

## **COURSE OFFERINGS**

### **Theology**

#### **Theology 9/10 – Old Testament Studies - 2 semesters**

Grades: 9/10

Required of all Freshmen/Sophomore Students

The Bible is God's book. Its entire writings center on Jesus Christ as the only way to salvation and eternal life God has made available for all people. This course will provide the student with an introduction to and an overview of the Bible. The student will also study the life and ministry of Jesus from the Gospels. Finally, the student will be involved in an in-depth study of selected chapters of the New Testament. This course is required in either the Freshman or Sophomore year, depending on time or enrollment. It fulfills two semesters of required credit for Theology.

#### **Theology 11/12 – Christian Doctrine - 2 Semesters**

Grades 11/12

Required of all Juniors/Seniors

The focus of this course is the life of the young Christian in the world. The first semester of this course is primarily an inductive approach to the study of Christian doctrine. The second semester consists of "applied" Christian doctrine. Contemporary ethics and morality will be studied in the light of the Christian gospel and Christ-centered living. This course is required of all students in the 11th and 12th grades depending on time of enrollment. It fulfills two semesters or required credit for Theology.

### **Career & Technical Education**

#### **Financial Literacy: MIND YOUR BUSINESS - 2 semesters**

Grades 11, 12

Prerequisite: None

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 11-12 Prerequisite: None. This course satisfies the fourth math-related elective graduation requirement if taken in the senior year. How many times have you been told to Mind Your Business? Well, now you can! Step into this course specifically designed to prepare high school students to transition into the workforce and independent living by teaching them how to apply the overlapping principles of business and self-management. Experts at minding their business know how to plan, budget, and manage their time AND money wisely. Areas of study include types of income, business plans and budgeting, banking, commercial and consumer credit, credit laws and rights, business and personal bankruptcy, insurance, spending, taxes, investment strategies, savings accounts, long term financial planning, the ins and outs of credit, mortgages, personal and business loans, taxes, and more! Mind Your Business places great emphasis on problem solving, reasoning, representing, connecting and communicating information in order to make data-driven decisions in both business and personal situations.

#### **Intro to Engineering & Design**

Grades 11, 12

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software.

## **Personal Finance** - 2 Semesters

Grades 11, 12

Prerequisite: 2 previous math classes (ie: Algebra, Geometry, Advanced Algebra)

The material in Business Math & Personal Finance will focus on the development of mathematical skills that are essential in helping students prepare for their future roles as Christians, citizens, consumers, employees and employers. The student will gain an understanding of how the world economy impacts business by learning and applying basic mathematical skills to everyday business activities including managing their money and expenses; making basic financial decisions; understanding the value of money in today's market and the future value of money; when to borrow / use credit and when to postpone purchases. Additionally, students should be able calculate gross and net pay for hourly, salaried, commissioned, and piece rate employees; determine total fringe benefits; write, edit and revise various banking documents including deposit / withdrawal and monthly bank reconciliation.

## **Accounting** - 2 semesters

Grades 10, 11, 12

Prerequisite: Successful completion of Algebra

The material in Accounting gives the student a thorough background and understanding of the basic accounting procedures used to operate sole proprietorships/partnerships. Students will learn the basic accounting principle (assets = liabilities + owner's equity) and learn how to apply daily business transactions to the appropriate budget categories and distinguish between fixed, variable and nonessential budget items. The accounting procedures serve as a sound background for employment in office jobs and preparation for studying business courses in college. Special emphasis is placed on budgeting and spending; time value of money; accounting for property, plant and equipment assets as well as intangible asset allocations (ie profit sharing/shareholder distributions) as well as reconciling General Journal entries to General Ledger entries and end of month reconciliations.

## **Microsoft Office** - 1 semester (paired with Digital Media)

Grades 9, 10, 11, 12

Prerequisite: None

This course will lead to increased proficiency in Microsoft Word (word processing), Excel (spreadsheet), and Access (database), the three most common productivity applications. If time allows, Microsoft PowerPoint (presentation) and Publisher (desktop publishing) are introduced.

## **Digital Media** - 1 semester (paired with Microsoft Office)

Grades 9, 10, 11, 12

This course focuses on the media of web pages, graphics, and animations. Students study webpage and website creation and management as well as gain experience on the Lutheran Northwest website. Adobe Dreamweaver (webpage and website construction), Adobe Fireworks (graphic design and editing), and Adobe Flash (web page animation) are used. This course cannot fulfill the English graduation requirement.

## **Computer Prog. 1** – 2 semesters

Grades 9, 10, 11, 12

Prerequisite: Successful completion of Algebra

This course is an introduction to the design, implementation, and understanding of computer programs. Students will learn to write computer code using logical reasoning, algorithmic thinking, and structured problem solving. The course will cover the basics of computer technology, programming, hardware interaction with software, programming using the Object-Oriented Languages of Python and Java, writing apps for the Android platform for mobile games. Students will participate in numerous group projects through a PBL environment established in the classroom setting to give authentic experiences to enhance learning. Students will be required to communicate through digital channels including email, messaging, shared drive, cloud computing, and other forms of written or printed communication.

## **Computer Aided Drafting (CAD) – 2 semesters**

Grades 9, 10, 11, 12

Prerequisite: Successful completion of ALgebra

## **English**

### **English 9 - 2 semesters**

Grade 9

Required of all Freshmen

Students work to develop necessary communication and study skills through the study of literature and development of writing, speaking, and organization skills. Practical skills in the areas of grammar and usage are also improved. Prewriting strategies will be taught to generate, focus, and organize ideas. Students will learn to select and use language that is appropriate, while learning informal and formal writing styles. A range of genres will be utilized for reading and writing purposes, such as: fiction, drama, poetry, and short stories. Sentence structure, paragraphing, and basic essay styles will be taught.

### **English 10 - 2 semesters**

Grade 10

Required of all Sophomores

Students build on the foundations of knowledge established in English 9 to further their command of the language. Skills are developed primarily through writing practice and the discussion of literature. The use of prewriting and pre-reading strategies will be utilized, such as brainstorming and mapping. More complex writing formats will be taught to develop clear concise sentences, well-formed paragraphs, the process to writing an essay, and the knowledge to complete a research paper. Novels, plays, poetry, and short stories will be read.

### **Honors English 10- 2 Semesters**

Grade 10

Prerequisite: Department Approval **3.0 English GPA**

This course is an accelerated writing and reading class, with focus on World Literature. Numerous essays and research projects are assigned on a regular basis. There are also mandatory summer novel reading assignments and summer essays assigned which are to be turned in by predetermined due dates throughout the summer. Some of the essay forms that are taught are: writing to compare/contrast, descriptive, persuasive, narrative, theme, symbolism, tone, characterization, and interpretative essays. Novels, plays, poetry, and short stories will be read along with focusing on a higher level of reading comprehension skills. Speaking formally and informally is also instituted within the year course. A 4.5- point scale is used (weighted grade).

### **English 11 - 2 semesters**

Grade 11

Required of all Juniors who are not taking AP English Language

#### **American Literature**

This course will concentrate on American Literature from Native American writings to modern day American Literature. Novels, short stories, journals, a drama, and poetry will be read and discussed. Sentence style will be a focus, as well as writing proper paragraphs, and the development of the five paragraph essay. Types of essay writing include, but are not limited to; expository, characterization, theme, literary response, and persuasive forms.

Also within the course, throughout the school year, speech will be of focus in addition to reading and writing. This third dimension will help students develop the skills of effective communication through a variety of formal and informal speaking situations. Students will also hear and read examples of speeches to enhance their abilities to speak formally and informally. Also students will develop the skills needed to become more effective listeners.

## **AP English Language and Composition - 2 semesters**

Grade 11

YEAR (Class cannot be dropped after the June 1st deadline or after first semester) (NCAA approved)  
Prerequisite: Signed AP Statement form; summer reading may be required. This course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. Both their writing and reading should make students aware of the interactions among a writer's purposes, audience expectation, and subjects as well as the generic conventions and the resources of language that contribute to effectiveness in writing. The purpose of the AP Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. It is expected that each student who takes this course will take the AP exam in the spring. This course may be eligible for college credit. See your counselor for more information.

## **English 12 - 2 semesters**

Grade 12

Required of all Seniors who are not taking AP Literature

British Literature and Composition: The focus of this course is on British Literature and composition. Students will have the opportunity to explore and discuss dramas, poetry, novels, and short stories. Also, the student will be taught to be a more effective writer and participate in the composing and peer editing of various styles of essay writing which they will see in college. All essays taught focus on arguing a thesis with solid evidence and logical explanations in a style that meets or exceeds college-level writing standards. Reading and interpretation skills, along with speaking and listening skills, will also be a focus.

## **AP Literature and Composition - 2 semesters**

Grade 12

Prerequisite: Departmental Approval, **3.0 English GPA**

LENGTH OF COURSE: YEAR (Class cannot be dropped after the June 1st deadline or after first semester)  
Grade: 12 (NCAA approved) Prerequisite: Signed AP Statement form; summer reading may be required. This course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. It is expected that each student who takes this course will take the AP exam in the spring. This course may be eligible for college credit. See your counselor for more information

## **Yearbook Production I - 2 semesters**

Grades 10, 11, 12

Prerequisite: Instructor approval

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 10-11-12 Prerequisite: "B" in English, Application and Selection Process. This yearlong course introduces students to a wide variety of basic journalism practices. Students will develop skills in interviewing, newswriting, feature writing, design, photography, graphics, business management, and marketing, sales, advertising, digital imaging and desktop publishing. Students will fund and produce the yearbook and must be able to finish work before deadlines and spend extracurricular time on the yearbook.

## FINE ARTS

### **Mixed Media 1** - 2 Semesters

Grades: 9 – 12

Prerequisite: None

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 9-10-11-12 Prerequisite: None. This class is an introduction to the design fundamentals in art. Understanding and manipulation of the elements of art and principles of design and how these are used in art will be explored. This course will explore a variety of 2-dimensional and 3-dimensional mixed-media art forms and techniques while developing personal style and voice through a variety of visual concepts and materials such as paper collage, recycled materials, altered books, and more. Contemporary and historical artworks will be explored.

### **Drawing and Painting 1** - 2 Semesters

Grades: 10 -12

Prerequisite: Intro to Art

Year Grades: 10-12 Prerequisite: This course is designed to further refine the students' drawing and painting abilities building off of the Elements and Principles of Design studied in Intro to Art. Students work in a variety of drawing (graphite, colored pencil, charcoal, chalk, ink) and painting (watercolor, acrylic, oil pastel and tempera) media to develop their abilities to accurately portray the world around them and in the development of a personal style. Students enhance their analytic and interpretive abilities through discussion of past and current artists. Weekly sketchbook work is used to develop skills and creativity.

### **Mixed Media 2** - 2 Semester

Grades: 10 – 12

Prerequisite: Intro to Art

(Paired with 3D Design)

(Class cannot be dropped after first semester) Grades: 10-11-12 Prerequisite: Mixed Media 1. This course will further your exploration of mixed media materials and techniques and their uses throughout history and the contemporary art world. Students will build on the fundamentals learned in Mixed Media I, as well as learn new and more complex mixed media art skills. Emphasis is placed on creative problem solving and exploration of experimental mixed media techniques. Contemporary and historical artworks will continue to be explored.

### **Ceramics I** - 2 Semesters

Grades: 10 – 12

CERAMICS 1 LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 9-10-11-12 Prerequisite: None. This class is an introduction to the design fundamentals in 3D art. Understanding and manipulation of the elements of art and principles of design and how these are used in art will be explored. This course will focus on hand-crafted three-dimensional objects as they relate to form and surface through use of clay and glaze. Basic hand-building methods will be explored, such as pinch pots, relief tiles, coil pots, soft slab, and hard slab construction. The history of ceramics as well as the basic chemistry of clay and glazes will also be studied. Safety in the studio and proper use of materials will be emphasized.

### **Independent Study Art Portfolio** - 1 semester, may be taken more than once

Grade 12

Prerequisite: 6 semesters of art, B+ or better average in art classes, instructor approval

This course is an independent study class for senior students where an individualized curriculum will be developed with the instructor relative to the student's interests and abilities. Students who are interested in pursuing an art-related career are aided in developing a functional portfolio within the school day. The intent of this course is to assist the student in developing a strong self-concept and to encourage self-expression and creativity. Media experimentation is encouraged, though the students may concentrate in specializing in one specific area of study.

## **Symphonic Band - 2 Semesters**

Grades 9,10,11,12

Prerequisite: Director Approval

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 9-10-11-12 Prerequisite: None. Symphonic Band is a performing ensemble designed for grades 9-12 students with intermediate skills on their respective instruments. Membership in this ensemble will be open to all students. Music for this ensemble will be chosen to present a challenge to all members. Instrumental performing techniques are studied along with basic music theory appropriate for this level musician. Students will perform in a minimum of four concerts each year and may participate in the Michigan School Band and Orchestra Association. Although not required, students are encouraged to participate in the MSBOA District XVI Solo and Ensemble Festival each year

## **Mixed Chorus - 2 semesters**

Grades 9 - 12

Prerequisite: None

MIXED CHORUS LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) This performing chorus is designed for 9th-12th grade students starting in high school choir for the first time. Music for this class will be chosen to present a challenge to all members. This class is constructed to be a continuation of what students learned in middle school. Knowledge of music theory and experience are necessary. Students will perform in a minimum of three concerts each year. Although not required, students are strongly urged to participate in the MSVMA District XVI Solo and Ensemble Festival each year. Participation in all performances is MANDATORY.

## **Concert Choir - 2 semesters**

Grades 9 - 12

Prerequisite: Audition

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 10-11-12 Prerequisite: Audition. Concert Choir is a performing chorus, designed for 11<sup>th</sup> and 12<sup>th</sup> grade students possessing advanced level music skills. This choir is designed to be the top high school performing organization and will be limited in membership. Advanced musical skills, sight-reading techniques and basic theory will be studied to enhance student proficiency in order to perform the advanced level of music chosen for this choir. Students will perform in a minimum of three concerts each year and may participate in the MSVMA District XVI Choir Festival. Although not required, students are strongly urged to participate in the MSVMA District XVI Solo and Ensemble Festival each year. Concert Choir may travel each year to a festival of music held outside the state of Michigan. Students will be required to participate in all performances. .

## **Foreign Language**

### **Spanish I - 2 Semesters**

Grades: 9, 10, 11, 12 Prerequisite: Approval based on HSPT scores

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 9-10-11-12 (NCAA approved) Prerequisite: None. This course will focus on developing the four language skills of speaking, listening, reading and writing. Students will engage in a variety of activities to practice and promote language learning. This course includes an overview of the geography and other cultural insights of the Spanish speaking world.

## **Spanish II - 2 Semesters**

Grades: 10, 11, 12 Prerequisites: Spanish 1 or instructor approval.

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 9-10-11-12 (NCAA approved) Prerequisite: Spanish I. Students will continue to work toward proficiency in the four language skills: listening, speaking, reading and writing. Students will examine the cultural practices of the Spanish speaking world.

## **Spanish III - 2 Semesters**

Grades: 11, 12 Prerequisites: Successful completion of Spanish 2, or instructor approval.

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 10-11-12 (NCAA approved) Prerequisite: Spanish II. Students continue to work toward proficiency in the four language skills of listening, speaking, reading and writing. Students will engage in a variety of activities and projects throughout the course to develop, practice and promote language use and understanding at this level.

## **Spanish IV - 2 Semesters**

Grade: 12 Prerequisites: Successful completion of Spanish 3, or instructor approval.

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades: 11-12 (NCAA approved) Prerequisite: Spanish III. This course includes the development of grammar skills, vocabulary reading, and writing. It will explore the influence of outstanding individuals from Spanish speaking countries. Much of this course is conducted only in Spanish.

## **German, French, American Sign Language I (Online) - 2 semesters**

Grade: 9, 10, 11, 12 Prerequisite: Approval based on Placement Test scores

These languages are available through a partnership with Oxford schools. They are done online in conjunction with an onsite proctor. There will not be a teacher onsite to help with these languages, therefore these courses can be more difficult than a language taught in a traditional classroom. Students must exhibit and possess self directed learner skills to be successful in this type of class.

# **Mathematics**

## **Algebra A - 2 semesters**

Grade: 9, 10 Prerequisite: None

An algebra course which will provide the student with a very methodical approach to working with real numbers, solving linear equations, properties of polynomials, factoring and solving polynomials, and numeric and algebraic fractions. Students enrolled in this course will take Elementary Algebra II as a sophomore. This two year sequence is the equivalent of Algebra I.

## **Algebra B - 2 semesters**

Grade: 9, 10 Prerequisite: Elementary Algebra I

An algebra course which will provide the student with a very methodical approach to working with rational and irrational numbers, solving systems of linear equations, solving and graphing inequalities, and an introduction to

linear and quadratic functions. This course is the second in the series. This two year sequence is the equivalent of Algebra I.

### **Algebra I - 2 semesters**

Grades 9, 10, 11, 12    Prerequisite: Acceptable HSPT scores

Problem solving is introduced early in this course and is integrated during the entire year. Applications of algebra are presented throughout the course as well. Reasoning skills, such as analyzing information, making conjectures, and presenting convincing arguments are developed throughout the course. Geometric models are used to illustrate abstract algebraic concepts.

### **Geometry - 2 semesters**

Grades 9, 10, 11, 12    Prerequisite: Successful completion of algebra or acceptable HSPT scores ( An incoming 9th grader must have an acceptable score on the Geometry Readiness Test)

This course is designed for the math student who wants to continue beyond Algebra I, which is a prerequisite. Topics of the first semester include a review of relevant algebra topics, logical arguments and line relationships, transformations, triangle congruence and relationships and quadrilaterals. Topics of the second semester include similarity, right triangles and an introduction to trigonometry, circles, area, volume and probability.

### **Advanced Algebra - 2 semesters**

Grades 9, 10, 11, 12    Prerequisite: Successful completion of Geometry

This course is designed for the serious math student, who wants to continue beyond Algebra I, which is a prerequisite. Geometry is strongly recommended. Topics of the first semester include a review of Algebra I, inequalities, linear equations, polynomials, rational and irrational numbers, quadratic equations, and polynomial equations. Topics of the second semester include analytic geometry, logarithmic and exponential functions, and an introduction to trigonometry.

### **Honors Advanced Algebra - 2 semesters**

Grades 9, 10, 11, 12    Prerequisite: Successful completion of Geometry & Department Approval

This course is designed for the serious math student, who wants to continue beyond Algebra I, which is a prerequisite. Topics of the first semester include a review of Algebra I, inequalities, linear equations, polynomials, rational and irrational numbers, quadratic equations, and polynomial equations. Topics of the second semester include analytic geometry, logarithmic and exponential functions, sequences and series, an in-depth study and analysis of trigonometry, and statistics.

### **Statistics - 2 semesters**

Grades 10, 11, 12    Prerequisite: Successful completion of advanced algebra

Any mathematics student who has completed two years of algebra and a year of geometry will benefit from taking this course. It is an introduction to the study of statistics. Major topics include producing data (measurement, sampling, and experimentation), organization of data (description and display), chance and probability, and inference using confidence intervals and, time permitting, chi-square testing.

## **PreCalculus - 2 semesters**

Grades 11, 12                      Prerequisite: Successful completion of advanced algebra

This course is designed for the serious math student, who wants to continue beyond Geometry and Algebra II, which are prerequisites. Topics of the first semester include functions & graphs and their applications, conic sections, and an in-depth study of trigonometry. Topics of the second semester include discrete mathematics (series, matrices, probability and statistics), limits of functions, and curve sketching. Because of the extent of the content, this course is tough!

## **A.P. Calculus AB - 2 semesters**

Grades 11, 12                      Prerequisite: Successful completion of PreCalculus

LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester) Grades 11-12 (NCAA approved) Prerequisite: Signed AP statement. AP Pre-Calculus or Department Placement. This course covers more material and moves more quickly than calculus. Topics include functions, limits, derivatives, integration, applications of derivatives and the definite integral, and the techniques of integration. Students are expected to take the AP Test in the spring.

# **Physical Education**

## **Health - 1 semester**

Grade 9, 10                              Required

This course is planned to help students understand human development. The class explores personal decision-making and examines the impact of the environment on life style. Unit topics, taught from a Christian perspective, will include personal relationships, alcohol, drugs, emotional health, foods and smoking.

## **Basic Physical Education - 1 semester**

Grades 9, 10                              Required

LENGTH OF COURSE: SEMESTER Grades: 9-10 Prerequisite: None. This course orients students to the importance of a continuing physical education program which affords them the opportunity to maintain a level of activity/fitness conducive to living a longer, healthier, and more enjoyable life. This course includes units in physical fitness, team sports, individual sports and skills, lifetime sports, and Red Cross.

## **Team Sports – 1 semester**

Grades: 10-11-12

Prerequisite: Basic Physical Education. This class is for students who have an interest in a particular activity. The class focuses on skill development, rules, and individual or team effort. Tournament competition will follow skill development. The program offers basketball, soccer, floor hockey, volleyball, Wiffel ball, and ultimate frisbee

## **Lifetime Sports - 1 semester**

Grades 11, 12                              Prerequisite: None

LENGTH OF COURSE: SEMESTER Grades: 10-11-12 Prerequisite: Basic Physical Education. This class is for students who have an interest in a particular activity. The class focuses on skill development, rules, and individual or team effort. Students will become more proficient in the units of tennis, pickleball, badminton, bowling, and volleyball. Can be taken more than one time for credit.

## **Lifetime Fitness** - 1 semester

Grades 10, 11, 12

Prerequisite: None

LENGTH OF COURSE: SEMESTER Grades 10-11-12 Prerequisite: Basic Physical Education. This class will utilize low to high impact aerobic movement and exercise in an effort to reach a student's target heart rate. Weight training will be used. Activities will include aerobic, and cardio-based workouts. Can be taken more than one time for credit.

## **Science**

### **Biology** - 2 semesters

Grade 9

Prerequisite: None

Biology is the science of life, introducing students to the structures and functions of living organisms while instilling an appreciation for God's creation. Many topics will be explored throughout the year, from cellular processes to organisms and their ecological relationships. Students will study the natural world through lectures, laboratory experiments, discussion and projects.

### **Chemistry** - 2 semesters

Grades 10, 11, 12

Prerequisite: None. Recommended for students with a grade of C+ or lower in either semester of Biology

Chemistry is a laboratory course designed to give students a beginning knowledge of chemistry, to offer insights into the means by which scientific knowledge is acquired, to encourage the exercise of reasoning skills, and to allow for the development of useful laboratory skills. Furthermore, the course is designed to increase the knowledge and appreciation for the world God created.

### **Honors Chemistry** - 2 semesters

Grades 10, 11, 12

Prerequisite: B- or better in both semesters of Biology OR C or better in both semesters of Physical Science and Department Approval

Honors Chemistry is a laboratory science, which studies inorganic chemistry, chemical laws and theories, atomic and molecular structure and organic chemistry. It is designed to increase the knowledge and appreciation for the world God created. It is for students who have a strong background and interest in science. Because mathematics is the language of science, a basic understanding is necessary.

### **Environmental Science** - 2 semesters

Grade 11/12

Prerequisite: Department Approval

Students will develop an understanding of the scientific principles, concepts and methodologies of Environmental Science. Those skills will be applied as students study the interrelationships between the created and human-made world with a focus on the environmental challenges the world faces. Topics studied include environmental quality, plant systems, human resources, conservation, pollution, and ecosystems.

### **Conceptual Physics** - 2 semesters Offered Fall of even numbered years

Grades 11, 12 Prerequisite: C or better in both semesters of Geometry. Recommended for students with semester grades of C- or lower in either semester of Honors Chemistry or successful completion of Physical Science and Department Approval.

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include motion, forces, energy, gravity, heat, electricity, magnetism, relativity, sound and

light. Laboratory experiments and projects enhance the understanding of basic physical principles and applications.

### **Honors Physics** - 2 semesters

Grades 11, 12 Prerequisite: C or better in both semesters of Honors Chemistry and Department Approval.

Honors Physics is an advanced laboratory science that studies the physical world around us. It is designed to increase the knowledge and appreciation for the world that God created. It is for students who have a strong background and interest in science. Because mathematics is the language of science, a basic understanding is necessary.

### **AP Physics** - 2 semesters

Grade 12

Prerequisite: B average or better in Honors Physics and /or Departmental Approval.

Advanced Placement Physics 1 provides the student a thorough understanding of the basic concepts of physics and prepares them to use physics in their own lives and professions. Students enrolled in this course are expected to take the Advanced Placement Physics 1 Test in the spring.

### **AP Biology** - 2 semesters

Grades: 11, 12

Prerequisite: C or better in Biology and Honors Chemistry and Department Approval

AP BIOLOGY LENGTH OF COURSE: YEAR (Class cannot be dropped after first semester)  
Grades: 11-12 (NCAA approved) Prerequisite: Biology, Chemistry. Signed AP statement. AP Biology is the equivalent of two semesters of introductory college biology. It will focus on four big ideas: (1) the process of evolution drives the diversity and unity of life. (2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis. (3) Living systems store, retrieve, transmit and respond to information essential to life processes. (4) Biological systems interact, and these systems and their interactions possess complex properties. The strong emphasis on the lab component is necessary to fully understand AP Biology and pass the AP exam. This course may be eligible for college credit. See your counselor for more information.

### **Honors Anatomy & Physiology** - 2 semesters

Grades: 11/12

Prerequisites: Biology, Honors Chemistry, AP Biology (either concurrently or previously taken)

Honors Anatomy and Physiology introduces basic concepts and principles important to an understanding of the human body. This course will present essential information dealing with the structure and function of the human body. Those pursuing careers in the medical field will acquire basic information to be integrated into future classes. Those seeking careers outside the biomedical field will gain knowledge and understanding of the human body that will prove valuable for life and health. Laboratory experiences, writing and reporting will be incorporated into evaluations. Biomedical professionals will provide hands-on experiences and education throughout the course. The class requires an internship/ volunteer work experience with a local hospital, medical professional, or approved by the instructor. The class includes field trips, guest speakers, and authentic hands-on lessons and assessments.



Government is designed to provide students with an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. It is expected that each student who takes this course will take the AP U.S. Government exam in the spring. This course may be eligible for college credit. See your counselor for more information.

## **Psychology** - 2 semesters

Grades 11 or 12

Prerequisite: None

This course is an introduction to the basic concepts of psychology. While learning how to apply psychological principles to their Christian daily life; each student will investigate modes of learning, thinking, memory, perception, motivation, emotion, and human development. Course requirements include daily reading, psychological research, analysis of behavior and development, and trends in modern psychology. Second semester topics include motivation, intelligence, personality theory, psychological disorders, abnormal behaviors and therapies. Students are expected to participate in, design, and conduct basic psychological research.

## **AP Psychology** - 2 semesters

Grade 12

Prerequisite: C or better in Psychology and instructor approval

“The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.”—College Board.

This course is essentially a college course and will be run with the same high expectations and opportunities to excel. Through the conducting and analysis of psychological experiments, students will gain hands-on experience in the field while guest speakers will give the “real-world” perspective to those interested in applying psychological principles in their future careers. We will be delving into many areas studied in the introductory Psychology course but in more depth, writing about psychology in APA format, and focusing on in-depth application. Students should expect to take the AP Exam in May.

## **Academic Center**

Grades 9, 10, 11, 12

Prerequisite: Counselor Approval

2 semesters

The Academic Center provides a location and an atmosphere for study and assisted learning. The goal of the Academic Center is to provide the opportunity for students to complete academic work, to access teachers for learning supports, and to gain assistance to improve their understanding of various subject matter and skills. The center is staffed by certified high school level teachers. Students are expected to bring academic materials with them every day to do their work in the Academic Center. Computers, including internet access are also available for students to use in the Academic Center. If academically appropriate, students may be enrolled in more than one Academic Center per semester

## **On-Line/Independent Study Courses**

Students may take “on-line” courses, or independent study courses, from accredited colleges/universities or institutions with prior approval of the principal. Courses offered by the school may not be taken as “independent study/on-line” except in the case that there is no other way for the student to achieve credits necessary to

graduate. The Lutheran High School will determine/approve the beginning and ending date of the course, in order for the credit to be accepted. Cost for the independent study will be the responsibility of the student. Any exceptions must be appealed to the Superintendent through the principal.

## **Non Credit Courses**

### **Office Aide**

Prerequisite: Departmental Approval	Non-Credit Class	2 semesters
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### **Teacher Aide**

Prerequisite: Departmental Approval	Non-Credit Class	2 semesters
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