



RACINE LUTHERAN HIGH SCHOOL

2019-2020

(Revised January 2019)

[Course Descriptions **]**

Art

INTRO TO ART

1 Semester, .5 Credit

Prerequisite: None
Grades 9, 10, 11, 12

This course serves as an introduction to the basic elements and principles of art and design. Students will discuss art history, learn vocabulary, technique and how to critique while exploring a wide range of media including, but not limited to: graphite, charcoal, acrylics, sculpture, and printmaking.

PHOTOGRAPHY

1 Semester, .5 Credit

Prerequisite: Intro to Art
Grades 9, 10, 11, 12

This course will help the students become well rounded in the fundamentals of digital photography. Four areas of instruction will be emphasized: How cameras work, how composition works, how lighting works, how to use photo editing software. Students will learn to take, review and edit for successful image-making and story-telling.

SCULPTURE

1 Semester, .5 Credit

Prerequisite: Intro to Art
Grades 9, 10, 11, 12

This course is split into two quarters. One quarter is dedicated to ceramics using hand-building, mold and wheel-throwing techniques. The other quarter is spent learning 3-dimensional design using an array of materials such as paper, cardboard, wire, etc.

DRAWING/PAINTING I

1 Semester, .5 Credit

Prerequisite: Intro to Art
Grades 9, 10, 11, 12

In this course, emphasis will be placed on the development of eye-to-hand drawing skills, both from life and photograph. Students will learn the basics of proportion, gesture, texture, value and color theory with a variety of drawing and painting mediums.

DRAWING/PAINTING II

1 Semester, .5 Credit

Prerequisite: Intro to Art, Drawing/Painting I
Grades 10, 11, 12

In this course, students will build upon the techniques learned in Drawing/Painting I and work through more complex and challenging mixed-media work with a greater emphasis on concept.

GRAPHIC DESIGN**1 Semester, .5 Credit****Prerequisite: Intro to Art, Drawing/Painting I****Grades 10, 11, 12**

This course is designed to help students master 2-dimensional design, composition and visual communication skills. Students will develop skills in both hand-drawing and digital drawing, editing. Students will learn the basics of design software while problem-solving real-life assignments/commissions typical of a graphic designer.

ADVANCED STUDIO**1 Semester, .5 Credit****Prerequisite: Intro to Art, Drawing/Painting I and II, Graphic Design, Sculpture****Grades 11, 12**

This course seeks to provide juniors and seniors with college-level visual art experiences leading to the completion of a portfolio of work ready for college admission review. A high level of product and performance will be expected.

English

ENGLISH & SPEECH**2 Semesters, 1 Credit****Prerequisite: None****Required for Grade 9**

Literature – Students will read, discuss, and analyze *Lord of the Flies*, *Night*, *A Christmas Carol*, *Gathering Blue*, *Romeo and Juliet*.

Vocabulary – Students improve their vocabulary skills by studying commonly confused words and words taken from novels.

Writing – Students participate in daily writing with journals, write book reports on class selections and books of their choice, and learn to use APA format of formal writing.

Speech – Goals will include improving presentation skills, finding creative ways to present information, and obtaining mastery in speech rules and procedures.

Study Skills – Goals will include improving organization, listening and note taking, test taking, library skills, reading and memory.

Grammar – Parts of speech, parts of a sentence, and punctuation will be covered.

TRADITIONAL LITERATURE**2 Semesters, 1 Credit****Prerequisite: None****Required for Grade 10**

Literature – Short story styles, essays, drama, and novel forms are used to improve reading comprehension. Specific novels are *Animal Farm* and *A Separate Peace*.

Vocabulary – Words will be taken from literature. Goals include learning definitions and proper usage.

Writing – Various types of writing purposes are explored, including essays, a book report, and a research paper. Emphasis is placed on elaboration, editing, and organization.

Grammar – Parts of speech and sentence are reviewed. Punctuation, clauses, and usage are emphasized.

AMERICAN LITERATURE

2 Semesters, 1 Credit

Prerequisite: None

Required for Grade 11

Literature – The history of American literature is studied from its early beginnings with Native Americans to the present day. Emphasis is placed on the classic writers of short stories, poetry, and drama. Novels include *The Scarlet Letter* and *To Kill a Mockingbird*.

Vocabulary – Words are selected from literature of each unit.

Writing – Each theme is at least one page long, and many of the assignments involve analyzing pieces of literature. A book report is required for three quarters, and a research paper about a career is required one quarter.

Grammar – Topics studied sophomore year are reviewed with more challenging examples and applications to the students' writing.

ACT Prep – Strategies for taking standardized tests are covered, and practice tests of the English and reading portions of the ACT test are taken.

BRITISH LITERATURE

2 Semesters, 1 Credit

Prerequisite: None

Required for Grade 12 or AP Literature and Composition

Literature – The history of British literature is studied from its beginnings with oral tradition (*Beowulf* and ballads) to the Victorian age. Emphasis is placed on student interpretation of classic works, mostly poetry, of famous authors.

Writing – Assignments prepare students for college writing and include a research paper. Book reports are written on *The Shack*, *Merchant of Venice*, and a book chosen from a list of classics.

Grammar – British Literature includes a final review of all the basics of grammar, especially phrases, clauses, verb forms, and verbals.

AP LITERATURE AND COMPOSITION

2 Semesters, 1 Credit

Prerequisite: Department Approval and grade of A- or better in American Literature

Grade 12

Literature – The history of British literature is studied from its beginnings with oral tradition (*Beowulf* and ballads) to the Victorian age. Emphasis is placed on student interpretation of classic works, mostly poetry, of famous authors. Additional books covered in AP Literature & Composition are *The Canterbury Tales*, *Grendel*, *Dr. Faustus*, *1984*, *Hamlet*, and *Pilgrim's Progress*. Students also must read two dramas on their own and write reports on them.

Writing – Assignments prepare students for college writing and include two research papers. Book reports are written on *Merchant of Venice*, and a book chosen from a list of classics. Students also have more themes to write than students in British Literature.

Grammar – Grammar issues will be dealt with as they arise in students' written work.

This course requires the student to do coursework throughout the summer preceding the actual start of school.

This course prepares the student for the AP exam in May which may be transferred for college credit.

ENGLISH ELECTIVES

(These do not replace the required English classes, and each is a semester class.)

THEATER ARTS

1 Semester, .5 Credit

Prerequisite: Department Approval for Grade 12

Grades 9, 10, 11, 12

Theater Arts is designed for the student who wishes to learn techniques that actors must know for the stage. Much of the course is activity based and requires the student to get up in front of peers and try the activities. The course also covers backstage duties such as props, lighting, makeup, and costumes. Each student is required to do four major homework assignments and two projects related to drama. The final exam is the student's performance of a memorized scene for the class.

LITERARY TYPES

(2019-2020 school year)

1 Semester, .5 Credit

Prerequisite: None

Grades 9, 10, 11, 12

Literary Types will cover various types of literature not currently dealt with in detail in other English classes. Topics include adventure, Christian novel, comedy, fantasy, horror, mystery, romance, sports and western. Students will learn the criteria for each genre and determine whether the books read and the movies watched in class fit the specifications by writing critiques. A creative project is required each quarter. This class is open to freshmen through seniors who are eager to read.

COMMUNICATION SKILLS

1 Semester, .5 Credit

Prerequisite: None

Grades 11, 12

Everything students do in this class can be applied to daily life. Our goal will be to practice and improve communication skills. We will cover topics including communication in everyday life, group communication, public speaking, personal narratives, electronic communication, and professional communication. Most of what we do will require very active participation. Projects will be used to assess students' understanding of and proficiency in using the concepts studied in each unit.

WRITING SURVEY

1 Semester, .5 Credit

Prerequisite: None

Grades 11, 12

Writing skills will be developed as students learn to use writing process, expand word choice, vary sentence structure, and follow grammar principles. Students will select clients for whom they will complete several projects including academic papers, business letters, brochures, scripts, articles, essays, and other creative works. Students will also contribute as editors, commenting on strengths and weaknesses in each other's writing.

SHAKESPEARE

(not offered until 2020-2021 school year)

1 Semester, .5 Credit

Prerequisite: None

Grades 11, 12

Shakespeare will be an in-depth look at several of the writings of the great English dramatist. Students will learn to analyze plot, character motivations, recurring themes, settings, and moods produced. In addition, students will learn more of the culture of the period, vocabulary, and the influences of Shakespeare. Plays covered will include *Much Ado About Nothing*, *As You Like It*, *Richard III*, *Othello*, *King Lear*, and *The Tempest*. This course is designed for the highly motivated junior or senior.

Foreign Language

SPANISH I

2 Semesters, 1 Credit

**Prerequisite: Proficient in English on Standardized Test scores
Grades 9, 10, 11**

The purpose of the Spanish language program is to communicate with others and to understand the Hispanic culture. Students begin speaking Spanish in the beginning of the course. Students will participate in group activities and speak individually with others in the target language. Students will experience communication by reading, writing, speaking, and listening. This course requires memorization of Spanish Bible verses, vocabulary words, and grammar practice.

SPANISH II

2 Semesters, 1 Credit

**Prerequisite: Passing Spanish I with a C or better or Department Placement
Grades 9, 10, 11, 12**

The course reviews themes from Spanish I. Each review allows for expansion on prior knowledge. Communication will become more refined, elaborate, and complex. Students will put their knowledge into action with more real-life scenarios. Students will participate in class activities. Students will experience communication by reading, writing, speaking, and listening. This course requires memorization of Spanish Bible verses, vocabulary words, and grammar practice.

SPANISH III

2 Semesters, 1 Credit

**Prerequisite: Passing Spanish II with a C or better or Department Approval
Grades 10, 11, 12**

This class focuses on grammar and verb forms and is for the student who wants to refine his/her communication skills in Spanish. Reports, essays, projects, and presentations will help the student solidify his/her understanding of the language. There will be focus on utilizing the language in new, meaningful ways. This course requires memorization of Spanish Bible verses and vocabulary words.

SPANISH IV

2 Semesters, 1 Credit

**Prerequisite: Passing Spanish III with a C or better and Department Approval
Grades 11, 12**

This class is for the student who wants to refine his/her communication skills in Spanish. The student will speak only Spanish in class. Reports, essays, and presentations will help the student solidify his/her understanding of the language. The focus of Spanish IV is mastery and experimentation of previous grammar concepts to help prepare for AP and college placement tests.

Industrial Arts

COMPUTER AIDED DRAFTING I

1 Semester, .5 Credit

Prerequisite: Passing Information Technology with a B or better & Algebra A, B or I with a C or better

Grades 10, 11, 12

This course provides students interested in exploring the fields of engineering, interior design, architecture, and more with a hands-on, exercise driven approach to developing the skills necessary to succeed in Computer Aided Drafting (CAD). Students must be able to visualize objects in 2D, utilize technical imagination, and think critically and precisely in class. Through exercises in the course, students will follow step-by-step instructions exposing them to the commands settings, drawing aids, shortcuts, and other characteristics available through the CAD software. This course serves as a foundation, preparing students for success drafting 3D objects in CAD II. Students will also learn about CAD in the real world through a career research paper and several guest speakers throughout the semester. This course requires a basic understanding of geometric concepts, and it involves math.

COMPUTER AIDED DRAFTING II

1 Semester, .5 Credit

Prerequisite: Passing CAD I with a B or better & must be enrolled in or have completed a Geometry course

Grades 10, 11, 12

This course builds upon the 2D foundation of skills acquired in CAD I. Delving deeper into the CAD software, students will move into 3D design, focusing on developing the skills necessary to create architectural and industrial drawings. Students will need to think critically and creatively to accomplish coursework. This course requires knowledge of geometric concepts and math.

HOME REPAIR AND MAINTENANCE

1 Semester, .5 Credit

Prerequisite: None

Grades 9, 10, 11, 12

This is a course of study which would allow the student to engage in activities and develop skills for home repair and maintenance. The student will learn to use various hand tools, begin to understand their proper use, and the techniques to make common repairs around the home. This course of study will enable the student to communicate in the technical terminology in the areas of carpentry, plumbing, electrical, and auto maintenance. At the conclusion of the study, the student will have developed a confidence to make most common home repairs.

INTRO TO WOODS

1 Semester, .5 Credit

Prerequisite: None

Grades 9, 10, 11, 12

Intro to Woods is designed to teach the basic fundamentals of woodworking through the use of hand tools and small tabletop equipment. The areas explored are types of wood, small project design, project assembly, correct tool use, and safety.

WOODCRAFTING I (Course offering for 19-20 School Year 1st semester) 1 Semester, .5 Credit

Prerequisite: Intro to Woods Grades 10, 11, 12

Students will expand their learning from Intro to Woods through a series of projects which will include furthering their skills using tools. Some new skills will include the use of the scroll saw, mini lathe, and optional woodburning.

WOODCRAFTING II (Course offering for 19-20 School Year 2nd semester) 1 Semester, .5 Credit

Prerequisite: Woodcrafting I Grades 10, 11, 12

Students will expand their learning from Woodcrafting I through a series of projects which will include enhancing their skills in the use of scroll saw, mini lathe, and woodburning.

Mathematics

ALGEBRA A **2 Semesters, 1 Credit**

**Prerequisite: Department Placement
Grade 9**

Algebra A is the first part of the two-year Algebra I course. Topics are covered at a slower pace with continuous review. Topics include: basic arithmetic review, real numbers, irrational numbers, powers and roots, transforming and solving linear equations, and graphing in one and two dimensions.

ALGEBRA I **2 Semesters, 1 Credit**

**Prerequisite: Department Placement
Grade 9**

Students use the basic properties of the real number system to manipulate expressions and equations involving both numbers and variables. Topics include: products and factors, powers and roots, rational and irrational numbers, solving of linear and quadratic equations with one variable, solving of linear equations with two variables, working with fractions, graphing in one and two dimensions, working with inequalities, and setting up and solving word problems.

ALGEBRA B **2 Semesters, 1 Credit**

**Prerequisite: Passing Algebra A
Grade 10**

Algebra B is the second part of the two-year Algebra I course. This course will review the Algebra A topics and expand them to include: manipulating and factoring polynomials, solving linear equations with two variables, solving quadratic equations, working with inequalities, and setting up and solving word problems.

ESSENTIAL GEOMETRY**2 Semesters, 1 Credit****Prerequisite: Passing Algebra I or Algebra B or Department Approval****Grades 10, 11**

Essential Geometry is designed to provide the basic geometry concepts without the writing of formal proofs. Topics include: the study of points, lines and planes, congruent and similar figures, polygons, circles, coordinating graphing, area and volume, algebra review, and an introduction to trigonometry.

GEOMETRY**2 Semesters, 1 Credit****Prerequisite: Passing Algebra I with a C- or better or passing Algebra B with a B or better or Department Approval****Grades 9, 10, 11, 12**

Students study the properties and characteristics of points, lines, planes, and two-dimensional figures such as triangles, quadrilaterals, and circles. Some three-dimensional geometry is also part of the course. Topics include: parallel and perpendicular lines and planes, congruent and similar figures, polygons, right triangles, circles and spheres, areas and volumes, coordinate geometry and graphing, introductory trigonometry, and direct proof.

ALGEBRA II**2 Semesters, 1 Credit****Prerequisite: Passing both Algebra I and Geometry with a C- or better or Department Approval****Grades 10, 11, 12**

Algebra II reviews skills obtained in Algebra I, applies them to more complex and involved problem situations, and extends these algebra skills into more advanced mathematical topics and real-world situations. Topics include solving and graphing of linear, quadratic and polynomial equations, exponential and logarithmic functions, radical and rational functions, imaginary and complex numbers, and an introduction to analytic geometry and trigonometry.

PRE-CALCULUS**2 Semesters, 1 Credit****Prerequisite: Passing both Geometry and Algebra II with a C- or better and Department Approval****Grades 11, 12**

Pre-calculus provides solid preparation for college-level courses in calculus, linear algebra, and finite mathematics. Heavy emphasis is placed on problem solving. The topics covered include functions, trigonometry, analytical geometry, logarithms, probability, vectors, matrices, and limits.

AP CALCULUS AB**2 Semesters, 1 Credit****Prerequisite: Passing Pre-Calculus with a C or better and Department Approval****Grade 12**

This full-year course is designed to provide the student with the necessary skills to take the AP calculus test. Topics to be covered include functions and graphs, limits and continuity, differential calculus, integral calculus, sequences and series.

This course prepares the student for the AP exam in May which may be transferred for college credit.

Music

BAND I & II

1 Semester each, .5 Credit each

Prerequisite: Department Approval

Grades 9, 10, 11, 12

This course is designed to teach advanced band students in playing their specific instruments in an ensemble setting. Through rehearsal and performance, the student has the opportunity to broaden his/her appreciation and understanding of all types of music. Exercise in technique, dynamics, and articulation are used every day in preparation for all performances. A student in band is required to participate in all scheduled performances throughout the semester. (Most performances are on the weekends and/or evenings.)

Each year the Music Department offers an optional trip. This may incur additional expense for the students.

CHOIR I & II

1 Semester each, .5 Credit each

Prerequisite: Department Approval

Grades 9, 10, 11, 12

This course is designed to teach students music skills in singing in harmony and provides an outlet for Christian witness through song. Attention is given to sight singing and proper vocal production, which will enable the student to realize the potential for his/her voice. A student in choir is required to participate in all scheduled performances throughout the semester. (Most performances are on the weekends and/or evenings.)

Each year the Music Department offers an optional trip. This may incur additional expense for the students.

Physical Education

HEALTH

1 Semester, .5 Credit

Prerequisite: None

Required for Grade 9

Health is a course that is designed to bring awareness to students concerning issues that affect their physical, mental, emotional, and spiritual health. Through this course, students will learn proper behaviors that will prolong life and vitality. They will also learn how to help others understand the importance of health in their own lives. Scriptural support for healthy living will also be a major emphasis. Topics covered will include fitness and nutrition, mental health and suicide, substance abuse, and reproductive health.

PE I/II**1 Semester, .5 Credit****Prerequisite: None****Required for Grade 9, 10**

This class aims to teach the value of a well-coordinated, efficient body, to promote good health, and to develop strength, endurance, and motor skills. Physical education also provides opportunities to develop Christian character traits and to establish physical activities, which will persist throughout life.

FITNESS**1 Semester, .5 Credit****Prerequisite: None****Grades 11, 12**

This class is a co-ed junior/senior Physical Education class designed to give students the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Students will benefit from this comprehensive program that includes core workouts, circuit training, speed and agility stations, weight training and other endurance activities. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in fitness, wellness, and movement activity for their favorite sport and for the rest of their lives. Students will also learn about injury prevention and nutrition in relationship to optimal physical fitness.

LIFETIME ACTIVITIES**1 Semester, .5 Credit****Prerequisite: None****Grades 11, 12**

Lifetime Activities is a co-ed junior/senior Physical Education course for those who wish to participate in activities that can generally be pursued throughout one's lifetime. Students will learn rules and fundamental techniques for a variety of games and activities. Emphasis in this class will be more on development of a spirit of cooperation and good sportsmanship than fostering a sense of competition. Because of the known health benefits associated with physical activity, it is important that students develop an understanding of the rules and fundamental techniques for games and activities that can be played throughout one's lifetime. Having basic knowledge of a variety of games and activities will increase the likelihood that students will become lifetime participants in physical activities.

Science

LAB SCIENCE**2 Semesters, 1 Credit****Prerequisite: None****Required for Grade 9**

This course is designed to prepare students for the science series. Integration of biology, chemistry, and physics concepts will be supplemented by a strong focus on scientific inquiry, questioning, strategies, lab skills, and critical thinking. Successful completion of this course prepares the student for biology.

BIOLOGY

2 Semesters, 1 Credit

Prerequisite: Passing Lab Science

Required for Grade 10

Biology students study the chemistry of life, cell structure and function, DNA and genetics, ecology and taxonomy. By developing scientific research skills, exploring relationships between concepts, applying biological principles to everyday life, and strengthening critical thinking skills, students should gain a deeper appreciation of the wonders and complexities of God's miraculous gift of life. Bioethics and careers in biological science will also be investigated.

CHEMISTRY

2 Semesters, 1 Credit

Prerequisite: Passing Algebra I and first semester Lab Science with a C- or better and passing

Biology with a C or better

Grades 10, 11, 12

The course begins with detailed studies of the structure of the atom and of the periodic relationship between atoms. The topics of chemical bonding, chemical reactions and equations, the properties of gases and solutions, and the chemistry of carbon or organic compounds follow this. Laboratory work relating to topics discussed is part of the course.

PHYSICS

2 Semesters, 1 Credit

Prerequisite: Passing Biology with a C or better and passing second semester Lab Science with a C or better and passing Algebra II with a C or better

Grades 11, 12

In this course, we will explore mechanics, sound, light, electricity, and magnetism, which are the foundation to a deeper understanding of science.

EARTH SCIENCE / ASTRONOMY *(2019-2020 school year)*

1 Semester, .5 Credit

Prerequisite: Passing first semester of Lab Science with a C or better and passing Biology with a C or better

Grades 10, 11, 12

This class is intended to give students a true appreciation for the earth, its enormity, its inferiority, and its place in the universe. We will explore how science is continually shaping the earth, its people, and their culture. In addition to this, we will travel beyond the earth to our celestial neighborhood. Students will learn about the formation of stars, their lives, and their catastrophic deaths.

ANATOMY AND PHYSIOLOGY *(not offered until 2020-2021 school year)* **1 Semester, .5 credit**

Prerequisite: Passing Biology with a B or better and Department Approval

Grades 11, 12

Anatomy and Physiology explores the structure and function of the systems of the human body. This class will help you to understand how our bodies work and some of the causes and effects of problems. Through this study, you will be able to see the intricate complexities of God's miraculous creation.

ENVIRONMENTAL SCIENCE *(not offered until 2020-2021 school year)* **1 Semester, .5 Credit**

Prerequisite: Passing Biology

Grades 11, 12

The dynamics of populations, ecosystems, and the biosphere as well as human impact on the environment will be studied. Various types of ecosystems and problems such as ozone, greenhouse effect, pollution, acid rain, world food supply and endangered species will be explored.

FORENSIC SCIENCE *(not offered until 2020-2021 school year)* **1 Semester, .5 Credit**

Prerequisite: Passing Biology

Grades 11, 12

Students will be working on researching, collecting data, organizing, reasoning, and evaluating as they study some on the areas of forensic science. Some of the topics to be covered are: history of forensic science, collection and analysis of evidence, fingerprinting, hair, fiber, the chemistry of drugs and poisons, and serology (blood) analysis.

GENETICS *(2019-2020 school year)* **1 Semester, .5 Credit**

Prerequisite: Passing Biology with a B or better or Department Approval

Grades 11, 12

Genetics focuses on the cellular and molecular processes of human inheritance. This class will examine the purpose, method, and repercussions of errors within our genes. The semester is divided into the following units: re-productive genetics, chromosomes and molecular genetics, mendelian (prediction) genetics, and genetic applications. The class will also cover concepts such as bioethics, stem cell research, cloning, The Human Genome Project, human uniqueness, genetic engineering, gene therapy, and some forensic applications.

MICROBIOLOGY *(2019-2020 school year)* **1 Semester, .5 Credit**

Prerequisite: Passing Biology with a B or better or Department Approval

Grades 11, 12

Microbiology is a course designed to broaden student understanding of microscopic organisms (both beneficial and detrimental) as well as laboratory and microscope skills. Topics will include foundations of microbiology, bacteria and bacterial disease, other microorganisms, disease and resistance, control of microorganisms, and microbiology and public health.

ZOOLOGY *(not offered until 2020-2021 school year)* **1 Semester, .5 Credit**

Prerequisite: Passing Biology

Grades 11, 12

This class studies vertebrate animals, with the primary focus on mammals. Birds, reptiles, amphibians, and fish are also studied. A brief overview of the entire animal kingdom is provided. Anatomy, physiology, behavior, habitats, and environmental interaction of the animals are examined. Emphasis is on living animals, although several dissection labs may be offered. Frequent trips to the zoo are also utilized.

AP BIOLOGY

2 Semesters, 1 Credit

Prerequisite: Passing Biology with a B or better and Department Approval

Grade 11 or 12

This course is a second-level experience in the biological sciences. The range and depth of topics covered, the kinds of laboratory work required, and the text used is the caliber of a first-level college biology course. Successful completion of the AP Biology examination permits some students to receive college credits and enroll in upper-level biology courses upon entering college. This course is recommended for students desiring to enter an area of medicine, nursing, medical research, or biology in college.

This course requires the student to do coursework throughout the summer preceding the actual start of school.

This course prepares the student for the AP exam in May which may be transferred for college credit.

TECHNOLOGY AND INNOVATION (2019-2020 school year) 1 Semester, .5 Credit

Prerequisite: Passing second semester Lab Science with a C or better and passing Biology with a C or better and concurrent enrollment in Chemistry or Physics and concurrent enrollment in Algebra II or greater and Department approval

Grade 11 or 12

This course is designed for future engineers and backyard tinkerers alike. Each week, student teams will tackle a new and challenging project that exposes them to a variety of physical science careers. A student's grade will be based on the project's ability to meet *certain mathematical and design objectives*. It's frustrating fun for those who desire a challenge!

Social Studies

GEOGRAPHY

1 Semester, .5 Credit

Prerequisite: None

Grades 9, 10, 11, 12

This course studies location, character, environment, and culture of the major regions of the world in relation to the five themes of geography. The course further provides an overview of geopolitics, climate, weather patterns, natural disasters, and natural resources. This is achieved through a variety of means including lecture, discussion, cooperative learning, and various forms of assessment.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

1 Semester, .5 Credit

Prerequisite: Information Technology

Grades 9, 10, 11, 12

Geographic Information Systems (GIS) are information systems that help people visualize information and create maps that can be used to make decisions and solve problems. Rooted in the science of geography, GIS allows users to analyze location and organize layers of information into maps and 3D scenes. This course provides an introduction to GIS. Students will learn fundamental GIS concepts with hands-on experience creating maps and using mapping software and geographic data. Student skills in this course will be evaluated, in part, through the creation of a portfolio of maps.

WORLD HISTORY**2 Semesters, 1 Credit****Prerequisite: None****Required for Grade 10**

The purpose of World History is to provide each student with the knowledge of the events that have taken place in our world from the Paleolithic Age through the current happenings in the Middle East. This will be achieved through a variety of means including lecture, discussion, cooperative learning, and various forms of assessment.

UNITED STATES HISTORY**2 Semesters, 1 Credit****Prerequisite: World History****Required for Grades 11**

The purpose of United States History is to provide each student with an accurate and independent knowledge of our nation's rich past. This shall be accomplished via class lecture, discussion, reading, and cooperative interaction. Each student will be able to form and defend his or her own opinion on the interpretation of significant events throughout the past two hundred years.

AP UNITED STATES HISTORY**2 Semesters, 1 Credit****Prerequisite: B+ or better GPA and Department Approval
Grades 11, 12**

The purpose of AP US History is to provide advanced students with in-depth, accurate, and independent knowledge of our nation's rich past. This shall be accomplished via class lecture, discussion, reading, and cooperative interaction. Each student will be challenged to form and defend his or her own opinion on the interpretation of significant events throughout the last two hundred years. Students will be required to write analytical essays based on historical documents.

This course prepares the student for the AP exam in May which may be transferred for college credit.

AMERICAN GOVERNMENT**1 Semester, .5 Credit****Prerequisite: Passing World History and American History
Required for Grade 12**

American Government is the study of principles, functions, and organization of American government as expressed in our national, state, and local political systems. Emphasis is also placed on contemporary political philosophy and current problems.

ECONOMICS**1 Semester, .5 Credit****Prerequisite: Passing World History and American History
Required for Grade 12**

Economics is a social science course that deals with the way individuals and societies organize themselves to deal with the problem of unlimited human wants and scarcity of resources. Topics will include: capitalism, free enterprise, role of business and labor, supply and demand, the stock market, and consumer economics.

PSYCHOLOGY**1 Semester, .5 Credit****Prerequisite: None****Grades 11, 12**

This is a survey course, including human behavior and the individual's role in society from the Christian viewpoint. Students will learn theories, applications, and what makes people behave the way they do.

SOCIOLOGY**1 Semester, .5 Credit****Prerequisite: None****Grades 11, 12**

This course applies the principles of Christianity to the individual and social concerns. Coursework will define groups, norms, deviance, and stages of life. It will also examine how the individual fits into society. This course emphasizes the development of critical thinking through discussion, reading, research, class activity, lecture and media. Some topics include the area of social equality, economic conditions, and social institutions.

Technology/Business

INFORMATION TECHNOLOGY**1 Semester, .5 Credit****Prerequisite: None****Required for Grade 9****Elective for Grades 10, 11, 12**

This course encompasses a wide range of topics involved in the world of computers and technology. Students will develop skills in keyboarding and use Google Docs to learn how to employ word processing, spreadsheets, and presentation software to complete individual and collaborative projects and complete coursework throughout their education and beyond. These skills will be evaluated through units on a wide variety of topics including, but not limited to buying a computer, web design, citations, time lapse videos, marketing, jobs skills, technology in our world, and more. Students will also gain experience using a variety of additional software available online, useful in education today.

WEB DESIGN/INFORMATION ARCHITECTURE**1 Semester, .5 Credit****Prerequisite: Passing Information Technology with a C or better****Grades 9 (with instructor approval), 10, 11, 12**

This course serves as an introduction to the principles of visual communication in relation to the development of websites and electronic documents. Students will learn about the principles involved in web design, user experience design, and information architecture and synthesize them into complete website blueprints, wireframes and webpages. They will also learn code, principally HTML, and CSS, and put this into practice creating their own websites. The course will be designed around the construction of each student's own webpage from the beginning design stages through completion. Students must be creative, able to think critically about design concepts and user experience, and collaborate in groups. Students must also be self-directed and be able to work on their own and in groups to meet deadlines.

AMERICAN FILM AND CULTURE

1 Semester, .5 Credit

Prerequisite: Passing Information Technology with a C or better and Department Approval.

Grades 11, 12

In this course, students will explore American culture through the analysis of films from a variety of time periods and genres. Students must think critically about films and their relationship to culture and one another, demonstrating their understanding through small projects, worksheets, and responses. Students will gain an understanding of film's development as an art form and a means of cultural expression. The films will give students a wide range of cinematic experiences spanning the 20th and 21st centuries, from silent Charlie Chaplain films, Alfred Hitchcock, *It's a Wonderful Life*, John Wayne westerns, Gene Kelly and Frank Sinatra musicals, *Star Trek*, *Star Wars*, *Bourne*, and others.

COMPUTER AIDED DRAFTING I

1 Semester, .5 Credit

Prerequisite: Passing Information Technology with a B or better & Algebra A, B or I with a C or better

Grades 10, 11, 12

This course provides students interested in exploring the fields of engineering, interior design, architecture, and more with a hands-on, exercise driven approach to developing the skills necessary to succeed in Computer Aided Drafting (CAD). Students must be able to visualize objects in 2D, utilize technical imagination, and think critically and precisely in class. Through exercises in the course, students will follow step-by-step instructions exposing them to the commands settings, drawing aids, shortcuts, and other characteristics available through the CAD software. This course serves as a foundation, preparing students for success drafting 3D objects in CAD II. Students will also learn about CAD in the real world through a career research paper and several guest speakers throughout the semester. This course requires a basic understanding of geometric concepts, and it involves math.

COMPUTER AIDED DRAFTING II

1 Semester, .5 Credit

Prerequisite: Passing CAD I with a B or better & must be enrolled in or have completed a Geometry course

Grades 10, 11, 12

This course builds upon the 2D foundation of skills acquired in CAD I. Delving deeper into the CAD software, students will move into 3D design, focusing on developing the skills necessary to create architectural and industrial drawings. Students will need to think critically and creatively to accomplish coursework. This course requires knowledge of geometric concepts and math.

ENTREPRENEURSHIP

1 Semester, .5 Credit

Prerequisite: Department Approval if Grade 10

Grades 10, 11, 12

Students will learn the principles of being an entrepreneur. This course will introduce the step-by-step process of owning a business, beginning with the inception of an idea, through the planning stages, and finally the completion of a business plan. Students will engage in skill development through course readings, videos, and a culminating project. Students will also learn about marketing and advertising and how they relate to developing and growing a business.

Theology

THEOLOGY I

2 Semesters, 1 Credit

Prerequisite: None

Required for Grade 9

A study of the Gospel of Luke: This is an intensive study of one of the gospels, looking at the early ministry of Jesus Christ. This study will compare the gospel of Luke with the other gospels where such a comparison is significant. It will also sense the differences in genres (parables, proverbs, discourse, various metaphors, etc.) used throughout the gospels and how they are used.

A study of the Acts of the Apostle: This is a study of the growth of the early Christian church as it is communicated in the New Testament's history book. The student will grow in the appreciation of dynamic change of early Christian believers and the make-up of the church, hearts of civilization for millenniums to come.

THEOLOGY II

2 Semesters, 1 Credit

Prerequisite: None

Required for Grade 10

During the first semester, students will study the Old Testament and how we became God's chosen people. The second semester will deal with a study of major and minor prophets, various aspects of being a high school student, and an intensive study of John's Gospel.

THEOLOGY III

2 Semesters, 1 Credit

Prerequisite: None

Required for Grade 11

During the first semester, the student will be exposed to a study of Paul's epistles. The student will be exposed to the development of the early Christian church and the development of the teachings of Christianity. The student will study the various letters that Paul wrote to the early Christian churches and be enabled to apply the truths and promises revealed there to everyday life. The student will be given an opportunity to compose and present a Bible study based on a portion of Paul's writings to his or her fellow classmates.

In the second semester, interpersonal relationships will be the focus. The student will be exposed to a study of relationships based on a Scriptural foundation. Students will study his or her relationship with God in the person of Jesus Christ. In light of that relationship, the student will study various other relationships in his or her life: family, friends, work-related relationships, as well as preparing for a life-long relationship within marriage. The study will include social issues: homosexuality, abortion, euthanasia, etc.

THEOLOGY IV**2 Semesters, 1 Credit****Prerequisite: None****Required for Grade 12**

During the first semester, the student will be exposed to the teachings and practices of the major world religions, and the various cults recognized throughout the world. The student will be enabled to see the difference between the teachings and practices of Christianity as opposed to those of other belief systems. The student will also recognize the teachings and practices of other Christian denominations. The student will be responsible for researching a Christian denomination other than his or her own, writing a paper concerning teachings and practices of this denomination, and making a presentation to the class.

In the second semester, the student will be exposed to a study of leadership based on a Scriptural foundation. The student will study various Biblical leaders and come to grips with their strengths and weaknesses. The study will embrace various characteristics of leadership activities as he (Continued) or she develops his or her own service activity: formulating the activity, arranging the various aspects of this activity, directing other students in the activity, and evaluating the results.

WORSHIP*(may replace one semester of Theology IV)***1 Semester, .5 Credit****Prerequisite: Department Approval****Grade 12**

In this course, students will learn the important elements in a worship service and parts of the liturgy. They will study the church-year calendar with its colors and symbols. The students will also plan, organize, and coordinate Chapel for Racine Lutheran High School. In addition, the class will lead grade school chapels and assemblies throughout the semester.