



2018-2019

COURSE CATALOG

GRADES 9-12



GENERAL GRADUATION REQUIREMENTS

	Class of 2019	Class of 2020	Class of 2021 +
Bible	0.5 - 4	0.5 – 4	0.5 – 4
English	4	4	4
Mathematics	4	4	4
Lab Science	3	3	3
Social Science	4	4	4
Foreign Language	2	2	2
Fine Arts	1	2	2
Technology	1	1	1
Physical Education	0.5	0.5	0.5
Health	0.5	0.5	0.5
Innovation	0	0.5	1
Electives	0 – 3	0 - 3	0 - 3
Minimum Total Credits	26	26	26

Notes:

1. Students must enroll in at least one Bible, mathematics, and English course each semester they attend Ben Lippen.
2. Students in grades 9-11 must register for at least 7 courses per semester. Seniors must register for at least 6 courses per semester.
3. Students must earn 0.5 credits of Bible for each semester they attend BL to graduate. No matter how many Bible credits a student earns, the minimum credits required for graduation is 26.
4. Students are required to earn at least two Fine Art credits (one for class of 2019) and one Technology credit among their electives for graduation.
5. Students must meet South Carolina computer proficiency requirements before graduation.
6. 30 hours of community service as a senior or rising senior are required for graduation.

HONORS DISTINCTION GRADUATION REQUIREMENTS

	Class of 2019	Class of 2020	Class of 2021 +
Bible	0.5 - 4	0.5 – 4	0.5 – 4
English	4 or 5	4 or 5	4 or 5
Mathematics	4 or 5	4 or 5	4 or 5
Lab Science	4	4	4
Social Science	4	4	4
Foreign Language	3	3	3
Fine Arts	1	2	2
Technology	1	1	1
Physical Education	0.5	0.5	0.5
Health	0.5	0.5	0.5
Innovation	0	0.5	1
Electives	0 – 3	0 - 3	0 - 3
Minimum Total Credits	28	28	28

Notes:

1. Students must enroll in at least one Bible, mathematics, and English course each semester they attend Ben Lippen.
2. Students in grades 9-11 must register for at least 7 courses per semester. Seniors must register for at least 6 courses per semester.
3. Students must earn 0.5 credits of Bible for each semester they attend BL to graduate. No matter how many Bible credits a student earns, the minimum credits required for graduation is 26.
4. Students are required to earn at least two Fine Art credits (one for class of 2019) and one Technology credit among their electives for graduation.
5. Students must meet South Carolina computer proficiency requirements before graduation.
6. 30 hours of community service as a senior or rising senior are required for graduation.

Additional Requirements for Diploma with Honors Distinction:

1. Students must earn at least a 4.250 cumulative, final SCUGP GPA.
2. Students must earn at least 12 credits classified as Honors, Advanced Placement, or Dual Credit.
3. Students must earn at least 9 credits in Math and English combined, with at least 4 in each discipline.
4. Students must earn at least 28 total credits.

INNOVATIVE SCHOLAR GRADUATION REQUIREMENTS

	Class of 2019	Class of 2020	Class of 2021 +
Bible	0.5 - 4	0.5 – 4	0.5 – 4
English	4	4	4
Mathematics	4	4	4
Lab Science	3	3	3
Social Science	4	4	4
Foreign Language	2	2	2
Fine Arts	1	2	2
Technology	1	1	1
Physical Education	0.5	0.5	0.5
Health	0.5	0.5	0.5
Innovation	3.5	3.5	3.5
Electives	0 – 3	0 - 3	0 - 3
Minimum Total Credits	26	26	26

Notes:

1. Students must enroll in at least one Bible, mathematics, and English course each semester they attend Ben Lippen.
2. Students in grades 9-11 must register for at least 7 courses per semester. Seniors must register for at least 6 courses per semester.
3. Students must earn 0.5 credits of Bible for each semester they attend BL to graduate. No matter how many Bible credits a student earns, the minimum credits required for graduation is 26.
4. Students are required to earn at least two Fine Art credits (one for class of 2019) and one Technology credit among their electives for graduation.
5. Students must meet South Carolina computer proficiency requirements before graduation.
6. 30 hours of community service as a senior or rising senior are required for graduation.

Additional Requirements for Innovative Scholar Diploma:

1. Students must take Foundations of Innovation and Public Speaking (class of 2021 +) plus two track-specific courses in Business, Robotics, Programming, Engineering, or Digital Media.
2. Students must complete a Capstone course in 12th grade.

Course Selection Guide by Grade Level

	9	10	11	12
BIBLE	<ul style="list-style-type: none"> • Old Testament Survey 	<ul style="list-style-type: none"> • New Testament Survey 	<ul style="list-style-type: none"> • Christian Theology 	<ul style="list-style-type: none"> • Philosophy & Ethics
ENGLISH	<ul style="list-style-type: none"> • English Fundamentals • Two English Seminars (CP) • World Literature (H) 	<ul style="list-style-type: none"> • Two English Seminars (CP, H) 	<ul style="list-style-type: none"> • Two English Seminars (CP, H) • AP Language • Composition and Research (DC) 	<ul style="list-style-type: none"> • Two English Seminars (CP, H) • AP Language • AP Literature • Composition and Research (DC) • Literature and Research (DC)
MATHEMATICS	<ul style="list-style-type: none"> • Algebra 1 (CP) • Algebra 2 (CP, H) • Geometry (CP, H) 	<ul style="list-style-type: none"> • Algebra 2 (CP, H) • Geometry (CP, H) • Discrete Math & Trig (CP) • Pre-Calculus (H) 	<ul style="list-style-type: none"> • Geometry (CP, H) • Discrete Math & Trig (CP) • Pre-Calculus (H) • Calculus (H) • AP Calculus AB or BC • College Algebra (DC) 	<ul style="list-style-type: none"> • Discrete Math & Trig (CP) • Statistical Reasoning (CP) • AP Statistics • Pre-Calculus (H) • Calculus (H) • AP Calculus AB or BC • College Algebra (DC)
LAB SCIENCE	<ul style="list-style-type: none"> • Biology (CP, H) 	<ul style="list-style-type: none"> • Chemistry (CP, H) • Anatomy & Physiology (H) 	<ul style="list-style-type: none"> • Chemistry (CP, H) • Anatomy & Physiology (H) • Marine Biology (.5)(CP) • Environmental (.5)(CP) • Physics (H) • AP Physics 1 • AP Biology • AP Chemistry 	<ul style="list-style-type: none"> • Anatomy & Physiology (H) • Marine Biology (.5)(CP) • Environmental (.5)(CP) • Physics (H) • AP Physics 1 • AP Biology • AP Chemistry
SOCIAL SCIENCE	<ul style="list-style-type: none"> • World Cultures & Geography (CP) 	<ul style="list-style-type: none"> • World History (CP, H) • AP European History 	<ul style="list-style-type: none"> • U.S. History (CP, H, AP) 	<ul style="list-style-type: none"> • Government (CP, H - fall only; AP - year long) • Economics (spring) (CP)
FOREIGN LANGUAGE	Spanish 1 Spanish 2 Spanish 3 Spanish 3 (H) Spanish 1 (DC) Spanish 2 (DC)	Mandarin 1 Mandarin 2 Mandarin 3 (H) Mandarin 4 (H)	French 1 French 2 French 3 (H)	
PE/HEALTH	PE (fall or spring)		Health (fall or spring)	
TECHNOLOGY	Digital Media Advanced Digital Media Computer Foundations	Introduction to Programming Programming 2 Pre-Engineering 1 Pre-Engineering 2	Robotics 1 Robotics 1 Robotics 3	
FINE ARTS	Drawing Painting Sculpture	Chorus Worship Arts Band	Guitar 1 Guitar 2 Guitar 3 (H)	Yearbook Drama Music Appreciation (DC)
BUSINESS AND INNOVATIONS	<ul style="list-style-type: none"> • Foundations in Innovation (.5 credit) • Public Speaking (.5 credit) 	<ul style="list-style-type: none"> • Foundations in Innovation (.5) • Public Speaking (.5) • Business Basics 	<ul style="list-style-type: none"> • Foundations in Innovation (.5) • Public Speaking (.5) • Business Basics • Intro to Business (DC) • Intro to Finance (DC) 	<ul style="list-style-type: none"> • Foundations in Innovation (.5) • Public Speaking (.5) • Business Basics • Intro to Business (DC) • Intro to Finance (DC)
OTHER ELECTIVES			<ul style="list-style-type: none"> • Intro to Psychology • General Psychology (DC) 	<ul style="list-style-type: none"> • Intro to Psychology • General Psychology (DC)

BIBLE

0.5 - 4.0 credits required

All students must be enrolled in a Bible class each semester that they attend Ben Lippen.

INTRODUCTION TO THE BIBLE

This full year course will introduce students to the Bible at a beginning English level. No previous Biblical knowledge is assumed at the beginning of this course. Biblical characters, stories, terms, and vocabulary are emphasized. This course is exclusively for beginning level English language learners. (1.0 credit)

THE STORY OF THE BIBLE

This course will introduce the student to the Bible as the foundation for Christian beliefs and practices. Students will then survey the Old Testament through the course of the fall semester, focusing on the stories and heroes of our faith as well as introducing them to the person of Jesus Christ, the coming Messiah, as presented in the Old Testament. The New Testament will be the focus of the spring semester when the student will be presented with the life and teachings of Jesus Christ, the birth of Christianity, and what the Bible reveals about the events that will happen next. This course is designed to build a Christian worldview grounded in Biblical truths for students who have a non-Biblical background or worldview. This course is appropriate for intermediate level English language learners as well as any student who lacks basic Biblical literacy. (1.0 credit)

OLD TESTAMENT SURVEY

In this course, students will study the Bible by tracing the chronological storyline through the Old Testament and creating Bible charts for each stage in redemptive history. Students will see how each book of the Old Testament (along with its historical circumstances) uniquely contributes to God's progressive plan of redemption for the world that is fulfilled in Jesus Christ. This is typically a 9th grade class. (1.0 credit)

NEW TESTAMENT SURVEY

First, this course provides an overview of the life of Christ as seen through a chronological synthesis of the four Gospels that highlights the works and words of our Lord and Savior. Second, this course provides a basic overview of the books of the New Testament (Acts-Revelation) and the historical circumstances surrounding these writings. The aim is to acquaint students with the background, content, message, and relevance of each book in the New Testament. This is typically a 10th grade class. (1.0 credit)

CHRISTIAN THEOLOGY

Scripture is the best place to study and learn theology. However, since not every Christian agrees on what the Bible teaches about certain topics, theologians have differing beliefs. This course will help each student learn what different theologians believe and help each student build a theology that they think best fits the Scriptures. Students will be able to carry out the process of systematic theology to help them summarize what the Bible teaches on the topics of: Bibliology, Theology Proper, Christology, Anthropology, Soteriology, Ecclesiology, and Eschatology. Students will understand orthodox beliefs, rejecting heresy and false beliefs from the past and present. Students will be able to explain what they believe in a clear manner, using biblical evidence, with a humble heart. (1.0 credit)

PHILOSOPHY AND ETHICS

This course is designed to accomplish two goals. First, to help students understand and/or formulate a Biblical worldview, and to understand the overall worldview of contemporary Western Culture and how it developed. This understanding will help the student articulate the Christian worldview. Second, to understand the overall ethic of contemporary Western Culture and its philosophical basis, and to discuss moral, ethical, and theological issues apologetically. Students will begin to understand and formulate a Biblical ethic and learn how a Biblical ethic is consistent with and a natural outgrowth of a Biblical worldview. Students will be challenged to think critically and with discernment both philosophically and ethically. Students will also be encouraged and challenged to live a 'pro-active' Christianity, as those who will make a positive and redemptive impact on their culture. (1.0 credit)

ENGLISH

4.0 credits required

All students must be enrolled in an English course each semester. 9th grade students who have not previously taken English Fundamentals must register for English Fundamentals both semesters. Students in 9th (who have successfully completed English Fundamentals) and 10th through 12th grade must register for at least one English seminar each semester unless they register for an Advanced Placement course in 11th or 12th grade.

Each seminar offers a different literature focus, but all class offerings maintain vocabulary building and writing emphases. Additionally, each seminar requires students to complete a term paper in order to receive credit for the course.

ENGLISH FUNDAMENTALS (Required for 9th grade students who have not already completed English Fundamentals)

The effective use of words is essential for communication. Students will become writers and public speakers who are able to use words in order to more clearly communicate their opinions, intentions, and knowledge. Words are powerful tools and must be used correctly. Through a study of vocabulary, grammar, writing techniques, argument construction, and public speaking skills, students will be empowered to use words in an effective manner. Students will work together as a community of writers to assist and challenge one another in the various stages of brainstorming, writing, revising, presenting, and publishing. Through a rigorous study of mythology, Shakespeare, contemporary literature and various short stories. Students will be equipped to analyze themes in writing that help us to gain a better understanding of who we are and the world we live in. Students will learn the differences of various literary genres and styles as they respond to literature individually and corporately through writing and discussion. Students will create a portfolio of their personal writings on various topics and of various styles, as well take part in classroom debates utilizing the Socratic Method. (1.0 credit)

HONORS WORLD LITERATURE (9th grade students who have complete Honors English Fundamentals)

World Literature is a year-long honors seminar for students that have completed and excelled English Fundamentals or an English 1 equivalent. This honors course will focus on developing students' reading, vocabulary, writing, and speaking skills through a study of literature from various cultures and eras. Students will explore various genres of literature - poetry, short fiction, drama and memoir - with emphasis on how cultural values and world view shape story. In addition to regular literature related writing assignments, students will also write a minimum of two research papers. Other major assignments and assessments include oral presentations, digital projects, collaborative projects, and Socratic Seminars. (1.0 credit)

BRITISH LITERATURE SURVEY 1 (9th-12th grade)

This class will examine British literature traditions beginning with the earliest Anglo-Saxon writings and ending with Shakespeare. We will also study the history and context of each work as it fits into the story of the British people (and us!), the English language, and the advance of the Gospel through literature. Coupled with their analysis of literature, students in this course will improve and refine their writing skills. Pre-requisite: English Fundamentals (0.5 credit)

SHAKESPEARE (9th-12th grade)

This class will cover selected plays and sonnets by William Shakespeare. The history and culture of Elizabethan England and Shakespeare's day. It will also examine the enduring legacy of the Bard and his impact on the English language, drama, and literature. Coupled with their analysis of literature, students in this course will improve and refine their writing skills. Pre-requisite: English Fundamentals (0.5 credit)

CONTEMPORARY LYRIC POETRY (9th-12th grade)

This class is built on the basis that song lyrics are poetry. During the semester, selected albums from the 20th Century will be compared and contrasted with a Christian worldview to challenge and strengthen students' beliefs. From the Mississippi myth-making of Robert Johnson to the icy ambience of Joy Division, the class will explore a wide range of genres and a diversity of lyricists from America and Britain. In the act of listening and responding to songs, students will develop rigorous analytical skills and become potent writers. Pre-requisite: English Fundamentals (.5 credit)

LITERATURE OF THE WEIRD AND UNREAL (9th-12th grade)

The Literature of Non-Reality includes, but is certainly not limited to, works of Sci-Fi, Fantasy, Horror, and Experimental fiction. Alongside phantasmal cats and utopian androids, students will contemplate reality through a bizarre and exciting lens. Delving into some classics as well as more obscure pieces from both American and British Literature, the class will interpret, discuss, and write on the questions raised by these masterpieces of fiction. Pre-requisite: English Fundamentals (.5 credit)

HONORS WOMEN'S LITERATURE (10th-12th grade)

Although they make up half the world's population, it wasn't until early in the 19th century that women's voices regularly began to be heard in literature. But once given a voice, they have spoken loudly and clearly. This course will examine a variety of women writers incorporating analysis of historical and cultural influences, the evolving role of women through a biblical lens, as well as literary analysis. In addition to the study of literature, students will work on perfecting their writer's craft through formal and informal writing assessments. (0.5 credit)

HONORS LITERARY CRITICISM (10th-12th grade)

This course will instruct students to read through the lens of several different literary theories. Over the course of the semester, we will encounter literature in a completely unique way: removing the personal analytics and biases and replacing them with practical readings through various critical approaches. Students will learn to apply the rules of several different schools of thought on literature and become stronger and more open readers in the process. Coupled with their analysis of literature, students in this course will improve and refine their writing skills. Pre-requisite: English Fundamentals, faculty approval (0.5 credit)

HONORS MODERN WRITINGS OF C.S. LEWIS (10th-12th grade)

C.S. Lewis has stoked many imaginations with visions of Prince Caspian and Aslan, but he has left a legacy of many other genres of literature besides his Narnian Chronicles. This course will provoke discussion on a wide variety of Lewis' works including his science fiction trilogy as well as his well-known examinations of the Christian faith. Emphasis in this honors-level course will be on critical analysis of literature and mastery of scholarly writing. Pre-requisite: English Fundamentals, faculty approval (0.5 credit)

CREATIVE WRITING (9th-12th grade)

This class guides students in the process of forging poetry, drama, fiction, and creative non-fiction. Whether individuals are new to creative writing or more familiar with it, this course will push them towards excellence in their craft. In addition to extensive writing, class discussions will explore the theological/philosophical value of creating art and what it means for humanity's relationship with God. Pre-requisite: English Fundamentals (.5 credit)

TRANSITION TO COLLEGE WRITING (12th grade, by invitation only; fall semester only)

Writing successfully is crucial in college. Mastery of MLA Citation Style as well as common essay strategies will help students enter their freshman year of college with confidence. This course will be offered for seniors only. (0.5 credit)

HONORS WRITING WITH A PURPOSE (11th-12th grade; spring semester only)

Strong writers change the world! This seminar will help students who already possess a basic grasp of good writing skills to move to the next level, but not in the way most would expect. Writers use their skill not only in the classroom for academic purposes, but also in the real world, whether it be in their jobs or simply in the course of daily life as citizens. In short, most real world writing doesn't look like a five-paragraph essay or the traditional research paper. This course will prepare students to write intentionally and effectively in various modes that achieve a variety of purposes. This focus will enable students to develop rich and powerful control of language in their academic writing and beyond. (0.5 credits)

ADVANCED YEAR-LONG COURSE OFFERINGS:

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION (11th or 12th grade)

According to the curricular requirements developed by the Advanced Placement division of the College Board, this course will prepare students to be effective and confident writers in college courses and professionally after that (paraphrased from AP English Course Description). To this end, this course will seek to stretch students by exposing them to varying types of well written prose material, training them to recognize the hallmarks of a well-written piece, and by challenging them to write on their own, responding to and learning from the techniques of accomplished writers. This course counts as 0.5 credits of British literature and 0.5 credits of American literature. (1.0 credit)

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION (12th grade)

This college-level course includes in-depth studies of 10-12 major works to prepare students for the essay and multiple-choice questions on the national AP test. Recognition and use of literary terms, test strategies, and vocabulary emphasis are also part of this course. Students are expected to be able to use these tools to understand the major works. Writing skills will be polished to help students write the AP essays. This course counts as 0.5 credits of British literature and 0.5 credits of American literature. (1.0 credit)

DUAL CREDIT COURSES:

ENG1110 - COMPOSITION AND RESEARCH

This course provides you an introduction to reaching well-reasoned conclusions based upon the most credible evidence available, skills fundamental to college writing but also for life as an educated adult. You will develop your abilities with modern academic library resources as evidenced through an annotated working bibliography, among other assignments. You will spend the majority of the course drafting and revising papers which demonstrate the effective use of secondary resources. (1.0 high school credits, 3 college credit hours offered through CIU, additional fees)

ENG1111 - LITERATURE AND RESEARCH

This is the second course designed to strengthen your critical thinking, reading, and writing skills—an important preparation for meeting the academic challenges of your educational career as well as for learning to participate in the world of ideas. This course serves as an introduction to the appreciation and analysis of literature in three genres: short fiction, poetry, and drama. Prerequisite: ENG 1110 or AP Language. (1.0 high school credits, 3 college credit hours offered through CIU, additional fees)

MATHEMATICS

4.0 credits required including Algebra 1, Algebra 2, Geometry, and one upper level math course

All students must be enrolled in a math course each semester. Information outlining the differences between direct instruction and problem based learning is available at math.benlippen.me. A TI-83 or TI-84 graphing calculator is required in all high school math classes. .

ALGEBRA 1

This course is the initial course in the high school math sequence, there are no prerequisites. Topics investigated include simplifying rational, irrational, and polynomial expressions as well as solving linear and quadratic equations, inequalities, systems and functions. Technology (including graphing calculators) will be used to introduce and investigate these areas of study. (1.0 credit)

ALGEBRA 2

Fundamental skills of mathematics will be applied to such topics as functions, equations and inequalities, probability and statistics, logarithmic and exponential relationships, quadratic and polynomial equations, complex numbers, and matrices. Technology (including computer-based and graphing calculator technology) will be used to introduce and expand upon the areas of study listed above. Prerequisite: Satisfactory completion of Algebra 1 or Algebra 1 Honors. (1.0 credit)

ALGEBRA 2 HONORS

This course covers the same material as Algebra 2, but in greater depth. Prerequisites: Faculty approval and outstanding completion of Algebra 1 or Algebra 1 Honors. (1.0 credit)

GEOMETRY This course covers the systematic study of points, lines, and planes with an emphasis on the properties of lines, polygons, and circles. The development of formal proofs using theorems and postulates, logical reasoning, congruence, similarity, and symmetry is emphasized. The properties of 2D/3D figures and simple right triangle trigonometry are also covered. Prerequisite: Satisfactory completion of Algebra 2 or Algebra 2 Honors. (1.0 credit)

GEOMETRY HONORS

This course covers the same material as Geometry in greater depth and at a more abstract level. Prerequisites: Faculty approval and outstanding completion of Algebra 2 or Algebra 2 Honors. (1.0 credit)

DISCRETE MATH

This is a one semester course offered the opposite semester from Trigonometry. Students study beginning probability and statistics focused on data exploration and describing patterns and departures from patterns (including mean, median, mode, standard deviation, normal frequency distribution and confidence intervals). Emphasis will be placed on practical applications. Prerequisite: Satisfactory completion of Algebra 1, Algebra 2, and Geometry. (0.5 credit)

TRIGONOMETRY

This is a one semester course offered the opposite semester from Discrete Math. Students study trigonometric relationships, functions, graphs (including transformations), complex numbers, and beginning limits. Solving trigonometric equations and verification of complex trigonometric identities utilizing all of the basic trigonometric identities is emphasized. Students use graphing calculators in activities that are appropriate to the topics studied. Prerequisites: Satisfactory completion of Algebra 1, Algebra 2, and Geometry. (0.5 credit)

STATISTICAL REASONING (12th Grade)

This course teaches students how to use four-steps of the statistical process: ask questions, collect data, analyze data, and make conclusions. Major statistical topics include: analyzing distributions of univariate and bivariate data, both categorical and numerical, using graphs and summary statistics; correlation and least squares regression; using simulations to estimate probability distributions; theoretical probability distributions, including the binomial and normal distributions; rules of probability, including conditional probability and expected value; the logic of hypothesis testing, including stating hypotheses, calculating and interpreting p -values, drawing conclusions, and Type I and Type II errors; using confidence intervals to estimate parameters; and proper methods of data collection, including sampling and experimentation. Use of technology, including online applets and the graphing calculator will be prominent in the course. Throughout the course, students will complete investigations that require students to complete the four-step statistical process. (1.0 credit)

ADVANCED PLACEMENT STATISTICS (12th Grade)

This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data (describing patterns and departures from patterns), sampling and experimentation (planning and conducting a study), anticipating patterns (exploring random phenomena using probability and simulation), and statistical inference (estimating population parameters and testing hypotheses). This course is equivalent to a one-semester introductory college statistics course. (Prerequisites: Faculty approval and satisfactory completion of Algebra 1, Algebra 2, and Geometry) (1.0 credit)

PRE-CALCULUS HONORS

This course is designed to prepare students for first-year college calculus or AP Calculus, and as a result it is an extremely rigorous course. Topics include polynomial and rational functions, exponential and logarithmic functions, absolute value functions, piece-wise functions, parametric and polar relationships, vectors, trigonometric functions (including verifying trigonometric identities), analytical geometry, and probability. Prerequisites: Faculty approval and outstanding completion of Algebra 1, Algebra 2, and Geometry. (1.0 credit)

HONORS CALCULUS

Honors Calculus provides the student with a rigorous course in calculus with in-depth instruction in the basic concepts of calculus. The course is designed for those students not planning to take the Advanced Placement Examination in Calculus. Calculus brings together many of the concepts and procedures from algebra, geometry and trigonometry. The focus in the first half of the year will be on functions, limits and differential calculus with an emphasis on real world problems in the area of related rates, optimization and motion. The focus in the second half of the year will be on integral calculus with applications that include finding areas enclosed by the graphs of functions, finding the volumes of shapes defined by functions and calculating quantities by integrating derivative functions.

ADVANCED PLACEMENT CALCULUS AB

This course covers all topics outlined in the AP Calculus AB syllabus including the study of functions, continuity, limits, derivatives, rules for differentiation, extreme values and rates, applications of derivatives, elementary integration, and applications of integration. This course is equivalent to the first semester of college calculus. Prerequisites: Faculty approval and satisfactory completion of Pre-Calculus. (1.0 credit)

ADVANCED PLACEMENT CALCULUS BC

This second semester course covers topics in the AP Calculus BC syllabus that are not included in the AB syllabus including advanced integration and applications of integration, sequences and series (including convergence, divergence, Power Functions and Taylor Polynomials), and differentiation/integration of polar and parametric relationships (including vectors) with applications. Students must enroll in the yearlong Advanced Placement Calculus AB course in order to enroll in Advanced Placement Calculus BC second semester. This course is equivalent to the second semester of college calculus. Prerequisites: Faculty approval and outstanding completion of Pre-Calculus. (0.5 credit)

ADVANCED MATHEMATICS TOPICS HONORS (Independent Study)

This course will extend the concepts learned in AP Calculus-BC and introduce a variety of higher level mathematics topics and methods. Problem solving strategies will be stressed throughout the course. Prerequisite: AP Calculus-BC. (1.0 credit)

DUAL CREDIT COURSE:

MAT1110 COLLEGE ALGEBRA

This course covers standard college algebra such as functions and expressions, linear, quadratic and rational expressions, and financial formulas. The course will also include real numbers, equations and inequalities, linear and quadratic functions, exponential and logarithmic functions. (1.0 high school credits, 3 college credit hours offered through CIU, additional fees)

LABORATORY SCIENCE

3.0 credits required including Biology, Chemistry, and one upper level laboratory science

BIOLOGY

This laboratory course includes studies in the areas of ecology, cellular structure and functions, genetics, classification, anatomy and physiology of invertebrates and vertebrates (including detailed dissection of both invertebrates and vertebrates), botany, and the issues involving evolution and creation. (1.0 credit)

BIOLOGY HONORS

This laboratory course, designed for advanced students, takes every area taught in regular biology and explores it from a more analytical perspective. Students are expected to be able to read with comprehension, work independently and use scientific principles to design and/or complete more complex laboratory exercises. Prerequisite: Faculty approval. (1.0 credit)

CHEMISTRY

This laboratory course is taught from a mathematical platform with practical applications, where relevant, as well as strengthening critical thinking skills. Essential lab experiments are interwoven throughout the scope of this class. Concepts covered in-depth include: scientific measurement, matter and change, atomic structure, the periodic table, chemical nomenclature, chemical reactions, stoichiometry, behavior of gases, electrons in atoms, periodicity, aqueous systems, solutions, acids and bases, and nuclear chemistry. Ionic bonding and ionic compounds, covalent bonding, reaction rate and equilibrium, and hydrocarbon compound topics are also covered. Prerequisites: Biology, enrolled in or completion of Algebra 2, faculty approval. (1.0 credit)

CHEMISTRY HONORS

This laboratory course includes all topics covered in chemistry but in more depth and a faster pace, requiring students to have strong math skills. Some additional concepts, including thermochemistry and oxidation/reduction, are added. A strong emphasis is placed on mathematical concepts and logical organization of data. Prerequisites: Satisfactory performance in Biology Honors or outstanding performance in Biology, enrolled in or completion of Algebra 2, faculty approval. (1.0 credit)

ANATOMY & PHYSIOLOGY HONORS

This laboratory course develops a deep understanding of the human systems and their functions. Topics include eleven body systems, embryology, and organization of the body along with common disorders of each system. This laboratory course emphasizes hands-on applications of both anatomy and the physiology of the human structure, with detailed dissection of fetal pigs and cow eyes. Prerequisite: A or B in CP or H Biology. (1.0 credit)

PHYSICS HONORS

This laboratory course serves as an introduction to physics concepts, and is designed to prepare students for college-level physics. Topics include Mechanics (linear and rotational kinematics, energy, and momentum), with some coverage of Waves. This course has a strong math emphasis. Prerequisite: Algebra 2, Biology, Chemistry. Open to 11th-12th grades. (1.0 credit)

ENVIRONMENTAL SCIENCE

This laboratory course provides 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 man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and preventing them. Environmental science is a multidisciplinary science. Students will search for viable solutions to environmental problems, basing their solutions as much as possible on solid scientific knowledge. A main focus of the course is to understand how the biosphere changes naturally and how human activities are altering it. Prerequisite: Biology. (0.5 credit)

MARINE BIOLOGY

Marine Biology is a comprehensive study of the oceans life and their interactions. In this course, we will study the chemistry of ocean waters and the vastly diverse organisms found in them. Marine microorganisms, from bacteria, protozoa, and fungi will be observed as well as plant life, while looking at the economic importance of each. We will see God's hand in creation as we study invertebrates and vertebrates such as marine reptiles, fish, mammals and birds. Understanding marine ecosystems like coral reefs, open ocean and rocky shores will allow us to learn how better to care for and appreciate this vast and amazing biome. Prerequisites: Successful completion of Biology, (0.5 credit)

ADVANCED PLACEMENT BIOLOGY

This college-level laboratory course is designed for the student who desires a more extensive knowledge in the field of biology. It will prepare students for the rigor of college courses and the Advanced Placement Exam administered at the end of the year. Topics of study include biological chemistry, cytology, genetics, molecular biology, evolution, biotechnology, plant and animal physiology, and ecology. Prerequisite: Biology and Chemistry, satisfactory performance in previous honors science course(s) or outstanding performance in previous non-honors science course(s), and faculty approval. (1.0 credit)

ADVANCED PLACEMENT CHEMISTRY

This college-level laboratory course is designed for the student who desires a more extensive knowledge in the field of chemistry. It will prepare students for the Advanced Placement Exam administered at the end of the year. Laboratory experiments are rigorous and extensive. Concepts emphasized in this course include: matter, measurement, atoms, molecules, ions, stoichiometry calculations, equations, aqueous reactions, thermochemistry, periodic properties, chemical bonding, molecular geometry and bonding theories, gases, intermolecular forces, liquids and solids, properties of solutions, chemical kinetics, chemical equilibrium, acid-base equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and organic chemistry. (Prerequisite: Faculty approval; outstanding performance in Algebra 2, Geometry, and previous science courses; and enrolled in or completion of Pre-calculus. (1.0 credit)

ADVANCED PLACEMENT PHYSICS 1

This is an algebra-based physics course emphasizing inquiry, critical thinking, and reasoning skills. Students will cultivate their understanding of physics and science practices as they explore kinematics, dynamics, circular motion, the universal law of gravitation, simple harmonic motion, impulse, linear momentum, collisions, work, energy, torque, rotational kinematics and dynamics, electrostatics, DC circuits, mechanical waves, and sound. Prerequisite: Faculty approval, Algebra 2, Chemistry, enrolled in or completion of Geometry. (1.0 credit)

SOCIAL SCIENCE

4 credits required including U.S. History, Government, and Economics

WORLD CULTURES AND GEOGRAPHY

What does it take to live in a complex and increasingly interdependent global society? Specific knowledge and skills are necessary to understand the people and cultures who live in the world God created. Students will learn to evaluate global decisions using a biblical worldview through a project-based learning approach as they become familiar with the five geographic themes and essential elements. Students will develop skills and knowledge about location, place, human/environmental interaction, movement, and regions. This is a required course for students in the 9th grade (1.0 credits)

WORLD HISTORY

This course provides a thorough look at non-western societies from a Euro-American framework. It introduces students to the cultures of humanity from Asia, Africa, the Middle East, and South America. Included is an overview of ancient and medieval societies with a look at each region's historical, geographical, social, economic, and political features. Units are tied in with current events where applicable. This is a 10th grade course. (1.0 credit)

WORLD HISTORY HONORS

This course covers the same topics as World History, but in greater depth, at faster speed, and with more independent reading required. This is a 10th grade course. (1.0 credit)

ADVANCED PLACEMENT EUROPEAN HISTORY

AP European History focuses on developing students' abilities to think conceptually about European history from 1450 to the present and to apply historical thinking skills as they learn about the past. Five themes of equal importance - Interaction of Europe and the World, Poverty and Prosperity, Objective Knowledge and Subjective Visions, States and Other Institutions of Power, and Individual and Society - provide areas of historical inquiry for investigation throughout the course. These themes require students to reason historically about continuity and change over time and make comparisons about various historical developments in different times and places. Prerequisite: Satisfactory performance in previous English class, strong writing skills, and faculty approval. (1.0 credit)

U.S. HISTORY

This course provides students with a structured view of the development of the United States from Pre-Colombian Era to the present. Special attention is paid to constitutional and economic issues in their respective historical settings. Students are encouraged to develop a biblical view of politics, economics, and the proper role of a responsible citizen. This is an 11th grade course. Prerequisite: World History or AP European History. (1.0 credit)

U.S. HISTORY HONORS

This course covers the same topics as U.S. History, but in greater depth, at faster speed, and with more independent reading required. This course is an 11th grade course. Prerequisite: World History or AP European History. (1.0 credit)

ADVANCED PLACEMENT U.S. HISTORY

The course goal is for students to gain knowledge comparable to an entry level college course and to fully prepare the student to successfully complete the AP exam. In addition to mastering the basics of historical knowledge, the student will develop significant writing abilities, particularly respecting interaction with various historical documents and knowledge of the period of those documents. Covering material from early exploration to the 21st Century, the student will grasp the meaning of historical change. This is an 11th grade course. Prerequisite: Satisfactory performance in previous English classes and Honors World History or AP European History, faculty approval. (1.0 credit)

GOVERNMENT

This semester course encompasses the political, economic, historical and Christian heritage of the United States from its founding to present day with special emphasis on the impact and events of the 20th century. Students will study the impact of America's democratic system within a global setting, as they examine political, economic and historical trends on a domestic level. This course emphasizes the fundamental concepts and principles of American government of the United States. This is a 12th grade course. Prerequisites: World History or AP European History and US History. (0.5 credits)

GOVERNMENT HONORS

This course covers the same topics as Government, but in greater depth and with more independent reading required. This is a 12th grade course. Prerequisites: World History and U.S. History. (0.5 credits)

ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS

This year long course is comparable to an entry level college course and prepares the student to successfully complete the AP exam. Students will focus on advanced writing skills as they examine the inner workings of the American Government from colonial America to the present day. Prerequisites: World History or AP European History, and US History, satisfactory performance in previous English classes, strong writing skills and faculty approval. (1.0 credits)

ECONOMICS

This semester course explores microeconomic, macroeconomic, and standard economic concepts and issues that define and affect our economy. Students will explore basic economic principles including scarcity, supply and demand, market structures, organized labor, wages, taxes, money and banking, fiscal policy, poverty, and international trade. Students will apply these economic principles to political and social issues of today. In addition, current events and practical aspects of economics will be interwoven throughout the course. This is a required 12th grade course. (0.5 credits)

ECONOMICS HONORS

This course covers the same topics as Economics, but in greater depth and with more independent reading required. This is a 12th grade course. (0.5 credits)

INTRODUCTION TO HUMAN PSYCHOLOGY

This course is designed to introduce students to the systematic and scientific study of human behavior and mental processes with an emphasis on the scientific nature of contemporary psychological investigation from a Biblical worldview. Students are exposed to the psychological facts, principles, and phenomena associated with the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. (1.0 credits)

DUAL CREDIT COURSES:

PSY2110 – GENERAL PSYCHOLOGY

In this survey of scientific psychology you will focus on historical roots, human development, and the physiological basis of behavior, learning, motivation, perception, emotions, personality, socialization, and pathology. You will learn how to filter psychological data through biblical principles to help produce a biblically-consistent model of human psychology which can then be used in both Christian and non-Christian environments. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

WORLD LANGUAGES

2.0 credits required for graduation; 3.0 credits of the same foreign language recommended

SPANISH 1

This course emphasizes the skills of listening and speaking so that students are able to communicate on a basic level. Vocabulary and grammar are learned through conversation, role play and other interactive activities. The grammar consists of regular and irregular verbs in the present tense, interrogatives, negatives, adjectives, possessives, and articles. The skills of reading and writing are learned through stories, creative writing, and written exercises. The culture of many Spanish-speaking countries will be explored. (1.0 credit)

SPANISH 2

This course continues to emphasize grammar and vocabulary while developing more in-depth skills in written and oral expression. Grammar consists of present and past tenses of verbs, the progressive tense, imperatives, direct and indirect object pronouns, and comparatives. Reading and listening comprehension skills are developed through the use of written and oral sources. An understanding of the geography and culture of the various Hispanic countries will continue to be developed. Students express ideas of the Christian faith using Spanish Scripture and songs. Prerequisite: Satisfactory performance in Spanish 1. A "C" or higher in Spanish 1 is highly recommended before registering for Spanish 2. (1.0 credit)

SPANISH 3

Students will delve deeper into Hispanic culture through thematic units, including daily life, the outdoors, volunteering and social action projects, environmental concerns and professions. In addition, students will build on Spanish 1 and 2 concepts in order to express their opinions, problem solve and share ideas about the future using the Avancemos 3 curriculum, as well as authentic material relevant to the world around them. (1.0 credit)

SPANISH 3 HONORS

This course continues to emphasize in-depth oral and written expression, listening and reading comprehension. Grammar consists of the use of all indicative tense, the present subjunctive mood, the use of all pronouns, and a review of other basic grammar functions. Students are exposed to cultural art forms such as authentic literature, music, art and videos. Students are required to express themselves in longer and more in-depth written and oral assignments. Students will continue to express ideas of the Christian faith. Prerequisite: Satisfactory performance in Spanish 2 and faculty approval. A "B" or higher in Spanish 2 is highly recommended before registering for Spanish 3 Honors. (1.0 credit)

DUAL CREDIT:

SPA2110 – SPANISH I

Spanish I is a basic communicative Spanish course in which you will integrate all four language skills (listening, speaking, reading and writing) with an emphasis on building key vocabulary, grammar knowledge, Spanish language functions, pronunciation, and the development of overall communicative competence. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

SPA2120 – SPANISH II

Spanish I is a basic communicative Spanish course in which you will integrate all four language skills (listening, speaking, reading and writing) with an emphasis on building key vocabulary, grammar knowledge, Spanish language functions, and the development of overall communicative competence. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

MANDARIN CHINESE 1

This course emphasizes the skills of listening and speaking so that students are able to communicate on a basic level. Vocabulary and grammar are learned through conversation, role play and other interactive activities. The grammar consists of regular and irregular verbs in the present tense, interrogatives, negatives, adjectives, possessives, and articles. The skills of reading and writing are learned through stories, creative writing, and written exercises. The culture of China will be explored. (1.0 credit)

MANDARIN CHINESE 2

This course continues to emphasize grammar and vocabulary while developing more in-depth skills in written and oral expression. Grammar consists of present and past tenses of verbs, the progressive tense, imperatives, direct and indirect object pronouns, and comparatives. Reading and listening comprehension skills are developed through the use of written and oral sources. An understanding of the geography and culture of China will continue to be developed. Prerequisite: Satisfactory performance in Mandarin Chinese 1. A "C" or higher in Mandarin Chinese 1 is highly recommended before registering for Mandarin Chinese 2. (1.0 credit)

MANDARIN CHINESE 3 HONORS

This course continues to emphasize in-depth grammar and vocabulary while developing more in-depth skills in oral and written expression. Grammar consists of the use of all indicative tense, the present subjunctive mood, the use of all pronouns, and a review of other basic grammar functions. Students are exposed to cultural art forms such as authentic literature, music, art and videos. Students are required to express themselves in longer and more in-depth written and oral assignments. Prerequisite: Satisfactory performance in Mandarin Chinese 2 and faculty approval. A "B" or higher in Mandarin Chinese 2 is highly recommended before registering for Mandarin Chinese 3 Honors. (1.0 credit)

MANDARIN CHINESE 4 HONORS

The fourth year Mandarin course enables students to broaden their ability in the language of Mandarin (listening, speaking, reading and writing) and appreciation of the Chinese culture. The course objectives include the following: (1) Speaking and listening: students will perform classroom activities almost entirely in Mandarin. (2) Reading: students are able to read longer short stories and anecdotes for the general idea, meaning, and for details. Students are able to read idioms and literary language in the reading passages. Students will memorize approximately 350 Chinese characters. (3) Writing: students will write short essays on the reading topics. They will use more discourse markers and conjunctions in their own speech and to connect their speech to other speakers. (4) Cultural activities are arranged to provide each student with opportunities to enhance language and cultural learning. Students will analyze commonalities and differences between Chinese and American culture through dialogue and writing. Prerequisite: Satisfactory performance in Mandarin Chinese 3. (1.0 credit)

FRENCH 1

This course emphasizes the skills of speaking French and listening so that students are able to communicate on a basic level. Vocabulary and grammar are learned through conversation, role play and other interactive activities. The grammar consists of regular and irregular verbs in the present tense, negatives, interrogatives, adjectives, possessives, and articles. Reading and writing skills are learned through stories, creative writing, and written exercises. The culture of many French-speaking countries will be explored. (1.0 credit)

FRENCH 2

This course continues to emphasize French grammar and vocabulary while developing more in-depth skills in written and oral expression. Grammar consists of present and past tenses of verbs, including reflexive verbs, the future tense, direct and indirect object pronouns, and comparatives. Reading and listening comprehension skills are developed through the use of written and oral sources. An understanding of the geography and culture of the various Francophone countries will continue to be developed. Students will learn to express ideas of the Christian faith using French Scripture, songs, and through the study of the church in Francophone countries. Prerequisite: A "C" or higher in French 1 is highly recommended before registering for French 2. (1.0 credit)

FRENCH 3 HONORS

This course continues to emphasize in-depth oral and written expression, listening and reading comprehension. Grammar consists of the use of all indicative tenses, the present subjunctive mood, the conditional mood, the use of all pronouns, and a review of other basic grammar functions. Students are exposed to cultural art forms such as authentic literature, music, art and videos. Students are required to express themselves in longer and more in-depth written and oral assignments. Prerequisite: Satisfactory performance in French 2 and faculty approval. A "B" or higher in French 2 is highly recommended before registering for French 3 Honors. (1.0 credit)

PHYSICAL EDUCATION / HEALTH

1.0 credit required including 0.5 credits in Health

HEALTH

The physical education health curriculum focuses on personal health and life choices as well as fitness/wellness which will assist students in establishing consistent exercise patterns maintainable for a lifetime. (0.5 credits)

PHYSICAL EDUCATION: Lifetime Sports

The physical education curriculum focuses on individual and team sports as well as personal fitness/wellness which will assist students in establishing consistent exercise patterns maintainable for a lifetime. (0.5 credits)

PHYSICAL EDUCATION: Weight Training

This advanced course is designed to train and condition varsity sport athletes not only during their specific season but throughout the school year. With the athletes' and their sport specific skills in mind, coaches monitor and train student athletes in advanced strength and conditioning skills. This course is assessed on a pass/fail basis and will not be included in the GPA calculation. This course may be taken more than once for credit up to a maximum of one full credit. (0.25 credits per semester)

SPORTS PARTICIPATION

Each season of junior varsity or varsity sports participation during grades 9-12 will give credit towards the Physical Education requirement. This credit will appear on the student's transcript but will not be included in the GPA calculation. (.2 credits per season)

FINE ARTS

2019 Graduates must earn at least one Fine Arts credit for graduation. All students in classes 2020 + must earn at least two Fine Art credits for graduation.

GUITAR 1

Guitar 1 is designed to introduce students to the fundamentals of playing the guitar. They will learn proper technique, music reading and theory, beginner accompaniment technique (strumming chords), reading Tablature, and ensemble performance. Students perform in two or more public performances. This course is a full year course that meets the Fine Art graduation requirement. Prerequisites: None. (1.0 credit)

GUITAR 2

If a student has been playing guitar for a year or more, or has successfully completed Guitar 1, they qualify for Guitar 2. Guitar 2 is designed to *increase* the student's knowledge and skill in the areas reading notes in higher positions, intermediate accompaniment technique, intermediate theory, improvisation, and ensemble performance. Students perform in two or more public performances. This course is a full year course that meets the Fine Art graduation requirement. Prerequisites: Guitar 1 or experience. For questions regarding experience contact Chris Essig at chris.essig@benlippen.com. (1.0 credit)

GUITAR 3 HONORS

If a student has been playing guitar for two years or more, or has successfully completed Guitar 2, they qualify for Guitar 3. Guitar 3 is an advanced guitar course designed to *increase* the student's knowledge and skill in the areas reading notes in higher positions, intermediate accompaniment technique, intermediate theory, improvisation, and ensemble performance. Students perform in two or more public performances. This course is a full year course that meets the Fine Art graduation requirement. Prerequisites: Guitar 2 or experience. For questions regarding experience contact Chris Essig at chris.essig@benlippen.com. (1.0 credit)

CHOIR

This year-long course is designed to introduce beginning singers to choir as well as to challenge intermediate to advanced singers. Students will learn the basics of singing, basic singing theory, and the origins of vocal music. Students will participate in at least 2 performances a semester and will be encouraged to participate in SCISA, NATS, MTNA, CMTA, and other music festivals and competitions. The class will focus on sharing the gift of Jesus through His gift of music. Prerequisite: None. Contact Alison Branham at alison.branham@ciu.edu for more information.

(1.0 credit)

BAND

9th-12th grade band places further emphasis on performance level skills and musicianship. Students have the opportunity to perform at football games, basketball games, jazz band, concerts, and competitions. Topics/skills covered include tone development, blend, repertoire, rhythmic variety and complexity, music theory, ear training and listening skills, equipment care and maintenance, and effective practice habits. (1.0 credit)

DRAMA

Drama explores the basic onstage principles of acting and improvisation, the audition process, stage/rehearsal terms, and theatre etiquette. Students will prepare and present a monologue in a mock audition setting as well as prepare and present a duet scene with another student. Students will learn about their God-given instrument through voice and movement and will learn how to properly warm up and take care of said instrument. Students will be required to volunteer 10 service hours towards the production for this semester. This course counts toward the Fine Art graduation requirement. (1.0 credit)

DRAWING

Drawing is a year-long course that prepares the student to see more clearly how to draw three-dimensionally using aerial and linear perspective. Students will focus on a variety of subject matters (landscapes, cityscapes, and still life) using pencil, colored pencil, etching tools, and colored chalk. During the second semester, students will begin to draw on a larger scale and continue to learn how to develop a variety of differing compositions that artists use in their drawings and paintings. Students are required to keep a sketchbook for preliminary sketches and will develop a physical and digital portfolio for use in future pursuits in the visual arts. This year-long course counts toward the Fine Art graduation requirement. (1.0 credit)

PAINTING

Painting explores a variety of painting mediums, techniques, and subject matter in light of portfolio development for the future.. Students will learn to use watercolor and acrylic painting and compose paintings in a variety of ways. Color schemes and painting techniques are emphasized so the student fully understands how the painter works. Each student keeps a 9x12 spiral notebook of field work and classroom practice. Students will paint from real life, personal photos, life experience, and their imagination. A variety of painting styles will be studied and incorporated in student work, and both a physical and digital portfolio will be used to track and present progress. This semester-long course counts toward the Fine Arts graduation requirement. Prerequisite: Drawing (1.0 credit)

SCULPTURE

Sculpture is a one semester course which prepares the student to see and think in three dimensions and create with found objects such as wire, sticks, clay, pasteboard, and a variety of mixed media. Students are required to keep a sketchbook for preliminary thumbnail sketches and keep a physical and digital portfolio for future pursuits in the visual arts. Prerequisite: Drawing (1.0 credit)

WORSHIP ARTS

This is an advanced level music course that provides an opportunity for upperclassman to lead their peers in corporate worship settings. Students are expected to model authentic worship and possess a desire to grow in their leadership skills. Students learn to combine music and other creative elements of worship in regular student chapels. Prerequisites include audition, a full year of Worship Arts 1, or Guitar 2. This course is a full year course that meets the Fine Art graduation requirement. (1.0 credit)

YEARBOOK

Yearbook class is a year-long course that counts as a full credit toward graduation. Students must apply for this class through Mrs. Cox.. The yearbook class equips students to apply design and journalistic skills and principles to the development a high quality high school yearbook. Students learn to use a checklist to self-assess their work and are responsible for every aspect of their layouts. Students learn and apply photography, journalistic writing, and design skills using online technology. Prerequisite: Application and approval by Mrs. Cox. Open to 9-12 graders. (1.0 credit)

ADVANCED PLACEMENT STUDIO ART

AP Art is a year-long course that counts as a full credit toward graduation. AP Art is for the serious art student looking to perfect their skills and develop a high quality portfolio before entering college. Students participate in the rigorous creation of 29 artworks in their choice of one of the following portfolio types: drawing, 2D design (which includes drawing and painting), and 3D (includes sculptures in many different forms and mediums). Students are required to write a commentary on their ideas and creative processes. Students will photograph their artwork and submit their work online. These portfolios can help students win scholarships from a variety of different art schools. Pre-requisite: One and one-half credits in the visual arts (i.e. Drawing, Painting, Sculpture).(1.0 credit)

DUAL CREDIT CLASSES:

MUS110 – MUSIC APPRECIATION

This course will introduce the student to music as one of the seven liberal arts, and as an apologetic to the study and enjoyment of music. The goal of the class is to enhance critical listening skills and to develop a working vocabulary of music that is meaningful to the non-musician. The course will introduce the basic elements of music and give a brief overview of the history of Western classical music, American Jazz, World, and Pop music. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

MUS2300 – MUSIC THEORY I

In this first theory course you will review the fundamentals of music (rhythm, scales, key signatures, reading and writing), followed by a detailed study of harmony, intervals, keyboard harmony, and melodic and choral analysis. You will apply your knowledge in composition of traditional and contemporary music. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

TECHNOLOGY

All students must earn at least one Technology credit for graduation.

DIGITAL MEDIA

Students will practice the art of visual communication by making intentional design choices through computer multimedia design. Using Pages, iMovie, and Adobe Photoshop software, students will utilize principles of layout, design, lighting, and editing. Students will creatively communicate through video production, photography, and basic graphic design scenarios. DSLR cameras and all necessary equipment will be provided. Previous experience with Apple computers and DSLR cameras is not required. This full-year course will count toward the Technology graduation requirement. (1.0 credit)

ROBOTICS 1

Students will be introduced to robotics using the LEGO MINDSTORMS systems. While building robots and learning to program them, students will look at in-depth, multi-faceted engineering challenges. This course is a full year course that meets the Technology graduation requirement. No prerequisite. (1.0 credit)

ROBOTICS 2

Using TETRIX ROBOT SYSTEMS, students will design, build, and program robots to a new level, applying real-world math and science concepts. Students will develop problem-solving, organizational, and team-building skills while using technical drawing or drafting, 3-D printing, and advanced 3D modeling. This class will also compete in a FTC FIRST Tech Challenge. We will explore Raspberry Pi systems and create projects with them. This full year course meets the Technology graduation requirement. Prerequisite: Satisfactory completion of Robotics 1. Prior robotics experience may be considered in lieu of Robotics 1 upon faculty approval. (1.0 credit)

ROBOTICS 3

Continuing the concepts learned in Introduction to Engineering Design, this year-long class will introduce students to engineering design and development. Students will develop a robotics project which teaches and uses skills such as problem identification, research and development, the decision process, and design of a solution. This class will also compete in a FTC FIRST Tech Challenge. This full-year course meets the Technology graduation requirement. Prerequisite: Satisfactory completion of Robotics 2. (1.0 credit)

ADVANCED DIGITAL MEDIA

Students will immerse themselves in a project-based environment where bringing the client's vision to life is the only thing that matters. They will experience true design by creating photographs, graphic designs, and videos from nothing with only a few promptings from the client. They will face the pressure of event-based photography where you only have one chance to capture the perfect shot, and their design projects will succeed or fail based on the client's final say. The reward for great design will be to see their designs, photographs, and videos featured in Ben Lippen social media and advertising. Pre-requisite Digital Media (1.0 credit)

INTRODUCTION TO PROGRAMMING

Students with no programming background will learn the basic fundamentals of programming. The class will be geared to introduce students to iOS Programming and App Development (XCode/Swift). Coding, principles of design, and mobile engineering with hands-on experience will be included. This course is a full year course that meets the Technology graduation requirement. (1.0 credit)

ADVANCED PROGRAMMING HONORS

In this advanced programming class we will use XCode and Swift language to code. The objective of this course is to learn iOS programming and learn how to put Apps in the AppStore. Students will work hands-on in teams to design, program and document their progress. Students will learn about the iPad/iPhone hardware and software design and functionality to open up the doors to creativity and innovation with their App designs. They will be introduced to advanced CSC aspects and be involved in advanced research and development utilizing various types of systems, software and devices. This course is a full year course that meets the Technology graduation requirement. Prerequisite: Faculty approval and enrolled in or completion of Precalculus. (1.0 credit)

PRE-ENGINEERING 1

Pre-Engineering I is an introductory course into the study of engineering. It is for students who are interested in pursuing a career in engineering, engineering technology, architecture, construction science, biomedical, or other related fields in college. It is also for students who are interested in learning more about applied physics and the physical world that God created. Pre-Engineering I is focused in four major areas: Statics, Mechanics, Thermodynamics, and Basic Circuits. Upon completion, students will be prepared for Pre-Engineering II or for freshman engineering in college. (1.0 credit)

PRE-ENGINEERING 2

This course is a continuation of the Pre-Engineering 1 course curriculum. Students will continue to build on the major themes of that course, including: engineering design, statics, mechanics of materials and surveying. In addition, the concepts of fluid mechanics, dynamics, thermodynamics and engineering problem solving methods will be introduced. Students will have the opportunity to apply the concepts they have learned to solve problems resulting in "hands on" solutions of their own design. (1.0 credit)

INNOVATIONS

All students in the class of 2020 and beyond must earn at least 0.5 Innovation credits for graduation.

FOUNDATIONS IN INNOVATION

Everything is an opportunity for ingenuity. Creativity allows you to thrive in an ever-changing world and unlocks a universe of possibilities. With enhanced creativity, instead of problems you see potential, instead of obstacles you see opportunities, and instead of challenges you see a chance to create breakthrough solutions. There is a saying "ideas are cheap." NO! This devalues creativity. They aren't cheap-they are FREE and amazingly valuable. They prevent our lives from becoming repetitive and stagnant. Creativity is the heart of innovation/invention (adapted from the book *InGenius* by Tina Seeling). In this class students will develop their creative and innovative capabilities. They will be challenged to think about problems in new and innovative ways. The tools they discover will equip them to be successful in every area of life. (.5 credit)

LEADERSHIP AND COMMUNICATION

This semester long course will prepare the student as they advance in the Innovation Academy, improving their ability to communicate clearly and effectively visually, orally, and in written form. These skills will be developed as they grow through leadership opportunities which capitalize on both their individual and collaborative strengths and skills, which will be discovered at the beginning of the course. The course provides hands-on training throughout in order to develop skills highly sought after in the professional world and higher education. (.5 credit)

BUSINESS BASICS

This course will introduce students to the basic principles, vocabulary, and major functional areas common to most businesses and organizations. The course also provides a broad overview of the primary business subject areas and disciplines that comprise the business program (1.0 credit).

DUAL CREDIT COURSES

BUS1100 - INTRODUCTION TO BUSINESS

In this survey course you will be introduced to the basic functions and environments for business in for-profit and not-for-profit organizations, including those operating in intercultural and international settings. You will focus on the primary disciplines of business and enterprise and entrepreneurship, including planning, organizing, staffing and management of organizations. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

BUS1200 - INTRODUCTION TO FINANCE

In this course, you will study the basic concepts and principles of corporate finance, accounting and reporting including analysis of financial statements, the time value of money, stock and bond valuation, risk and return, capital budgeting, the cost of capital, and conversion of international monetary systems. You will also develop basic skills in analyzing the finances of publicly-traded companies. (1.0 high school credit, 3 college credit hours offered through CIU, additional fees)

GENERAL ELECTIVES

APPLIED LEADERSHIP

Biblical leadership and biblical exemplars of leadership – both positive and negative – will be studied and discussed. Additionally, a mix of leaders from our community will be invited to speak to and interact with the prefect group. Some class time will be devoted to fulfilling the responsibilities of each individual prefect position, and some time will be used for collaborating as a prefect group to provide student leadership at Ben Lippen School. This course is assessed on a pass/fail basis and will not be included in the GPA calculation. Prerequisite: Student must be elected or appointed as a prefect in order to register for this course. This course is required for all elected or appointed prefects. (1.0 credit)

TEACHER AIDE

A student may request to assist a teacher in a discipline that the student may be interested in studying further in college or university. This can be an academic discipline (e.g. mathematics, history) or education at a particular level (e.g. elementary education). The student and teacher will create a written agreement that must be approved by the appropriate principal's office outlining the student's responsibilities in assisting the teacher before a student can register for this course. This course is assessed on a pass/fail basis and will not be included in the GPA calculation. This course may be repeated for a maximum of one elective credit. (0.25 credits per semester)