2017-2018
Course Catalog

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COURSE CHOICE GUIDELINES

MATHEMATICS (4 credits required)

- Algebra I
- Algebra II
- Geometry
- One Higher Level Math Class
  - Discrete Math
  - Pre-Calculus (may substitute MAT 129)
  - AP Calculus (may substitute MAT 165)
  - Statistics (MAT 115)

SCIENCE (4 credits required)

- Biology
- Chemistry (may substitute CHE 101)
- Environmental Science
- One Additional Science Course
  - Anatomy & Physiology
  - Physics (PHY 110 or 121)
  - Geology (EAR 110)

FOREIGN LANGUAGE (2 credits required)

- Spanish I
- Spanish II

Recommend

- Spanish III
- Intro Spanish I (SPA 110)
- Intro Spanish II (SPA 111)

SOCIAL STUDIES (4 credits required)

- Civics & Economics
- US History (2)
- World History (may substitute HIS 101)

ENGLISH (4 credits required)

- English 9 : Intro to Literature and Composition
- English 10: American Literature
- English 11: World Literature
- English 12: British Literature (may substitute ENG 131 and ENG 231 or other literature-based course)

RELIGION (4 credits required)

- Religion 9: Old Testament Studies
- Religion 10: New Testament Studies
- Religion 11: Comparative Religions
- Religion 12: Contemporary Issues

SPEECH (1 credit required)

- Introduction to Speech (1/2 credit)
- Introducttion to Debate (1/2 credit)
- Model UN
- Speech Communication (COM 111 or COM 142)

ENGLISH

The ultimate purpose of the English Language Arts curriculum is to teach students the language abilities they need to communicate effectively as individuals and as contributing members of society. The sequence of courses is designed to help students develop language skills necessary to function in society as self-directed learners, collaborative workers, and complex thinkers.

While students continue to need mastery of enabling skills such as reading and writing, they must also prepare for new basics, including problem solving, critical and creative thinking, decision making, flexibility and adaptability, and the ability to work cooperatively.

Students will also be introduced to a variety of literature such as novels, short stories, plays, poems, and non-fiction.

ENGLISH 9

Introduction to Literature and Composition
1 credit/4.0 weight

The purpose of this course is to develop fundamental English skills. Students will study the correct usage of language through grammar and mechanics of writing. In addition, introductory literary units including the short story, the novel, and poetry will be studied. Vocabulary study and development of writing skills form an integral part of the program. *(This course is available online through LHSOC.)*

ENGLISH 9 (Honors)

Introduction to Literature and Composition
1 credit/4.5 weight*

Students in this course examine a wide range of literature and print and non-print texts. They explore the ways audience, purpose, and context shape written and oral communication as well as media and technology. Students reflect upon and react to literature and personal experiences in writing. They explain meaning, describe relationships, and evaluate and critique fiction and nonfiction texts including: novels, short stories, poems, an epic poem, mythology, a Shakespeare play, drama, essays, informational texts and media. Students develop critical thinking skills. They grow in their ability to make and support informed opinions through literature analysis and participation in discussions about literary genres, elements, and traditions. Higher-level thinking skills are emphasized, and students are provided opportunities for independent critical thinking, self-directed and collaborative research. Students produce narratives, essays, reflective journals, research reports, oral presentations, and other written and visual presentations demonstrating effective use of written language and standard grammar conventions.

ENGLISH 10

American Literature
1 credit/4.0 weight

This course includes a comprehensive study of American literature incorporating developmental, canonical and modern reading. In addition, the course further develops vocabulary and writing skills through formal essays, a topical research paper, and a variety of creative and analytical writing experiences. A review of the grammar and mechanics introduced in English 1 will be part of the curriculum. *(This course is available online through LHSOC.)*

ENGLISH 10 (Honors)

American Literature
1 credit/4.5 weight

The purpose of this course is to introduce students to major (and some less renowned) writers and literary movements from pre-colonial America to the 21st Century, with a focus on literature in a historical context. We will also explore nonfiction and nonliterary

writing, ranging from journalism and mass media to legal and procedural documents.

A major goal of this course is to improve student writing. Forming well-reasoned and effective papers will be of prime importance in college, and contributes to a well-reasoned and effective mind. Accordingly, we will write and revise a good deal, and make constant efforts to improve vocabulary.

ENGLISH 11

World Literature

1 credit/4.0 weight

This course is designed to prepare students for college-level English. Major literary works are drawn from around the world and studied in thematic context of Christianity, history, culture, and modern society. Composition includes analytical essays, a college application essay, and a major research paper. *(This course is available online through LHSOC.)*

ENGLISH 11 (Honors)

World Literature

1 credit/4.5 weight

The purpose of this course is to introduce students to major (and some less renowned) writers and literary movements from around the world. We will also explore nonfiction and nonliterary writing, particularly (given the subject of the course), writing that covers world events.

A major goal of this course is to improve student writing. Forming well-reasoned and effective papers will be of prime importance in college, and contributes to a well-reasoned and effective mind. Accordingly, we will write and revise a good deal, and make constant efforts to improve vocabulary.

ENGLISH 12

British Literature

1 credit/4.0 weight

This course is designed to develop and refine skills in writing, grammar, and vocabulary building. Particular emphasis is placed on the study of British literature by reading assignments of classical British works. *(This course is available online through LHSOC.)*

ENGLISH 12 (Honors)

British Literature

1 credit/4.5 weight

As the final preparatory course for college level work in English, Honors English 12 offers rigorous practice in the close reading and written analysis of selected works from British and European literature. Works will be presented chronologically to demonstrate how the English language has developed through history. Readings will range from Old English translated texts, through Middle and Early Modern English (including the King James Bible), as well as Victorian and 20th century works. The course focuses upon a critical awareness of genre, theme, and style, with an introduction to formal literary theory and how to employ it in their written analyses of the texts. *(Fall Only)*

FOREIGN LANGUAGE

The world is full of languages. How far do you have to go from your front door to know that this is true? Studying a foreign language is a way to give yourself a competitive edge. It helps improve your skills in other subjects and can improve entrance exam scores (SAT, ACT). Research has shown that SAT scores climb higher with each additional year of foreign language study, which means that the longer you study a foreign language, the stronger your skills become to succeed in school. Studying a foreign language can improve your analytic and interpretive capacities. Studying a foreign language also provides an opportunity for job advantages in a global economy. More and more businesses work closely with companies in other countries. They need many different kinds of workers who can communicate in different languages and understand other cultures.

SPANISH I

1.0 credit/4.0 weight

Spanish I is an introduction to the study of the Spanish language and culture. Students perform the most basic functions of the language and become familiar with some cultural elements. Emphasis is placed on the development of the four skills of listening, speaking, reading and writing within a given context extending outside of the classroom setting when possible. The context focuses on the students' lives and experiences including an exposure to everyday customs and lifestyles. Basic grammatical concepts are integrated throughout the course. Students will begin to acquire some insight into how languages and cultures work by comparing the target language and culture(s) to their own. Integration of other disciplines will be on-going throughout the course. *(This is a year-long course.)*

SPANISH II

1.0 credit/4.0 weight

Prerequisite: Satisfactory performance on the UCHS Spanish Proficiency Test is required for placement into Spanish II.

Spanish II builds upon information acquired in Spanish I. The course will also work to reinforce the four language skills of listening, speaking, reading and writing. Spanish II will provide opportunities to explore and learn the Spanish language and culture through vocabulary practice, listening activities, group speaking exercises, grammar instruction, videos, culture lessons, WebQuests, Google Voice activities, blogs and projects. Through this course, students will continue to build upon reading and writing abilities as well as speaking and listening comprehension skills. Emphasis will be placed on perfecting pronunciation, mastery of the basic grammatical structures and increased communicative proficiency. Although Spanish II places a large emphasis on grammatical structure, acquisition of functional vocabulary is expected. Students will be exposed to the past tenses, future, conditional and subjunctive mood. *(This is a year-long course.)*

SPANISH III (Honors)

1.0 credit/4.5 weight

Prerequisite: Spanish II.

Spanish III builds on the principles taught in Spanish II in order to develop speaking, reading, listening and writing skills more fully. The curriculum for Spanish III is intended to engage students in communication with spoken and written language entirely in Spanish. Students will continue to familiarize themselves with different perspectives of the target cultures through experiences with its products and practices. Through the study of thematic vocabulary and more advanced grammatical structures, students will be able to imitate appropriate gestures, intonation and common idiomatic expressions through relevant social interaction. The course expands on key grammatical points including past tenses, perfect tenses, commands and the subjunctive mood. Students will also read selected literature in order to sharpen their comprehension skills. A strong emphasis will be placed on culturally authentic real world interactions. *(Fall Only)*

MATHEMATICS

"Who cares about math and when am I ever going to need it?" is a frequent lament among students. Broadly speaking, we should study math (or anything) because it is (1) Useful. Mathematical problems abound in daily life, mathematical proficiency is required for many jobs, and mathematics is essential for science, engineering, and research. (2) Important. A mathematically informed citizenry will make better economic and political decisions about risk, policy, and resource allocation. (3) Interesting. Doing mathematics teaches patterns of problem-solving and insight that transfer to other knowledge domains and mathematical proof teaches skills in rigor, argumentation and persuasion that transfer to other knowledge domains.

ALGEBRA I

1 credit/4.0 weight

In this course, students learn to solve linear equations, use linear equations to solve word problems, solve systems of linear equations, factor and solve quadratic equations and simplify expressions involving polynomials, exponents and radicals. Topics in Algebra 1 comprise a large portion of many college entrance exams. Students are required to take the NC End-of-Course (EOC) test in Algebra.

ALGEBRA II

1 credit/4.0 weight
Prerequisite: Algebra I

This course leads to an understanding of algebra beginning with review of Algebra 1 concepts and extending these same concepts and skills. Topics such as solving polynomial, exponential, logarithmic, and trigonometric equations are first encountered in this course. The study of angles and triangles are the main emphasis of the trigonometry section of the course. *(This course is available online through LHSOC.)*

ALGEBRA II (Honors)

1 credit/4.5 weight
Prerequisite: Algebra I

Honors Algebra II continues students' study of advanced algebraic concepts including functions, polynomials, rational expressions, systems of functions and inequalities, and matrices. Students will be expected to describe and translate among graphic, algebraic, numeric, tabular, and verbal representations of relations and use those representations to solve problems. Emphasis should be placed on practical applications and modeling. Appropriate technology, from manipulatives to calculators and application software, should be used regularly for instruction and assessment.

DISCRETE MATH (Honors)

1 credit/4.5 weight
Prerequisite: Algebra II, Geometry

Introduction to basic concepts of mathematics and mathematical reasoning. Logic, sets, number theory, mathematical induction, direct and indirect formal proofs. Active instruction in mathematical writing is given throughout the course and mathematical writing (including effective and correct English expression) is a major component of the course requirements.

GEOMETRY

1 credit/4.0 weight
Prerequisite: Algebra I

This course is a study of geometric figures in two and three dimensions. It is designed to increase a student's understanding of spatial relations. Emphasis is also placed upon applying algebra to geometric problem solving and applying the basic terminology and concepts of geometry in a logical and organized manner, including formal proofs. *(This course is available online through LHSOC.)*

GEOMETRY (Honors)

1 credit/4.5 weight
Prerequisite: Algebra I

Geometry continues students' study of geometric concepts building upon middle school topics. Students will move from an inductive approach to deductive methods of proof in their study of two- and three-dimensional geometric figures. Reasoning skills will be emphasized and students will broaden their use of the coordinate plane. Appropriate technology, from manipulatives to calculators and graphics software, will be used regularly for instruction and assessment.

PRE-CALCULUS

1.0 credit units/4.0 weight
Prerequisite: Algebra II, Geometry

Analytic Geometry and Trigonometry are integrated with other important topics in mathematics by an approach that stresses the use and understanding of functions. Study will include such topics as rational and irrational numbers, vectors, polar coordinates, sequences and series, matrices, and probability. *(This course is available online through LHSOC.)*

PRE-CALCULUS (Honors)

1 credit/4.5 weight
Prerequisite: Algebra II, Geometry

Pre-Calculus provides students an honors-level study of trigonometry, advanced functions, analytic geometry, and data analysis in preparation for calculus. Applications and modeling should be included throughout the course of study. Appropriate technology, from manipulatives to calculators and application software, are used regularly for instruction and assessment. *(Fall Only)*

CALCULUS (AP)

2 credit/5.0 weight
Prerequisite: Pre-Calculus. Must meet AP course requirements.

In AP Calculus the students will gather an understanding of the concepts of Calculus and the applications of Calculus. Students will look at problems and express the results graphically, numerically, analytically, and verbally. Students will use technology to draw connections between the relationships of the different topics in calculus. Through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. Students are required to take the AP College Board exam in Calculus in May. *(This is a year-long class.) (Offered odd school years only.)*

RELIGION

RELIGION 9: OLD TESTAMENT STUDIES
1.0 credit/4.0 weight

With the inspiration of the Holy Spirit, the purpose of this class is to provide a personal growth experience for incoming freshmen and to familiarize them with the Old Testament of the Holy Bible including God's creation, man's sin, God's law, love, prophecy, wisdom for daily life, and a history of His chosen people.

RELIGION 10: NEW TESTAMENT STUDIES
1.0 credit/4.0 weight

With the inspiration of the Holy Spirit, the purpose of this class is to provide a personal growth experience and familiarize student with the New Testament of the Holy Bible. The students will come to an understanding and appreciation for the love and grace of God shown to His people through the sacrifice of His son for the forgiveness of sin and the assurance of salvation.

RELIGION 11: COMPARATIVE RELIGIONS
1.0 credit/4.0 weight

This course is designed to provide an introduction to a variety of religious traditions, with emphasis on their origins, foundational beliefs and practices. Topics include: Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, Islam, and religion in America.

RELIGION 12: CONTEMPORARY ISSUES
1.0 credit/4.0 weight

Students will engage with perennial questions and issues of the day from a spiritual and religious perspective. Major topics will include: gender, race, sexuality, conflict and peace, ethics, current events, and apologetics. The questions guiding this course will be: "What is happening in the world?", "Why does it matter?", and "What should Christians do?" *(Spring Only)*

SCIENCE

The favorite question of children has always been "why?". We have been born into a fascinating world and have always been curious about why things are the way they are.

Science is the study of "why." It teaches students to look at the world with eyes of appreciation. They see that the simplest things are really incredibly complex and valuable. They learn that what they take for granted shouldn't be taken for granted. This appreciation inspires gratitude and a desire to protect and steward the world we have been given. Additionally, the study of science develops valuable skills. It encourages precision and excellence as well as critical and innovative thinking. It develops habits of observing and recording that can be transferred to other areas of life.

ANATOMY & PHYSIOLOGY (Honors)

1 credit/4.0 weight

This class provides opportunities for students to learn about the structure and functions of cells, tissues, organs and organs systems with emphasis on the human body. Students will learn through case studies, guided inquiry projects, hands on-minds on organ dissections, cells and tissue slide observations as well as research. In addition to learning about the structure and function of the levels of biological organization from the molecular to the organismal level, students will learn how the body transforms energy, maintains homeostasis, and responds to its environment.

BIOLOGY

1 credit/4.0 weight

This course focuses on the relationships between living organisms and their environment. Similarities and differences between all organisms, from simple to complex are examined. Additionally, recent developments in molecular biology and biotechnology are presented. Specific topics and activities include study of population dynamics, online dissection of a plasma membrane, exploration of bioenergetics, examination of the cellular basis of inheritance, application of Mendel's rules, and research of evolution. Learning methodology includes assigned readings, lectures, discussion responses, high-frequency online interaction with classmates, and introspective learning summaries. *(This course is available online through LHSOC.)*

BIOLOGY (Honors)

1 credit/4.5 weight

The biology curriculum is designed to continue student investigations and deepen student understanding of the biological sciences. High school instruction should include concepts introduced in grades K-8 at a more abstract level. In-depth study of the following concepts is included: structure and functions of living organisms, ecosystems, evolution and genetics, and molecular biology, Students in Honors Biology are required to write a research paper. Students are required to take the NC End-of-Course (EOC) test in Biology.

CHEMISTRY

1 credit/4.0 weight

This subject provides a study of matter and the changes that occur in it. Physical and chemical changes are identified. Energy relationships are studied and interpreted. Emphasis is given to interpreting the behavior of atoms and molecules based upon what students observe in the laboratory. Formula and equation writing follows an understanding of the changes that are being described. *(This course is available online through LHSOC.)*

CHEMISTRY (Honors)

1 credit/4.5 weight

The Chemistry course encourages students to continue their investigations of the structure of matter along with chemical reactions and the conservation of matter and energy in those reactions. Inquiry is applied to the study of the composition, structure, properties and transformation of substances. The course focuses on basic chemical concepts and incorporates investigations to build understanding of these concepts. Students in Honors Chemistry are required to write a research paper.

ENVIRONMENTAL SCIENCE (Honors)

1 credit/4.5 weight

Prerequisite: Biology

Learners will study natural and technological systems. The strands and unifying concepts provide a context for teaching content and process skill goals. All goals should focus on the unifying concepts: nature of science, ecological principles, biodiversity, natural resources, environmental quality, and sustaining human societies.

ENVIRONMENTAL SCIENCE (AP)

1 credit/5.0 weight

Prerequisite: Successful completion of Algebra I, Biology and Chemistry with a grade of B or higher. Must meet AP course requirements.

Environmental Science provides an in-depth study of the following concepts: earth systems and resources, the living world, populations, land and water use, energy resources and consumption, pollution, and global change. **This course is rigorous and will require continuous textbook chapter readings, writing, and data analysis.** All laboratory investigations and field work will require satisfactorily-completed written reports. Students are required to take the AP College Board exam in Environmental Science in May. *(Spring Only)*

SOCIAL STUDIES

History asks "How did things get to be this way?" There is nothing in the world that does not become more intriguing and far more mysterious once we recognize the complicated events and causes that led to its creation.

At the same time, history also recognizes that there is far more to the past than the events that created the world we know today. As the British writer L. P. Hartley once famously remarked, "The past is a foreign country; they do things differently there." Recognizing what we share with people in the past, while simultaneously exploring how profoundly their lives differed from our own, provides some of history's most fascinating insights.

History revels in exploring the diversity of the human experience: how profoundly people have differed in their ideas and institutions and cultural practices, how widely their experiences have varied by period and nationality and social circumstances, how much they have struggled with each other while inhabiting a shared world.

History seeks to understand past lives and societies by exploring every conceivable aspect of their reality. It takes as its field of study the entire human experience in all times and places, but does so in ways that pay very close attention to the fine-grained particularities of, and differences among, those times and places.

History analyzes the past, assessing the complex web of causes that help explain why particular events and phenomena occur, but it often communicates its findings in the form of narratives—stories—that make the past come alive as few things can. In this, history straddles the boundary between the sciences and the humanities. It is among the very few modern academic disciplines that can claim for itself one of the classical muses, Clio, of Greek antiquity. At its best, history is a form of literature, an art as much as a science.

From the University of Wisconsin's "Why Study History?"

CIVICS AND ECONOMICS (Honors)

1 credit/4.5 weight

Through the study of *Civics and Economics*, students will acquire the skills and knowledge necessary to become responsible and effective citizens in an interdependent world. Students will need a practical understanding of these systems of civics and economics that affect their lives as consumers and citizens. Furthermore, this course serves as a foundation for *United States History*.

As informed decision-makers, students will apply acquired knowledge to real life experiences. When studying the legal and political systems, students will become aware of their rights and responsibilities and put this information into practice. The economic, legal, and political systems are balanced for presentation and, like other social studies subjects, this course lends itself to interdisciplinary teaching. The goals and objectives are drawn from disciplines of political science, history, economics, geography, and jurisprudence.

ECONOMICS

0.5 credit/4.0 weight

1.0 credit units/5.0 weight

Economics is the systematic study of man's effort to satisfy his wants by securing goods and services from the scarcity of nature. The high school economics course is an introduction to the essential concepts, principles, values and methods of economic analysis and their application to the modern world. This course must be taken along with Government in order to fulfill the NC Civics & Economics requirement. *(This course is available online through LHSOC.)*

GOVERNMENT

0.5 credit/4.0 weight

This course is designed as an introduction to American Government. Federal, state, & local organization and operation of the legislative, executive, and judicial branches are the main theme of this course. This course must be taken along with Economics in order to fulfill the NC Civics & Economics requirement. *(This course is available online through LHSOC.)*

GOVERNMENT & POLITICS (AP)

1 credit/5.0 weight

Prerequisite: Civics and US History. Must meet AP course requirements.

AP US Government and Politics is a one semester college-level course designed to help students glean and demonstrate deeper understanding of American politics and the processes of government that help to shape our public policies. The course builds upon basic knowledge of American government by delving into deeper analyses of political behavior, political institutions and the factors that influence them. Students will examine the design of the American political system--how it functions as a pluralistic system of various (and often competing) individual and group interests. Students will begin to develop a more sophisticated and insightful understanding of majority-rule democracy, constitutionalism, civil liberties, and other distinguishing characteristics of the American political system.

This course is inherently **reading and writing intensive**--both of these characteristics are designed and implemented at the collegiate level. The rigor of this course is intended to prepare students for the Advanced Placement examination in May. Students demonstrating mastery on this exam are often eligible to receive college-level credits from most post-secondary institutions. *(This course is offered in Spring of odd numbered years only.)*

US HISTORY

1 credit/4.0 weight

Prerequisite: Civics & Economics

This course includes the study of the political, social, economic, and geographic development of the United States from the colonial days to the present. Emphasis is placed on the personalities that helped shape this nation and on the origins of current political elements. Current events and world issues are discussed throughout the year, and special emphasis is placed on helping students develop a cultural understanding of the nation. *(This course is available online through LHSOC.)*

US HISTORY (Honors)

2 credits/4.5 weight

Prerequisite: Civics & Economics

The study of Honors United States History is designed as a survey course and a continuation of the Civics and Economics curriculum studied in ninth grade. This survey course will begin with the national period and the administration of George Washington. Throughout the competency goals, there will be some overlap of time periods to allow for teacher flexibility and to address the complexity of the issues and events. The overall curriculum continues to current times.

The focus of this course provides students with a framework for studying political, social, economic, and cultural issues, and for analyzing the impact these issues have had on American society. This course goes beyond memorization of isolated facts to the development of higher-level thinking skills, encouraging students to make historical assessments and evaluations. *(This is a year-long class.)*

US HISTORY (AP)

2 credits/5.0 weight

Prerequisite: Civics & Economics. Must meet AP course requirements.

Advanced Placement United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States History. Students will analyze historical material, synthesize their own ideas, and evaluate those of others.

The AP United States History course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Students are required to take the AP College Board exam in US History in May. *(This is a year-long class.)*

WORLD HISTORY

1 credit/4.0 weight

This course includes a brief review of medieval history followed by in-depth examinations of the Renaissance and Reformation, the rise of democratic ideas, the history of world revolutions, the development of imperialism, the impact of the World Wars, and the presence of nationalism in the contemporary world. Each unit utilizes a variety of materials and has an emphasis on geographical relationships. *(This course is available online through LHSOC.)*

WORLD HISTORY (Honors)

1 credit/4.5 weight

The study of World History gives students the opportunity to explore recurring theme of human experience common to civilizations around the globe from ancient to contemporary times. The application of the themes of geography and an analysis of the cultural traits of civilizations will help students understand how people shape their world and how their world shapes them. As students examine the historical roots of significant events, ideas, movements, and phenomena, they encounter the contributions and patterns of living in civilizations around the world. Students broaden their historical perspectives as they explore ways societies have dealt with continuity and change, exemplified by issues such as war and peace, internal stability and strife, and the development of institutions.

ELECTIVES

Elective Courses *are classes that a student can take which are not specifically required to graduate or to fulfill a degree. They are generally seen as the opposite of core requirements, which are classes that all students must take unless they have special dispensation. Elective courses give students the chance to take classes outside of a prescribed plan of coursework. This lets students pursue other interests they may have, giving them a more "well-rounded" education. These electives also let students find subjects that might interest them and change the direction they wish to take with their education. A student who takes an elective class in drafting, for example, might discover a love of design and engineering that leads to a career he or she might not otherwise have found.*

At UCHS our elective offerings change depending on the interest of our students and the expertise of our instructors. Through our partnership with Lutheran High School of Orange County and Mayer Lutheran High School, we are able to offer a wider variety of elective courses through their online formats.

ACCOUNTING

0.5 credit/4.0 weight

This course focuses on the basics of analyzing, journaling, and completing financial statements for a service business organized as a proprietorship and a merchandising business. Students will explore topics such as the accounting equation, T accounts, journalizing, posting to a general ledger and recording and adjusting financial entries. Activities include, but are not limited to, financial calculations, discussions questions, weekly summaries, business simulations, and multi-media activity. *(This course is available online through LHSOC.)*

ART HISTORY

1.0 credit/4.0 weight

This course introduces art principles and instructs students to look at art within the concept in which it was made—its history. Exploration of the cultures that created significant buildings, sculptures, and paintings are a key factor in understanding the importance and relevance of Art. This course leads students through the drawings and structures of Prehistoric Man, through thousands of years of human creativity and innovation, and concludes with the Renaissance period. *(This course is offered online through Mayer Lutheran High School.)*

BUSINESS LAW

0.5 credit/4.0 weight

This course focuses on the foundation of the U.S. legal system in the areas of business and personal law. Students will explore the evolution of our legal and court systems, and understand criminal, civil, property, employment and contract laws, including legalities in business and financing. Activities include, but are not limited to, discussion questions, weekly summaries, lectures, and multi-media activity. *(This course is available online through LHSOC.*)

COMMUNICATION IN AN ELECTRONIC AGE

0.5 credit/4.0 weight

This course introduces students to learning in an online environment. Students will develop strategies for successful distance learning, time management, and online communication. Students will also explore the appropriate use of information found on the Internet in an academic environment. Specific topics for the course include using search engines, time management, Microsoft Word©, Excel©, and PowerPoint©. *(This course is available online through LHSOC.)*

DIGITAL PHOTOGRAPHY I & II
0.5 credit/4.0 weight (each)

This course focuses on the basics of digital photography, and the basics of photography in general. Studies include using the camera, post-production, elements of composition, the properties of light, black and white conversion, watermarks, and image selection for portfolios. Students read lectures, respond to discussion questions, view the work of their classmates and professional photographers, photograph images and make corrections to photos before submission. *(This course is available online through LHSOC.)*

FOUNDATIONS OF FITNESS
0.5 credit/4.0 weight

The emphasis of this course is on physical fitness through active living. In addition, studies will include units on cardio respiratory fitness, muscular fitness, flexibility, designing a personal fitness program, body composition, maintaining a healthy body weight, and incorporating fitness throughout various stages of life. *(This course is available online through LHSOC.)*

GRAPHIC DESIGN
1.0 credit/4.0 weight

This course will teach students how design is used in modern communication. They will study various areas of design including product, corporate, logo, t-shirt, poster, and a variety of other design-related projects. Students will learn design rules, design trends, and how to critique good and bad design. This class will show students what the design industry is like and how a career in design might suit them. *(This course is available online through Mayer Lutheran High School.)*

GRAPHIC DESIGN-ADVANCED
1.0 credit/4.0 weight
Prerequisite: Graphic Design

This course in the applied visual arts prepares students to use artistic techniques to effectively communicate ideas and information to consumer and business audiences via illustrations and other forms of digital or printed media. Instruction includes training in concept design, layout, color, typography, computer graphics, and printing. *(This course is available online through Mayer Lutheran High School.)*

HEALTH EDUCATION
0.5 credit/4.0 weight

The emphasis is on wellness and a positive life style. In addition, studies will include units on personal identity, personality types, human sexuality, relationships and family roles, alcohol, tobacco, drugs, nutrition, and sexually transmitted diseases (STD's). *(This course is available online through LHSOC.)*

INFORMATION & INFLUENCE
0.5 credit/4.0 weight

This class will examine the use of language in non-literary contexts to persuade, influence, manipulate and control. Rather than analyzing poetry and fiction, this class will examine language in a wide range of non-fiction applications, such as marketing and advertising, science, philosophy, and mass media. Projects will include things like creating a marketing campaign, writing political speeches, critiquing news coverage, and examining texts ranging from philosophy to law codes.

MULTIMEDIA DESIGN CONCEPTS
0.5 credit/4.0 weight

This course combines the elements of art, the principles of design and computer generated audio/visual techniques with an emphasis on creative problem solving skills. Course discussions and assignments guide students to a stronger grasp of media literacy and visual communication, with the development of basic proficiency in interactive media design. Using up-to-date software, students will be able to create static digital presentations, simple animations and interactive media pieces. Students will also develop self-promotional pieces and successfully publish their work to the Internet in the form of a Webfolio. *(This course is available online through LHSOC.)*

MUSIC APPRECIATION I
0.5 credit/4.0 weight

In this course, students explore a variety of musical styles, forms, fundamentals, instruments, and composers. They will learn about the social backgrounds of various artists and how the various styles and periods reflect the mainstream of history and influence and are influenced by the society at large.

There is a focus on listening skills that sharpen students' aesthetic valuing of music and its elements that allows students to engage and interact with music. Students gain an understanding of melody, harmony, rhythm and meter, tempo, dynamics, and others, and learn how these are combined to produce the effects of the music they hear. Learning methodology includes assigned readings, listening, lectures, discussion responses, high-frequency online interaction with classmates, and introspective learning summaries. FEE: All students will be required to purchase supplemental media. *(This course is available online through LHSOC.)*

MUSIC APPRECIATION II

0.5 credit/4.0 weight
Prerequisite: Music Appreciation I with a final grade of B or higher.

This course will explore the progression of musical styles, instruments, and composers throughout the ages. The reflection of the world's social and political condition on the evolution of the various artistic styles will be examined. There will also be a focus on developing listening skills that will sharpen the listener's perception of music and its elements. Learning methodology includes assigned readings, lectures, discussion responses, high-frequency online interaction with classmates, and introspective learning summaries. *(This course is available online through LHSOC.)*

PERSONAL NUTRITION

0.5/4.0 weight
Prerequisite: Foundations of Fitness

The emphasis of this course is on nutrition and healthy eating as a way of life. In addition, the course will include units of study on the importance of have a nutritionally balanced diet, dieting and nutrition myths vs. facts, designing a personal nutrition plan, achieving a healthy body image, and incorporating nutrition throughout the various stages/phases of life. *(This course is available online through LHSOC.)*

SPORTS AND ACTIVITIES

0.5 credit/4.0 weight
Prerequisite: Foundations of Fitness

This course will emphasize the importance of physical sports/activities in reaching and maintaining a healthy/active lifestyle. The course will include an overview of the physical benefits as well as the basic skills that are needed for various team/individual sports and activities. Students will set personal/individual fitness goals and be able to experience what sports/activities will help them to achieve these goals, both now and as their physical needs change. *(This course is available online through LHSOC.)*

VIDEO GAME DESIGN I

0.5 credit/4.0 weight

This course provides an introduction to the game design industry to study various career opportunities. Students will evaluate games and their use of images, sound effects and music to make the games attractive to players. Using game design software, they will develop multilevel games. Students will design a game from scratch using relevant software, and add original sound effects, audio, and music. *(This course is available online through LHSOC.)*

VIDEO GAME DESIGN II

0.5 credit/4.0 weight
Prerequisite: Video Game Design I with a final grade of B or higher.

This course is a continuation of Video Game Design I. The course leads students further through the theory and process of designing and programming computer games. The history, genre and future of gaming are considered. A unit on successful game attributes will include game plots, controls, strategies, graphics and Foley sound effects. The planning of their students' game project will study storyline, characters, music, and flowcharting. Students will play other students' games and provide feedback. *(This course is available online through LHSOC.)*

SPEECH/DEBATE

We believe Debate to be one of the single most valuable skills students can acquire in school. We teach all speech and debate formats, and our classes prepare students to compete in local and state competitions. Although we encourage our students to participate in tournaments, it is not necessary.

INTRO TO SPEECH (Honors)

0.5 credit/4.5 weight

This course will introduce students to public speaking and debate skills. Students will learn to take issues and examine them from multiple perspectives in order to effectively take a stance and defend their position. The course will also help students hone their speech skills in areas such as grammar and physical projection. Through the course, it is the goal to help students look at all angles of issues, to become more well-rounded, and to create strong public speaking skills. This course will provide plenty of practice, with a goal of making students more comfortable with public speaking and confrontation.

INTRO TO DEBATE (Honors)

0.5 credit/4.5 weight

Speech and Debate will encourage students to take issues and examine them from multiple perspectives in order to effectively take a stance and defend their position. The course will also help students hone their speech skills in areas such as grammar and physical projection. Through the course, it is the goal to help students look at all angles of issues, to become more well-rounded, and to create strong public speaking skills. These skills will help students tremendously in job interviews, college interviews, awards ceremonies, and daily interaction with others.

MODEL UN (Honors)

1 credit/4.5 weight

This course will focus on the issues, goals, and procedures of the United Nations and will prepare students for participation in Model United Nations conferences. As a class and international club, Model United Nations aims to replicate the rigorous yet successful process international leaders must go through to find agreeable solutions to major problems in the world today. By actively engaging in discussion about global issues from both the past and the present, this course hopes to create engaged students knowledgeable on the workings of the United Nations.

One of the more unique aspects of this class is that the students will have the opportunity to participate in the Pangea Model UN Conferences at Lenoir-Rhyne University and Appalachian State University. The students will be assigned a country and a committee where they will have the opportunity to work with other schools to solve international issues. *(Spring Only)*

COMPUTER SCIENCE

The most important aspect of computer science is problem solving--an essential skill for life. Students study the design, development and analysis of software and hardware used to solve problems in a variety of business, scientific and social contexts. This is a three course sequence culminating with AP Computer Science.

INTRO COMPUTER SCIENCE (Honors)

0.5 credit/4.5 weight

Intro to Computer Science is designed to introduce students to the central ideas of computing and computer science (CS), to instill ideas and practices of computational thinking, and to have students engage in activities that show how computing and computer science can change the world. The CS course is rigorous and rich in computational content, includes computational and critical thinking skills, and engages students in the creative aspects of CS. Through both its content and pedagogy, this course aims to appeal to a broad audience.

CS uses the mobile computing language, App Inventor for Android, to provide a rigorous, programming-based introduction to the principles of computer science. Students learn computer science by building socially useful mobile apps. In addition to programming and computer science principles, the course is project-based and emphasizes writing, communication, collaboration, and creativity.

JAVA I (Honors)

1 credit/4.5 weight

JAVA I is an advanced programming course for students who have successfully completed *Introduction to Computer Science*. This course is designed for those students who wish to prepare for AP Computer Science or prepare for taking computer science courses at the college level. This class focuses on problem solving and the science of designing computer programs using an object oriented style. The course covers topics such as ordering/sorting algorithms, infinite lists, list comprehension, function abstraction, and artificial intelligence. The course will develop these skills using Java as a means for learning programming. The types of problems solved by means of programming will vary (ie. Math, Finance, Graphics). *(Fall Only)*

COMPUTER SCIENCE (AP)

1 credit/5.0 weight

Prerequisite: Pre-AP Computer Science. Must meet AP course requirements.

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to creative aspects of programming, using abstractions and algorithms, working with large data sets, understandings of the Internet and issues of cybersecurity, and impacts of computing that affect different populations. AP Computer Science Principles will give students the opportunity to use current technologies to solve problems and create meaningful computational artifacts. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

AP Computer Science Principles will encourage students to be both analytical and creative in their thinking, and to collaborate with their peers to investigate solutions to real-world issues using computing. Students who succeed in AP Computer Science Principles will be better prepared in college and career, with a thorough grasp of computing foundations and concepts. Students are required to take the AP College Board exam in Computer Science in May. *(This course is offered in Spring semester of odd years only.)*

HEALTH/PE

HEALTH & PE

1.0 credit/4.0 weight

In this course the learner will develop knowledge and skills to enhance mental and emotional well-being. Students will also study and learn how to enhance their personal and consumer health. Other study areas include healthy and effective interpersonal communication and relationship skills; self-management skills in the areas of nutrition and physical activity for healthy growth, development, and maintenance; and the danger related to substance abuse. In addition, time will be spent developing competency in a variety of movement forms and proficiency in a few to gain competence toward lifetime physical activities. Each year UCHS participates in the program "Relationships" as part of the Teen Series specially designed for 9th graders. The course is presented by educators from the Council on Adolescents of Catawba County who have been specifically trained in this area. A copy of the curriculum for this program is available in the school office if you wish to review the curriculum in person.

DUAL-ENROLLMENT COURSES

Dual-enrollment classes enable high school students to take classes at Lenoir-Rhyne University and potentially earn college credit. These programs introduce students to the rigors of college coursework early and help them get used to the academic environment before they leave the comfort and support of home. By learning to navigate the testing, study requirements, and time-management of college classes, our students are truly "learning to go to college before they go to college."

ART 200. ART APPRECIATION

1.0 credit/5.0 weight

A study of the fundamentals of visual design, the materials and techniques by which they are made, and the principal forms of art developed by cultures both ancient and modern.

ART 201. DESIGN I

1.0 credit/5.0 weight

An examination of the principles, theories, and concepts of color and design and their application to two and three dimensional design. There will be formal exercises which are aimed at assisting the students in the development of sensitivity to color, composition, and form-making.

ART 205. PHOTOGRAPHY

1.0 credit/5.0 weight

A basic introduction to the equipment, materials, and techniques for producing good photographic prints, as well as the aesthetic concepts related to the art of photography.

ART 211. DRAWING I

1.0 credit/5.0 weight

Basic visual concepts and materials traditionally associated with the art of drawing.

BIO 105. PRINCIPLES OF BIOLOGY

1.33 credits/5.0 weight

This Biology course is designed for science majors. The course emphasizes major biological concepts ranging from the molecular to the ecosystem level. The following principles are covered: basic chemical and physical laws, energy dynamics, genetics, ecology, evolution, cell structure and function, growth and development. Laboratory exercises and experiments demonstrate analytical and descriptive approaches to biology and involve the collection, organization, and interpretation of various types of biological data. Three lecture hours and three laboratory hours per week. *(Fall Only)*

BIO 106. PRINCIPLES OF BIOLOGY

1.33 credits/5.0 weight

This course is a continuation of BIO 105. The course emphasizes major biological concepts ranging from the molecular to the ecosystem levels. The following principles are covered: basic chemical and physical laws, energy dynamics, genetics, ecology, evolution, cell structure and function, growth and development. Laboratory exercises and experiments demonstrate analytical and descriptive approaches to biology and involve the collection, organization, and interpretation of various types of biological data. Three lecture hours and three laboratory hours per week. *(Spring Only)*

BIO 110. CONCEPTS OF BIOLOGY

1.0 credit/5.0 weight

A course designed for non-majors involving a study of the basic biological concepts common to living organisms. Particular consideration given to the physical and chemical laws governing life, cell structure and function and basic principles of genetics, photosynthesis, cellular respiration, reproduction, and evolutionary theory. Two lecture hours and two laboratory hours per week.

BUS 100. INTRODUCTION TO BUSINESS
1.0 credit/5.0 weight

A fundamental survey course designed to familiarize students with a broad overview of the relationships that exist among an organization's management, marketing, finance, production, and accounting functions. Open to first-years or any other student who has not yet completed a course in accounting or management.

CHE 101. FUNDAMENTALS OF GENERAL AND INORGANIC CHEMISTRY
1.0 credit/5.0 weight for Class
0.33 credit/5.0 weight for Lab

A study of principles, laws, and theories which are basic to understanding chemical changes. Topics include atomic structure, periodic table, chemical bonding, nomenclature of compounds, solutions, acids and bases, chemical reactions and equilibrium, chemical kinetics, electrochemistry, nuclear chemistry, and properties of important metallic and nonmetallic elements and their compounds.

CHE 103. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS
1.0 credit/5.0 weight for Class
0.33 credit/5.0 weight for Lab

Designed for science majors. This course teaches fundamental principles and theories of chemistry and chemical calculations. Three lecture hours per week. *(Fall Only)*

CHE 104. GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS
1.0 credit/5.0 weight for Class
0.33 credit/5.0 weight for Lab

This course is a continuation of CHE 103. Students are taught **descriptive inorganic** chemistry; fundamentals of qualitative analysis. Three lecture hours per week. *(Spring Only)*

COM 111. SPEECH COMMUNICATION
1.0 credit/5.0 weight

An introduction to public speaking.

CSC 175. INFORMATION TECHNOLOGY
1.0 credit/5.0 weight

This course provides literacy in computers and information systems. It will supply knowledge of productivity software packages, computer systems hardware, and computer systems software. As an introductory computer course it is designed to provide a brief study of computer applications. The course enables students to improve their skills through effective and efficient use of packaged software. The emphasis is on productivity concepts and how to achieve them through functions and features in computer software. Topics will include knowledge work productivity concepts; software functionality to support personal and group productivity; developing a solution using database software; refining and extending individual and group information management.

EAR 110. PHYSICAL GEOLOGY
1.0 credit/5.0 weight

An introduction to the science of physical geology, including the study of earth materials (minerals and rocks), the forces which act on and within the earth, the major types of land forms found on the earth, structural geology, and the theory of plate tectonics.

ECO 121. PRINCIPLES OF ECONOMICS, MACROECONOMICS
1.0 credit/5.0 weight

A study in the foundations of economic analysis, national income accounting, economic growth and the public sector, with emphasis on macroeconomics. *(Fall Only)*

ECO122. PRINCIPLES OF ECONOMICS, MICROECONOMICS
1.0 credit/5.0 weight

A study of markets, the price system and allocation of resources, distribution of income, international economy, and perspectives on economic change, with emphasis on microeconomics. *(Spring Only)*

ENT 210. INTRODUCTION TO ENTREPRENEURSHIP

1.0 credit/5.0 weight

This course introduces students to both commercial and social entrepreneurship through case studies, key readings, and primary information resources. This course shapes students' understanding of the entrepreneurial process and exposes students to challenges, problems, and issues faced by today's entrepreneurs. Major objectives include identifying and evaluating business opportunities, developing a business model, and creation of an academic business plan.

ENG 131. CRITICAL THINKING AND WRITING

1.33 credit/5.0 weight

Instruction and practice in expository writing, reading, and critical thinking. Includes the production of a research paper, the study of rhetoric, logic, and Edited Standard Written English.

FOREIGN LANGUAGE: Studies in Chinese, French, German, Greek, Sign Language, and Spanish are available.

HES 100. CONCEPTS IN HEALTHFUL LIVING

0.33 credit/4.5 weight

This course is designed to teach students that healthful living is not a destination, but a journey. Wellness is not a static condition, but a continual balancing of the different dimensions of human needs—spiritual, social, emotional, intellectual, physical, occupational, and environmental. Students must understand that they are responsible for their own growth in these areas, and the course emphasizes the importance of self-responsibility.

HIS 101.WORLD CIVILIZATIONS I

1.0 credit/5.0 weight

A survey of the development of human civilizations with an emphasis on the course of Western civilization but with a focus on the relevance of the global community and diverse cultures for an increasingly interactive and interdependent humanity.

HIS 102.WORLD CIVILIZATIONS II

1.0 credit/5.0 weight
Prerequisite: HIS 101

A survey of the development of human civilization with an emphasis on the course of Western civilization but with a focus on the relevance of the global community and diverse cultures for an increasingly interactive and interdependent humanity.

MAT 115. ELEMENTARY STATISTICS

1.0 credit/5.0 weight
Prerequisite: A Math SAT score of at least 500 points.

An introduction to some of the basic concepts and procedures common to many applications of statistics. Topics include descriptive statistics, a brief study of probability, distributions of selected discrete and continuous random variables, confidence intervals, hypothesis testing, correlation, and regression.

MAT 129. PRE-CALCULUS MATHEMATICS

1.0 credit/5.0 weight
Prerequisite: A Math SAT score of at least 500 points.

A study of selected topics from algebra and trigonometry including equations and inequalities of the first and second degree, linear and quadratic functions, systems of linear equations, the Fundamental Theorem of Algebra, exponential and logarithmic functions, right triangle trigonometry, trigonometric functions of real numbers, trigonometric identities, and trigonometric equations.

MAT 165. CALCULUS I

1.33 credit/5.0 weight
Prerequisite: A Math SAT score of at least 540 points.

A study of the calculus of elementary real-valued functions. Topics studied will include the limit concept, the derivative, and the integral. This course is designed to meet the needs of all liberal arts students.

MUS 12X and 13X APPLIED MUSIC

Private instruction in voice, piano, and orchestral instruments. One to two lessons per week. Credit varies depending on course level chosen. **There is an extra fee for this class.** (See Student Handbook)

*Marching Band is also offered but only as an extra-curricular activity. (See Student Handbook)

MUS 200. MUSIC APPRECIATION
1.0 credit/5.0 weight

Fundamentals essential to the introduction and development of musical thought and judgment; aesthetic significance and other values; principal forms and historical movements; interpretation of current musical efforts.

PHY 110. CONCEPTS OF PHYSICS
1.0 credit/5.0 weight

An introduction to the science of physics, including the study of the history of science and technology: mechanics, heat, electricity, magnetism, optics, atomic structure, and nuclear physics. Energy: types, sources, uses, prospects and the impact of technology on culture and future trends. Two lecture hours and a two laboratory hours per week.

PHY 121. GENERAL PHYSICS
1.33 credits/5.0 weight

This course is designed for science majors. An introduction to mechanics, heat, and sound. Three lecture hours and three laboratory hours per week. *(Fall Only)*

PHY 122. GENERAL PHYSICS
1.33 credits/5.0 weight

This course is a continuation of PHY 121. Students are introduced to electricity, magnetism, optics, atomic and nuclear science. Three lecture hours and three laboratory hours per week. *(Spring Only)*

PSY 100. INTRODUCTION TO PSYCHOLOGY
1.0 credit/5.0 weight

An introduction to the basic areas of psychology with emphasis on understanding human experience and the application of empirical methods to human behavior.

SOC 100. INTRODUCTION TO SOCIOLOGY
1.0 credit/5.0 weight

Systematic study of patterned social behavior, basic sociological concepts, processes of social interaction, and social relationships of groups, classes, communities, and social institutions.

THR 200. THEATRE APPRECIATION
1.0 credit/5.0 weight

Development of the theatre as an institution of civilization and its relationship through the ages with other arts and the social environment. Emphasis on sampling contemporary tragedy, comedy, satire, musical, and mass media productions.

*Weighting shown in this catalog is new scale that went into effect for all students graduating after 2018. Students graduating in 2017 and 2018 will receive weighting based on old scale of +1.0 for Honors classes and +2.0 for AP and college classes.