Honors and have shown a desire to continue the study of French through the Advanced Placement level. In addition to the French II curriculum, this course permits the student to cover material at a more rapid rate and to study the language at a deeper level. Writing and reading comprehension skills are cultivated at a more intensive level through the TPRS curriculum and an introduction to poetry and literature. Cultural differences and communication skills remain a vital part of each unit. Students will continue describing famous artworks in French and reading and listening to authentic language. There is increased emphasis on the development of writing and presentational skills. Assessments have increased rigor. 90%-95% of the course is conducted in French, and students are expected to ask questions in French at all times. This is a full homework course.

Permission Needed: Teacher recommendation and 93% average in French I or IB (the equivalent of high school French I taken in Middle School), or 85% unweighted average in Honors French IB.

French 3 CP [600130 60.013]

Prerequisites: French 2 College Prep

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: Third-year French reinforces grammar learned in the previous years, with the addition of subjunctive, future, and conditional tenses along with advanced grammar and enriched vocabulary. Incorporating the four major linguistic skills of listening, speaking, reading, and writing, the course emphasizes the total immersion of the student. There is increased emphasis on verbal communication, listening comprehension and reading of more challenging authentic language. 95%-100% of the course is conducted in French, and students are expected to ask questions in French at all times. This is a full homework course.

French 3 Honors [600137 60.0137]

Prerequisites: French II Honors, successful completion of High School French II or equivalent

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: In addition to the French III curriculum, the third-year honors class focuses on extended conversation using complex sentences and appropriate pronouns, on more complex comparisons of people, things and actions, on extended narration of past, present and future events, and on expression of emotions, wishes and hypotheses in complex sentences. Students learn to read the International Phonetic Alphabet for French, and correct pronunciation of all syllables is expected. Incorporating the four major linguistic skills of listening, speaking, reading, and writing, the course emphasizes the total immersion of the student. To promote critical thinking skills and interdisciplinary approaches, students give spoken presentations on social and philosophical questions, history, literature, and art and write essays based on specific grammar structures that focus on a cultural question of the Francophone world. Students read and listen to progressively more challenging authentic materials. 95%-100% of the course is conducted in French, and students are expected to ask questions in French at all times. Quizzes and tests also require more rigorous work. This is a full homework course.

Permission Needed: Teacher recommendation and 93% average in French II, or 85% unweighted average in Honors French II.

French 4 CP [600139 60.0139]

Prerequisites: French 3 College Prep

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: French IV College Prep is an advanced course in French language and culture. This course focuses on refining students' understanding of all aspects of grammar while honing their speaking, listening, reading and writing skills. Students are expected to speak with their teacher as if they were speaking English, giving more elaborate thoughts and drawing more analytical conclusions. Students listen to and read increasingly more difficult authentic materials including current news, which the class discusses and context is given to better understand the global community and contemporary history. More analytical thought is expected. This is a full homework course.

French 4 Honors [600140 60.014]

Prerequisites: French 3 Honors

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: French IV Honors is an advanced course in French language and culture. This course focuses on refining students' understanding of all aspects of grammar while honing their speaking, listening, reading and writing skills. Students are expected to speak with their teacher as if they were speaking English, giving more elaborate thoughts and drawing more analytical conclusions. Students listen to and read increasingly more difficult authentic materials including current news which the class discusses and context is given to better understand the global community and contemporary history. Dialects and accents of different Francophone nations are studied and examined by students, and the teacher provides context on their history and development. The history of France is explored, with a particular emphasis on the French Revolution and the Napoleonic Era. Students master the utilization of the International Phonetic Alphabet

for French. Highly-advanced grammar is mastered, including the conditional, pluperfect, past conditional, and future perfect tenses, along with the practice of more fluent written communication with an emphasis on the grammar structures as well as cultural and/or historical questions pertaining to the Francophone world. More analytical thought is expected. A primary outcome of this class is sufficient preparation for succeeding in the AP French class the following year. This is a full homework course.

Permission Needed: Teacher recommendation and 93% average in French III, or 85% unweighted average in Honors French 3.

French AP [600170 60.017]

Prerequisites: French 4 Honors

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: This AP French Language course is designed to offer students a learning experience equivalent to that of a third-year college course. The class utilizes a wide variety of authentic audio and video recordings, nonliterary texts, and literary texts. Additionally, students develop proficiency in written interpersonal communication, interpretive communication, and presentational communication, as well as achieve competency in spoken interpersonal communication, interpretive communication, and presentational communication. Audio & video clips from France, Belgium, and the Francophone world reinforce students' mastery of fluent listening skills. Cultural questions facing the contemporary Francophone world are explored, and students are expected to discuss and write about them analytically. Students are required to integrate all four language skills, to synthesize the information they gather, and to produce accurate and insightful work. Original research papers are expected to maintain the same standards as papers written in English. Most importantly, this class is conducted almost exclusively in the target language (99%-100%), and students are expected to participate in French at all times. In rare cases, English may be used for grammatical clarification, in preparation for the AP exam. This is a solid homework course.

Permission Needed: Department Chair recommendation, teacher recommendation and 85% unweighted average in Honors French IV.

Spanish I CP [600701 60.0701]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10

Sections: 1

Description: This course begins with an introduction to the basic grammatical structure of the language allowing students to gain confidence in expressing themselves in both oral and written simple phrases. Students will explore basic elements of communication such as: greeting others, expressing likes and dislikes, stating wants and needs, discussing schedules, and sequencing events chronologically. Level I introduces students to the fundamentals of Spanish grammar including present, past, and near future tenses, direct and indirect object pronouns, and prepositions. In addition, students learn basic vocabulary word groups enabling them to communicate in the target language. At this level, 75% to 80% of the course is conducted in the target language. This is a full homework course.

Spanish 2 CP [600720 60.072]

Prerequisites: Spanish IB standard, or Spanish I CP

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10

Sections: 1

Description: In Spanish II College Prep, students gain confidence in their verbal expression, augment their aural comprehension, and build grammatical accuracy in written form. To develop a greater understanding of grammar and vocabulary, students will employ reflexive verbs and pronouns while talking about their daily routines, express their feelings and emotions, ask for and give opinions and advice, make comparisons, and describe people. Students will also learn about stem-changing verbs, irregular verb conjugation patterns within present and preterit verbal tenses, and the imperfect verbal tense to recount history, stories in the past, and past memories/events in their lives. Students will further learn to use formal and informal command forms, comparisons using superlatives, and common expressions used in daily life. At this level, 80 to 85% of the course is conducted in the target language. This is a full homework course.

Spanish 2 Honors [600721 60.0721]

Prerequisites: Spanish IB standard, Spanish IB Honors, or Spanish I CP

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11

Sections: 1

Description: This honors course provides advanced study for students who have demonstrated excellent ability in Spanish. In addition to the Spanish II curriculum, students read a selected group of stories for further development of vocabulary and language skills. This course permits the student to cover material at a more rapid rate and to study the language at a deeper level. The development of writing skills and practical verbal fluency are emphasized. At this level, 85% to 90% of the course is conducted in the target language. This is a full homework course.

Permission needed: Students must have a 93% or higher in Spanish I, a recommendation from Spanish I instructor, approval of High school principal as well as permission from their parents.

Spanish 3 CP [600730 60.073]

Prerequisites: Spanish 2 CP

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11, 12

Sections: 1

Description: In Spanish III College Prep, students develop a command over grammar and vocabulary as they learn to distinguish between present perfect tense, future tense, usage of por and para, double object pronouns and the subjunctive verbal tense. Differences between the preterit and imperfect tenses, verb usage after prepositions, and the use of present and present perfect subjunctive are studied in detail. Extensive lessons in vocabulary and grammar help student's express opinions, describe people's behavior, talk about achievements, identify future ambitions, relate personal background, express agreement or disagreement on issues, and discuss unintentional events. At this level, 80 to 85% of the course is conducted in the target language. This is a full homework course.

Spanish 4 CP [600740 60.074]

Prerequisites: Spanish 3 CP, or Spanish 3 Honors

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Spanish IV College Prep provides students the opportunity to prepare for college-level courses by reviewing concepts learned in previous courses, furthering their knowledge of grammatical structures, expanding their vocabulary and developing the skills required for sophisticated verbal and written expression. Extensive lessons in grammar help students narrate events and stories in the past tense, discuss future events, express positive and negative emotions, and discuss hypothetical and unintentional situations. Extensive lessons in vocabulary help students discuss volunteerism, environmental concerns, social awareness, leisure activities, cultural excursions and career planning. At this level, 85 to 90% of the course is conducted in the target language. This is a full homework course.

Spanish 4 Honors [600742 60.0742]

Prerequisites: Spanish 3 Honors, or Spanish 3 CP

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: This course is designed to review and expand the essential points of grammar covered in the previous Spanish courses. The course emphasizes the improvement of writing skills through regular compositions; speaking skills through class discussions and presentations; and reading skills through exposure to the literary works of various writers. Students discuss different cultural topics related to the Hispanic world: recent historical events, the environment, human rights, personal relationships, Hispanic entertainers, issues of diversity, the importance of leisure, and current social problems. In addition to literary texts, students listen to and study songs that are culturally significant. Active classroom participation is mandatory, and classes will be conducted entirely in Spanish. A primary outcome of this class is sufficient preparation for succeeding in the AP Spanish class the following year. The course is open to students who have successfully mastered the material taught in Spanish III Honors or Spanish III college prep. and who have been recommended by the department. At this level, 100% of the course is conducted in the target language. This is a full homework course.

Permission needed: Students must have an 85% or higher in Spanish 3 Honors. Students wishing to transfer from Spanish 3 College Prep to Spanish 4 Honors must have a 93% or higher in Spanish 3 College Prep, a recommendation from Spanish 3 instructor, approval of High school principal, as well as permission from their parents. Students switching from College Prep track to Honors track may be assigned additional summer work to bridge knowledge gaps, if necessary.

Spanish AP [600770 60.077]

Prerequisites: Spanish 4 Honors, Spanish 4 CP (85% or higher)

Maximum Class Size: 25

Credits: 1.00

Grades: 12

Sections: 1

Description: The Advanced Placement Spanish Language course is designed to prepare students for the AP Spanish Language exam in May. The course is intended for qualified students who are interested in studies comparable in content and difficulty to a third-year university Spanish course. It is important that students understand the serious dedication required of a college level course and are prepared to put forth the requisite effort to succeed. The content of the course will address the specific sections and conditions of the AP exam which are: written interpersonal communication, written interpretive communication, and written presentational communication, as well as spoken interpersonal communication, spoken interpretive communication, and spoken presentational communication. The class will utilize a wide variety of authentic audio and video recordings, authentic nonliterary texts and authentic literary texts. Students will also review complicated aspects of grammar, practice writing compositions,

and expand their vocabulary base. The course will be taught in Spanish, and students are expected to speak Spanish at all times during the class period. This is a solid homework course.

MATHEMATICS

AP Calculus AB [270720 27.072]

Prerequisites: Teacher recommendation from either Pre-Calculus or Honors Pre-Calculus (85 average - unweighted)

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Advanced Placement Calculus AB follows the College Board curriculum after which students should be prepared to take the Advanced Placement exam. The AB curriculum roughly corresponds to one semester to one-and-a-half semesters of college calculus. Colleges have a wide variety of policies regarding awarding credit based on AP exam scores; students will need to check with individual colleges to determine each one's particular policy. This course begins with a formal study of limits followed by differential and integral calculus. Students will need to understand all topics from an algebraic, graphical, numerical, and analytical perspective. In addition to the mechanics of solving calculus problems, particular attention will be devoted to developing a conceptual understanding of derivatives and integrals. Applications from the physical world, particularly the relationship between position, velocity, and acceleration, involving both derivatives and integrals will be covered. A graphing calculator is required for this course and strongly recommended is the TI 83/84.

CP Algebra I [270623 27.0623]

Prerequisites: Pre-Algebra 3, for rising 8th grade - Pre-Algebra and 7th grade teacher recommendation, for rising 9th grade – successful completion of 8th grade Pre-Algebra.

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: Algebra I begins with a review of the properties of the Real Number System. Core topics include: Solving and graphing individual and systems of linear equations and inequalities, applying properties of exponential and radical expressions, simplifying and factoring polynomials and rational expressions, introduction to probability (if time permits). There is a strong focus placed on using these skills practically by interpreting and solving word problems on a consistent basis. Full homework course/full year.

CP Algebra II [270650 27.065]

Prerequisites: Geometry or Honors Geometry

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11

Sections: 1

Description: Algebra II begins with a review of the core concepts and skills covered in Algebra I. Core topics include: techniques of solving equations, properties of functions as well as transformations and their graphs, quadratic and higher-order polynomial functions, radical, rational, exponential and logarithmic equations and functions, conic Sections, sequences and Series. A graphing calculator is required for this course and strongly recommended is the TI 83/84. Full homework course/full year.

CP Calculus [270780 27.078]

Prerequisites: Pre-Calculus, or Honors Pre-Calculus

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Calculus consists of two topics: derivatives and integrals. We will work toward understanding these concepts algebraically, graphically, numerically, and verbally as well as the connections between those representations. Students will also need to understand the relationship between the algebraic computations and the corresponding graphical and numerical representations. In addition, you will need to be able to understand and articulate the analytical meaning of your computations and graphs. The TI-83/84 graphing calculator is required.

CP Geometry [270632 27.0632]

Prerequisites: Algebra I

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10

Sections: 1

Description: Geometry includes a traditional take on a Euclidean Geometry course of study that falls between Algebra I and Algebra 2. Students will build on standard definitions and axioms to construct proofs and learn the theorems and properties associated with the following core topics: assisted Formal Geometric Proofs, parallel and Perpendicular Lines, applications of Triangles and Basic Trigonometry, properties and Characteristics of Quadrilaterals, Specifically Parallelograms, properties and Characteristics of Circles and Spheres, use of Practical Algebraic Skills – Volume, Area, Surface Area, Coordinate Geometry, there is a strong focus placed on using these skills practically by interpreting and solving proofs regularly. Full homework course/full year.

CP Pre-Calculus

Prerequisites: Algebra I, Geometry, and Algebra II

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: The course begins with a review of the characteristics of functions along with an analysis of graphs. Core topics include parent functions and their transformations, rational functions, exponential and logarithmic functions, triangle and circular trigonometry, trigonometric functions and identities, analytic geometry (rectangular and polar equations). Throughout the course, material is presented to prepare students for Calculus. A graphing calculator is required for this course and strongly recommended is the TI 83/84. Full homework course/full year.

Honors Algebra II

Prerequisites: Algebra I, Geometry/Honors Geometry. From Algebra II or Honors Pre-Calculus (75 overall average – unweighted), from Algebra III or Pre-Calculus (80 overall average).

Maximum Class Size: 25

Credits: 1.0

Grades: 9, 10, 11, 12

Sections: 1

Description: The Honors Algebra II class will cover pre-calculus concepts in greater detail. Additionally, students will be expected to apply their understanding of algebraic concepts to solve more challenging

real world problems than those presented in the standard course. A graphing calculator is required for this course and strongly recommended is the TI 83/84. Full homework course/full year.

Honors Geometry [270633 27.0633]

Prerequisites: Algebra I, teacher recommendation for rising 9th graders based on placement test, for rising 10th graders: teacher recommendation (93 average required).

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10

Sections: 1

Description: Honors Geometry covers all the topics of the regular Geometry class, which includes a traditional take on a Euclidean Geometry course of study that falls between Algebra I and Algebra 2. Students will build on standard definitions and axioms to construct proofs and learn the theorems and properties associated with the following core topics: formal Geometric Proofs, parallel and Perpendicular Lines, applications of Triangles and Basic Trigonometry, properties and Characteristics of Quadrilaterals, Specifically Parallelograms, properties and Characteristics of Circles and Spheres, use of Practical Algebraic Skills – Volume, Area, Surface Area, Coordinate Geometry. This course places a strong emphasis on completing proofs accurately and unassisted. Students will also develop critical thinking skills when working with the above topics.

Honors Statistics [270935 27.0935]

Prerequisites: Algebra II, Algebra III, Pre-Calculus, or Honors Pre-Calculus. From Algebra II or Honors Pre-Calculus (75 overall average – unweighted), from Algebra III or Pre-Calculus (80 overall average).

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Honors Statistics is the high school equivalent of a one semester, introductory college statistics course. In this course, students develop strategies for collecting, organizing, analyzing, and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance behavior. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a TI-83/84 graphing calculator, Fathom, and Minitab statistical software, and Web-based java applets to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data.

PHYSICAL EDUCATION

Personal Fitness Strength & Conditioning [750600 PF.0600]

Prerequisites: None

Maximum Class Size: 25

Credits: 0.50

Grades: 9, 10, 11, 12

Sections: 1

Description: Develop an understanding of basic personal fitness for the purposes of growth in strength and conditioning. Teach, supervise, and allow for the practice of different fitness movements so that students may gain a knowledge of the purpose of each movement and how to safely perform them. By the end of the semester class, students should have a full grasp of a plethora of different ways to stay physically fit and active while at the same time remain safe.

SCIENCES

Anatomy & Physiology Honors [260730 26.073]

Prerequisites: Biology, Chemistry 85% average

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Anatomy and Physiology is a course in which students will study the structure and function of the human body from both a cellular and systematic perspective. Topics include body organization, cell structure and function, tissue classification, integumentary system, skeletal system, muscular system, nervous system and sensory systems, endocrine system, cardiovascular system, blood and lymphatic systems, immune system, respiratory system, digestive system, urinary system, and reproductive system. In addition, disease with each of the human body systems will be discussed. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, and multimedia presentations. Upon completion of this course, the student will demonstrate basic knowledge in the following: General body organization and anatomical terminology; Tissue types; Integumentary system; Anatomical and physiological characteristics of the skeletal system; Bioelectrical events of membrane potentials; Anatomy and physiology of muscle and muscle contraction; Anatomy and physiology of the central and peripheral nervous systems; Functions of the autonomic nervous system; Reflexes and central motor mechanisms; Anatomy and physiology of sensory processes.

AP Chemistry [400530 40.053]

Prerequisites: Math completion of: Algebra I, Algebra II, Geometry or Honors Geometry, Pre-Calculus, or Honors Pre-Calculus

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: AP Chemistry is equivalent to a two-semester college freshman general chemistry course and is designed to prepare the student for the AP Chemistry examination in May. Topics such as the structure and states of matter, types of reactions, stoichiometry, equilibrium, kinetics, electrochemistry, and thermodynamics are addressed at an advanced level. Laboratory investigations supplement each major topic. Due to the rigorous nature of this course, students considering AP Chemistry should possess a high level of autonomy and motivation as well as demonstrated proficiency in math and sciences. Lab Science/Solid Homework Course/Full Year Course.

AP Environmental Science [260640 26.064]

Prerequisites: Biology/Chemistry one of which must be an honors course. 85% overall unweighted average. Petition to take if 93% average in science standard courses. Math Algebra II concurrently or taken Algebra II with an 85% unweighted average. Complete Algebra I with an 85% unweighted average.

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of this inter disciplinary course is to provide students with the scientific principles, concepts, and methodologies required to understand the

interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. The following themes provide a foundation for the structure of the course: (1) Science is a process; (2) Energy conversions underlie all ecological processes; (3) The Earth itself is one interconnected system; (4) Humans alter natural systems; (5) Environmental problems have a cultural and social context; (6) Human survival depends on developing practices that will achieve sustainable systems.

AP Physics I [400830 40.0830]

Prerequisites: Honors Pre-Calculus concurrent / Standard Pre-Calculus concurrent. Math overall average is 85. Biology and chemistry (one of which must be an Honors course.) Science overall average 85 unweighted. Teacher recommendation, approval of Department Chair, rubric for placement.

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: This is an inquiry-based course with a student centered classroom platform. The key concepts and related content are organized around basic core scientific principles, theories and processes of physics that cut across traditional boundaries and provide students a comprehensive way of thinking about the physical world. The basic ideas behind this course are as follows: systems are composed of objects which have internal structure and properties such as mass and/or charge which define the system and fields in space are used to explain interactions between these systems. Within systems, interaction between objects can be described by the force concept and conservation laws. Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for describing related phenomena. Students will learn to use mathematics appropriately in the solution of physics problems. Students will engage in scientific questioning to extend thinking and guide investigations. Students will plan and implement data collection strategies relating to scientific questions and will perform data analysis and evaluation of evidence to solve problems. The students can work with scientific explanations and theories to combine essential knowledge with science practices to form learning objectives. The specific topics covered in this course are: Kinematics; Dynamics (Newton's Laws); Circular Motion; Universal Gravitation; Simple Harmonic Motion; Conservation of Momentum; Impulse; Work; Mechanical Energy; Conservation of Energy; Rotational Motion; Electricity; Mechanical Waves and Sound.

The number of topics in AP I is fewer than on level physics but each topic is covered in greater detail and with greater mathematical depth. 25% percent of instructional time will be spent in laboratory work with emphasis on inquiry based investigations providing students with opportunities to demonstrate foundational physics principles. 75% percent of instructional time will be learning fundamental theoretical principles and the mathematical concepts which, when applied to physics problems, have solved many of the difficulties facing today's society. Solid Homework Course, Full Year, Graphing Calculator required. At the end of the course students may take the national AP I Physics exam which may allow college Physics credit depending on their grade on the exam and the college they are attending.

AP Physics 2 [400840 40.0840]

Prerequisites: Geometry, Algebra II, Chemistry and concurrently taking Pre-Calculus. Students will be required to present a science project sometime during the course. At the end of the course, students may take the national AP 2 Physics exam which may allow college Physics credit depending on their grade on the exam and the college they are attending. Must have science 85 unweighted average and a math 85 unweighted average

Maximum Class Size: 25

Credits: 1.00

Grades: 12

Sections: 1

Description: This is an inquiry-based course with a student-centered classroom platform. The key concepts and related content are organized around basic core scientific principles, theories and processes of physics that cut across traditional boundaries and provide students a comprehensive way of thinking about the physical world. The basic ideas behind this course are as follows: systems are composed of objects which have internal structure and properties such as mass and/or charge which define the system and fields in space are used to explain interactions between these systems; Within systems, interaction between objects can be described by the force concept and conservation laws; Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for describing related phenomena.

Students will use representations and models to communicate phenomena and solve scientific problems. Students will learn to use mathematics appropriately in the solution of physics problems. Students will engage in scientific questioning to extend thinking and guide investigations. Students will plan and implement data collection strategies relating to scientific questions and will perform data analysis and evaluation of evidence to solve problems. The students can work with scientific explanations and theories to combine essential knowledge with science practices to form learning objectives.

The specific topics covered in this course are: Conservation of linear momentum, fluid mechanics, temperature, heat, thermodynamics, electrostatics, Coulombs law, electric fields and potential, capacitance and parallel plate capacitors, Ohm's and Kirchoff's laws, resistors and capacitors in circuits, RC circuits, magnetic forces on charges and current carrying wires in magnetic fields, electromagnetic magnetic induction, Lenz's and Faraday's laws superposition, interference and diffraction, electromagnetic spectrum, reflection, refraction, mirrors lenses, atomic and nuclear physics, Compton scattering, photoelectric effect, atomic energy states, matter waves, probability and graphical wave function, nuclear physics, mass energy equivalence, half- life, nuclear reactions.

The number of topics in AP 2 is fewer than on-level Physics, but each topic is covered in greater detail and with greater mathematical depth. 25% percent of instructional time will be spent in laboratory work with emphasis on inquiry based investigations providing students with opportunities to demonstrate foundational physics principles. 75% percent of instructional time will be learning fundamental theoretical principles and the mathematical concepts which, when applied to physics problems, have solved many of the difficulties facing today's society. Topics include: Fluid Mechanics (Archimedes principle, Bernoulli's Principle, Thermodynamics (Heat transfer, First and 2nd laws of thermodynamics, P-V diagrams, Electrostatics (Electric Fields, forces, potential difference and potential energy, Electric Currents (Series and parallel circuits, Ohms Law, capacitors), Magnetism (magnetic fields and force, magnetic induction, Faraday's Law), Waves and Optics (Snell's Law, Reflection, Refraction, Lens equation), Modern Physics (Atomic physics, nuclear physics, radioactivity, particle physics).

Biology Honors [260137 26.0137]

Prerequisites: 93 average in 8th grade physical Science, 85 unweighted in Honors Physical Science. KRCS teacher recommendation criteria document from 8th grade/placement test if new to high school, department chair approval.

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: Honors Biology is the study of structure, function, growth, origin, evolution, life processes and diversity of organisms from a Christian perspective. The honors course is academically more challenging than the standard biology courses due to depth of study, amount of material covered and in depth lab experiences. The student will be exposed to the following topics during the year: Chemical foundations; Cell structure, function and communication; Cell Division; Photosynthesis/Cell Respiration; Genetics-Mendelian and human; Diversity and Evolution; Botany-structure and physiology; Organ systems (fetal pig dissection); Ecology and behavior. Lab Science/Full Homework Course/Full Year.

AP Biology

Prerequisites: CP Biology (93), Honors Biology (85 unweighted), Honors Chemistry (85 unweighted), CP Chemistry (93) numerical averages. Three's and four's on placement rubric for work ethic, intellectual curiosity, academic responsibility. Department chair approval.

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year in college. The two main goals of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as an investigative process. This course covers a vast amount of material and, as such, makes heavy demands on even the most organized student. In addition to the readings and studies outlined below, specific labs from the AP College Board lab manual are conducted during the year along with other hands-on activities. Labs encompass at least 25% of class time and are performed in small groups with required formal lab reports. The AP Biology exam is given in the spring. It is three hours in length and is designed to measure a student's knowledge, understanding, ability to think critically and to apply their knowledge to lab situations. The results will determine a student's eligibility for advanced placement and /or college credit for a biology course. Lab Science/Solid Homework Course/Full Year Course. General course outline: Unit 1 - Molecules and Cells (a. Basic Biochemistry; b. Cells/cell communication/cell signaling; c. Energy Transformations); Unit 2 - Genetics and Evolution (a. Heredity; b. Molecular Genetics; c. Evolutionary Biology); Unit 3 - Organisms and Populations (a. Classification, Eubacteria, Archaeobacterial, Viruses; b. Plant Physiology; c. Ecology; d. Behavior).

Conceptual Physical Science [400500 40.05]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: Conceptual Physics is an introductory course designed to allow students to explore the basic concepts of the physical sciences. Students will be introduced to the nature of the universe in a manner that pertains to phenomena occurring in daily life as well as abstract ideas. Concepts will be confirmed in a laboratory. Topics: Newton's Laws, Projectile motion, Momentum, Energy, Rotational motion, Gravitation, Special relativity, Relativistic mechanics, Atomic nature, Thermodynamics, Sound, Light, Optics, Electricity and magnetism and Quantum physics. Lab Science/Full Year course.

Chemistry Honors [400527 40.0527]

Prerequisites: Honors Geometry, 85 unweighted average. Geometry/Algebra I = 93 plus average; Biology 93 for College Prep or 85 unweighted for Honors

Maximum Class Size: 25

Credits: 1.00

Grades: 10

Sections: 1

Description: The purpose of the Honors Chemistry course is to prepare students for AP Chemistry in the future. The primary differences between standard and honors sections of chemistry will be the depth in which material is covered, the difficulty and complexity of problems, and the move from scripted labs to those that are inquiry-based. In Honors Chemistry, students will investigate the composition, structure, and properties of matter. Some concepts covered include classification of matter, atomic structure, periodic properties, molecular structure, chemical bonding, acids and bases, kinetics, and equilibrium. Through investigation and experimentation, students will gain experience in formulating ideas, discovering evidence to support those ideas, and practical application regarding real world concepts. Lectures, discussions, lab activities, and readings are structured to fulfill the following purposes: To increase knowledge and understanding of general chemistry; To develop scientific literacy, problem solving skills, and an understanding of the interrelationship between matter and energy; To increase the student's knowledge of and appropriate use of terminology related to science; To increase awareness of real life and how chemistry is involved; To increase the student's skills in communication, collaboration and consultation within groups. Lab Science/Full Homework Course/Full Year Course.

CP Biology [260130 26.013]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9

Sections: 1

Description: CP Biology traces the complexity of living organisms from the molecular level to their interactions within the biosphere. The on-level course places greater emphasis on generalized conceptual knowledge and the integration of subject matter with day to day issues such as how biology influences health care or technology. Topics: Scientific methodology; Chemistry of life; Cell structure/function; Cell Division; Energy flow and transformation in cell respiration and photosynthesis; Genetics; Mechanisms of Evolution; Diversity and Taxonomy in Invertebrates; Botany; Anatomy-fetal pig dissection. Many labs are incorporated into the curriculum which helps to develop inquiry, critical thinking, and lab based skills. This course is a Lab Science/Full Homework Course/Full Year Course.

CP Chemistry [400510 40.051]

Prerequisites: completion of Algebra I, Geometry, Honors Geometry, Biology

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11

Sections: 1

Description: In Chemistry, students will investigate the composition, structure, and properties of matter. Some concepts covered include classification of matter, atomic structure, periodic properties, molecular structure, chemical bonding, and acids and bases. Through investigation and experimentation, students will gain experience in formulating ideas, discovering evidence to support those ideas, and practical application regarding real world concepts. Lectures, discussions, lab activities, and readings are structured to fulfill the following purposes: To increase knowledge and understanding of general chemistry; To develop scientific literacy, problem solving skills, and an understanding of the interrelationship between

matter and energy; To increase the student's knowledge of and appropriate use of terminology related to science; To increase awareness of real life and how chemistry is involved; To increase the student's skills in communication, collaboration and consultation within groups. Lab Science/Full Homework Course/Full Year Course.

CP Environmental Science [260630 26.063]

Prerequisites: Biology

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: Environmental Science is a curriculum that is designed to introduce students to major ecological concepts and the environmental problems that affect the world in which we live. The full year course emphasizes Physical and Earth Science components involved in biogeochemical cycles that impact biomes. Students study a variety of topics including biotic and abiotic factors in habitats, ecosystems, and biomes; interrelationships between resources and environmental systems; sources and flow of energy through environmental systems; factors that influence carrying capacity; and natural and man-made environmental changes. This program provides one way in which students can become aware of the interactions of people and their environment. The curriculum focuses on concepts that are real-life issues. It promotes awareness and understanding of practical everyday problems that affect their lives. It also relates important environmental issues to the lives of the students and their families. The course encourages critical thinking, use of the scientific method, integration of technology, and application of knowledge and skills learned to practical questions and/or problems. Safe field and laboratory investigations are used in instruction to illustrate scientific concepts and principles and support inquiry instruction.

CP Physics [400810 40.081]

Prerequisites: Pre-Calculus, Algebra II standard or Honors concurrent

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: This is an inquiry-based course with a student-centered classroom platform. The key concepts and related content are organized around basic core scientific principles, theories and processes of physics that cut across traditional boundaries and provide students a comprehensive way of thinking about the physical world. Students will use representations and models to communicate phenomena and solve scientific problems. Students will learn to use mathematics appropriately in the solution of physics problems. Students will engage in scientific questioning to extend thinking and guide investigations. Students will plan and implement data collection strategies relating to scientific questions and will perform data analysis and evaluation of evidence to solve problems. The student can work with scientific explanations and theories to combine essential knowledge with science practices to form learning objectives. The number of topics covered in on level physics is greater than those in AP I physics but they are not covered in the depth or mathematical rigor as the AP I topics. 25% percent of instructional time will be spent in laboratory work with emphasis on inquiry based investigations providing students with opportunities to demonstrate foundational physics principles. 75% percent of instructional time will be learning fundamental theoretical principles and mathematical concepts which, when applied to physics problems, have solved many of the difficulties facing today's society. Topics covered: Conservation of linear momentum, Fluid mechanics, Temperature/Heat/Thermodynamics, Electrostatics/Electric fields and potential, Coulombs Law, Capacitance/Parallel plate capacitors, Ohm's and Kirchoff's Laws, Resistors

and capacitors I circuits, Magnetic fields, Electromagnetic Induction, Lenz's and Faraday's Laws, Nuclear physics and Lenses/Mirrors.

Physics Honors [400910 40.091]

Prerequisites: Algebra I & II Honors 85% unweighted and 90% weighted

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Honors Physics is a course with a difficulty level between that of on level and AP Physics. It is designed for the student who has an intellectual curiosity about the nature of the physical universe and is motivated to give a little extra to achieve certain goals. Emphasis in this course is the use of higher mathematics in problem solving. Honors Physics begins with the study of kinematics, the study of motion, and the introduction to vector mathematics. After mastering one and two dimensional motion the next step is dynamics, the causation of motion. In this phase Newton's laws of motion demonstrate how and why forces cause accelerated motion as well as the studying the nature of specific types of forces including gravity, centripetal, friction and others. Following Newton's laws, momentum and energy conservation and torque are presented as alternative methods to problem solutions. Following basic mechanics, the course explores waves with special emphasis and time spent on sound, light and simple harmonic waves. The next unit is an extensive coverage of electricity, both static and circuit. In this electric fields, forces, potential difference, electrical potential energy, current, resistance and capacitors is covered. Fluid physics and heat are covered in topics such as Archimedes and Bernoulli's principles, Pascal's law, calorimetry and the 1st and 2nd laws of thermodynamics. The course concludes with a cursory overview of relativity, quantum and nuclear physics. 25% percent of the course is laboratory work. Both traditional and high tech equipment is used in the laboratories. A few examples in mechanics might include projectile motion with a spring loaded gun, determine acceleration of gravity with a photogate, and conservation of momentum with colliding carts. Various properties of waves are demonstrated with a ripple tank. With light labs are done which confirm the laws of refraction, reflection and diffraction. Electricity labs include verification of Coulomb's law, mapping electric fields, testing potential drops, current and capacitor charge in parallel and series circuits. Fluid and heat labs include water displacement and specific heat determination. Simulated labs are done in nuclear physics including reproduction of the Rutherford experiment and deriving the half-life decay rate equation through experimental means. The course evaluation is determined by major tests, homework, lab reports and class/lab participation. Major tests are given at three week intervals; homework is assigned nightly. Labs, as previously stated, will take 25% of class time. Mathematics requirements are completion of Algebra with an 'A' or 'B'.

SOCIAL SCIENCES

AP Psychology [450160 45.016]

Prerequisites: World History and U.S. History

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: The course is designed to provide a college-level experience and preparation for the AP exam in May. The purpose of the Advanced Placement course in Psychology is to introduce students to the systematic and scientific study of behavior and mental processes of human beings and animals. Students are exposed to the psychological facts, principles, and phenomena associated with the major sub-fields within psychology. They also learn about the methods psychologists use in their science and practice. This

is a two semester long course. Students are taught to think critically about the principles of psychology using essays, analysis of primary and secondary resource readings, discussion, and lecture.

Course themes and goals:

1. Study the major core concepts and theories of psychology. They will be able to define key terms and use these terms in their everyday vocabulary.
2. Learn the basic skills of psychological research. They will be able to devise simple research projects, interpret and generalize from results and evaluate the validity of research reports.
3. Be able to apply psychological concepts to their own lives. They should be able to recognize psychological principles when they are encountered in everyday situations.
4. Demonstrate critical thinking skills in reading and writing assignments, including the ability to analyze, synthesize, and interpret primary and secondary sources.

AP European History [450840 45.084]

Prerequisites: World History and U.S History

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: AP European History is a college-level course specifically designed to prepare students for the Advanced Placement examination in May. The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Some of those developments include, but are not limited to, the Renaissance, the Reformation, the Scientific Revolution, the Age of Absolutism, the Industrial Revolution, the Congress System, two World Wars, and the Cold War era. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop an understanding of some of the principal themes in modern European history, an ability to analyze historical evidence and historical interpretation, and an ability to express historical understanding in writing.

AP U.S. Government & Politics [450520 45.052]

Prerequisites: World History and U.S. History

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: Advanced Placement Government & Politics is designed to provide a college-level course in preparation for the Advanced Placement (AP) exam in May. An emphasis is placed on interpreting documents and statistics, analyzing political theory, writing analytical essays, and answering free-response questions. Topics to be covered include constitutional underpinnings of the United States government, political beliefs and behaviors, political parties and interest groups, institutions of the national government as well as civil rights and liberties. The focus of first semester is on the democratic form of government in America, including the Constitution, federalism and civil liberties. Students will examine models of political socialization and demographics and their effects on interest groups, political parties and elections. In the second semester, students will probe political institutions such as Congress, the Presidency, the Bureaucracy the Supreme Court and their influences on domestic, economic and foreign policies. In addition, students will learn how state and local governments operate in a federal system.

AP U.S. History [450820 45.082]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: The AP curriculum in United States History is designed to provide students with the analytical skills and knowledge necessary to deal critically with the problems and materials in United States history and prepare them for success on the Advanced Placement exam in May. The students will learn to properly analyze primary sources and synthesize them to support a clear and powerful argument. Additionally, they will develop an in-depth understanding of the creation of America's democracy, its struggles and conflicts, geography, beliefs and institutions, cultural diversity and role in world affairs. First semester will begin with the pre-Colonial history and end with the Civil War/Reconstruction. Second semester will cover the period from the Civil War to the 21st century.

Economics CP [455131 45.05131]

Prerequisites: World History and U.S. History

Maximum Class Size: 25

Credits: 0.50

Grades: 11, 12

Sections: 1

Description: This semester course is designed to give students an introduction into the complicated but crucial study of both microeconomics and macroeconomics. Current events relating to economic principles and ideas will be discussed frequently as will the relationship between economics and politics throughout American history. It is the intention of the course to develop the student into an effective steward of financial resources by providing the knowledge of their role in our local, national, and global economy.

European History CP [450817 45.0817]

Prerequisites: World History and U.S. History

Maximum Class Size: 25

Credits: 1.00

Grades: 11, 12

Sections: 1

Description: The study of European history since the 14th century (late Medieval/early Renaissance) through the present challenges students to demonstrate a knowledge of basic chronology and of major events and trends in modern European history. Analysis of those events in terms of their cultural, diplomatic, economic, intellectual, political and/or social significance will also be required. Students must be able to explain historical events in both classroom discussions and in writing. Some of those developments include, but are not limited to, the Renaissance, the Reformation, the Scientific Revolution, the Age of Absolutism, the Industrial Revolution, the Congress System, the two World Wars, and the Cold War Era.

Honors World History [450931 45.0931]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11, 12

Sections: 1

Description: The Honors course covers all of the topics studied in the standard course as well as additional readings. Greater focus is placed on comprehension and analysis of primary sources, writing effective, timed essays and research reports, and cross-cultural comparisons in an effort to prepare for future Advanced Placement courses.

U.S. Government CP [455130 45.05130]

Prerequisites: World History & U.S. History

Maximum Class Size: 25

Credits: 0.50

Grades: 11, 12

Sections: 1

Description: United States Government is a semester course designed to provide a deeper understanding of the constitutional underpinnings of the United States government, political beliefs and behaviors, political parties and interest groups, institutions of the national government as well as civil rights and liberties. Students begin their study concentrating on the democratic form of government in America, including the Constitution, federalism and civil liberties. Students will examine models of political socialization and demographics and their effects on interest groups, political parties and elections. The latter half of the course will probe political institutions such as Congress, the Presidency, the Bureaucracy the Supreme Court and their influences on domestic, economic and foreign policies. In addition, students will learn how state and local governments operate in a federal system.

U.S. History [450812 45.0812]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 10, 11, 12

Sections: 1

Description: The United States History course will challenge students to develop an understanding of the following aspects of United States history: the creation of democracy; struggles and conflicts within and outside of the country; geography; core beliefs and institutions; cultural diversity; and America's role in world affairs. The first semester will begin with the pre-Colonial period and end with the Civil War/Reconstruction. The second semester will cover the period from the Civil War to the 21st century. The course will incorporate multimedia, cooperative learning, the Internet and focus heavily on class discussions. Students will be assessed through tests/quizzes, research projects and class activities.

World History CP [450921 45.0921]

Prerequisites: None

Maximum Class Size: 25

Credits: 1.00

Grades: 9, 10, 11, 12

Sections: 1

Description: In World History and Cultures, students will learn and explore the world's diversity of people, places and cultures with an emphasis on Africa, South Asia, East Asia, and the Middle East. Students will develop a comprehensive understanding of each region's culture, history, religion, geography and social environment to form a better understanding of how they fit in the world today. In our increasingly interdependent world, students need to have a better understanding of and empathy for different cultures throughout the world. The course will incorporate multimedia, cooperative learning, the Internet and in-class discussions. Students will be assessed through tests, quizzes, research projects and class activities.