



MAYER LUTHERAN HIGH SCHOOL

2017-2018

Course Descriptions Booklet

**Preparing the Next Generation of Christian
Leaders**

**305 5th St. NE
Mayer, MN 55360**

School 952-657-2251

Fax 952-657-2344

www.mayerlutheran.org

Mayer Lutheran High School engages in on-going curriculum review. The impact of this process is a curriculum that is able to be updated and modified to meet the educational needs of today's high school students. The courses in this Academic Guide reflect what is currently being offered by Mayer Lutheran High School. Some courses listed in the Academic Guide do not occur every year. New course offerings, course descriptions, and course prerequisites are a possible outcome of the curriculum review process.

COURSE DESCRIPTIONS

All of the course descriptions have been ranked on a scale of 100-400. The 100's are entry-level classes and usually have no pre-requisites. The 200 level courses are intermediate level courses and the 300 level courses are more advanced college preparatory courses. Please check for any pre-requisites or minimum GPA requirements on any of these courses. The 400 level courses are college preparatory, Advanced Placement, or very advanced courses. Please check for pre-requisites, a minimum GPA, or an application process that must be completed before registering for these courses.

ENGLISH – 4.0 credits needed to graduate

Sequence:

105LD1/LD2 – ENGLISH 9: 1 credit. Course Length: Year. Grade Level: 9.

210LD1/LD2 – ENGLISH 10: 1 credit. Course Length: Year. Grade Level: 10.

220LD1/LD2 - HONORS ENGLISH 10: 1 credit. Course Length: Year. Grade Level: 10.

310LD1/LD2 - English 11-12 WORLD LITERATURE: 1 credit. Course Length: Year.
Grade Level: 11-12. (alternating years)

320LD1/LD2 - English 11-12 AMERICAN LITERATURE: 1 credit. Course Length: Year.
Grade Level: 11-12. (alternating years)

410LD1/LD2 – HONORS ENGLISH 11 – AP Language and Composition: 1 credit.
Course Length: Year. Grade Level: 11-12. (alternating years)

420LD1/LD2 – HONORS ENGLISH 12 – AP Literature and Composition: 1 credit.
Course Length: Year. Grade Level: 11-12. (alternating years)

Courses:

105LD1/LD2 – ENGLISH 9: 1 credit. Course Length: Year. Grade Level: 9. An introduction to study skills, writing, research, poetry, literature, speech and drama needed for high school success. Class size: 27.

210LD1/LD2 – ENGLISH 10: 1 credit. Course Length: Year. Grade Level: 10. Prerequisite: English 9 or Department Chair approval. Students will continue practice and mastery of research and composition skills, study various forms of literature, and build vocabulary and oral communication skills in preparation for more advanced studies in English language. Class size: 27.

220LD1/LD2 - HONORS ENGLISH 10: 1 credit. Course Length: Year. Grade Level: 10. Prerequisite: Grade in English 9 of B – or higher, an approved Honors program application, and/or Department Chair approval. Students will continue practice and mastery of research and composition skills, study various forms of literature, and build vocabulary and oral communication skills in preparation for more advanced studies in English language. This course will reflect the content of ENGLISH 10, only with added academic rigor and a greater emphasis on critical thinking and analysis skills. Class size: 27.

310LD1/LD2 - English 11-12 WORLD LITERATURE: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisite: Completion of English 10 or Department Chair approval. Students will develop an appreciation and understanding of literature and effective composition. They will be challenged to analyze, critique and respond to different genres of world literature. Selections from each of the genres (poetry, fiction, drama, non-fiction) will be studied. Students will write a variety of papers, including response, informative, persuasive, creative, and research, as they develop their skills in communicating clearly and effectively. Class size: 27. (Offered in 2018-2019.)

320LD1/LD2 - English 11-12 AMERICAN LITERATURE: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisite: Completion of English 10 or Department Chair approval. Students will develop an appreciation and understanding of literature and effective composition. They will be challenged to analyze, critique and respond to different genres of American literature. Selections from each of the genres (poetry, fiction, drama, non-fiction) will be studied. Students will write a variety of papers, including response, informative, persuasive, creative, and research, as they develop their skills in communicating clearly and effectively. Class size: 27. (Offered in 2017-18.)

410LD1/LD2 – HONORS ENGLISH 11: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisite: Grade in Honors English 10 of C – or higher, or an approved Honors program application, and/or Department Chair approval. The purpose of this course is to equip students to read complex texts critically and to communicate effectively. Students will write in a variety of forms: narrative, expository, argumentative and others. They will learn to read primary and secondary source material, learning the skills of synthesizing, summarizing, paraphrasing, quoting and citing material according to MLA guidelines. Students who enroll in this course will be equipped and encouraged to take the Advanced Placement English Language and Composition Test in May. Class size: 27. (Offered in 2018-19.)

420LD1/LD2 –HONORS ENGLISH 12: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisite: Grade in Honors English 11 of C – or higher, or an approved Honors program application, and/or Department Chair approval. Students will analyze and interpret literature in the four major genres (poetry, fiction, drama, and non-fiction). An emphasis will be placed on the evaluation of how authors create meaning with the use of stylistic devices such as diction, figurative language, imagery, syntax, tone and point of view. Students will write about literature in expository, analytical and argumentative essays. They will also explore and respond to literary criticism. Students who enroll in this course will be equipped and encouraged to take the Advanced Placement English Literature and Composition Test in May. Class size: 27. (Offered in 2017-18.)

WORLD LANGUAGES

201WL1/WL2 – SPANISH 1: 1 credit. Course Length: Year. Grade Level: 9-12. Spanish 1 is an introductory course. The students learn to greet/introduce others, discuss academic life, describe family members, and talk about hobbies and vacations. Throughout the year, students also explore cultural information and Hispanic countries, with a focus on Spain, Ecuador, Mexico, and Puerto Rico. Class size: 27.

301WL1/WL2 – SPANISH 2: 1 credit. Course Length: Year. Grade Level: 10-12. Prerequisite: Passed Spanish 1 with a C or higher. Spanish 2 is a continuation of Spanish 1. Throughout the year, the students learn basic survival skills in Spanish. Spanish 2 includes a more in depth study of Spanish and teaches the students to express themselves about a wide variety of topics. Topics include daily routine, food, parties and celebrations, health, and medical terms. The students also learn about past tense verbs and explore cultural information about Cuba, Peru, Guatemala, Chile, and Costa Rica. This course may include a field trip to a Hispanic Market. Class size: 27.

401WL1/WL2– SPANISH 3: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisites: Successful completion of Spanish 1 and Spanish 2 with a C or higher. Spanish III students explore the Spanish language through music, history, and geography of Hispanic countries with a focus on Argentina, Panama, Colombia, Venezuela, and Bolivia. Throughout the year, students will learn about the subjunctive verb tense, electronics and home, parts of the house, nature, city life, and health and well-being. This course may include a field trip to a Hispanic Market. Class size: 27.

402WL1/WL2 – SPANISH 4: 1 credit. Course Length: Year. Grade Level: 12. Prerequisite: Successful completion of Spanish 3 with a B- or higher. Spanish 4 students develop a deeper understanding of culture through the reading of Spanish books. A comprehensive review of Spanish grammar occurs, as well as covering elements of the AP Spanish curriculum. (Course may be taught as a combined course with Spanish 3.) Class size: 27 (Which includes any Spanish 3 students if courses are combined.)

HUMANITIES DEPARTMENT

THEOLOGY– 4.0 credits needed to graduate (A semester of Theology is required for each semester in attendance.)

101R1/R2 – OLD TESTAMENT: 1 credit. Course Length: Year. Grade Level: 9. The presence of Law and Gospel are prominent in God’s Word. Specifically, this class will focus on the presence of Christ in the Old Testament. This course reviews the chronological history of God’s people, investigates themes found in the Old Testament and encourages an understanding of the student’s leadership skills as rooted in the Word of God. Class size: 27.

201R1/R2 – NEW TESTAMENT: 1 credit. Course Length: Year. Grade Level: 10. This course is an introduction to the New Testament. Student will gain a deeper understanding of the Gospel and what God has done for them through the life, death and resurrection of Jesus Christ. Students also study the history of the early Christian church as they investigate a survey of New Testament books. Emphasis is on Bible study, personalizing the gospel message and understanding church structure. Class size: 27.

301R – COMPARATIVE RELIGIONS: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Junior or Senior. All people on the earth can be placed into two separate categories, (1) those who accept what God has done for them through Jesus’ life, death and resurrection and (2) those who reject God’s gift of love. This course in Comparative Religions strives to study both groups in a way so that the student’s faith is strengthened while preparing to meet the Great Commission as found in Matthew 28. Students will have opportunities to compare their own faith with other religious groups as well as compare their faith with those Christians around them. Class size: 27. (Offered in 2017-18.)

302R – HISTORY OF CHRISTIANITY: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Junior or Senior. This course takes a historical study of the formation of the Christian Church while also connecting the past with present situations. The content of this course stretches from 100 AD through the Crusades, the Reformation, and concludes with an investigation of the Christian church in America, specifically the presence of the LCMS. Class size: 27. (Offered in 2017-18.)

303R – ARTICLES OF FAITH (Christian Doctrine): 1/2 credit. Course Length: Semester. Grade Level: 11-12. Pre-requisite: Junior or Senior. This course will take an in-depth look at the fundamental doctrines of Lutheranism and Christianity. An emphasis will be placed on Justification, the Sacraments, and Luther’s explanations and teachings. This course will seek to answer some of the deeper faith questions posed to Christians, and prepare them to be ready to give an answer for the faith that they have. Class size: 27. (Offered in 2017-18.)

304R – CHRISTIAN ETHICS: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Pre-requisites: Junior or Senior. This course is an examination of Biblical, theological and historical backgrounds of ethical decision-making. On the basis of Biblical principles, issues facing the contemporary Christian and the church will be discussed, including personal behavior, abortion, euthanasia, poverty, war and the church’s social responsibility. Class size: 27. (Offered in 2018-19.)

310R - DEFENDING THE FAITH: 1/2 Credit. Course Length: Semester. Grade Level: 11-12. The purpose of this course is to give students an introduction into the skill of defending the faith known as ‘apologetics.’ The course will provide a theological foundation of the appropriate use of reason in matters of faith through the lenses of God’s law and gospel. Topics covered include defending the existence of God, the reliability of the Bible, creation, miracles and the problem of evil. Class size: 27. (Offered in 2018-19.)

401R – CHRISTIAN LEADERSHIP: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Junior or Senior. Department approval - This course can only be taken once during a student's high school career. God has enabled His church with gifts and abilities that are to be used to strengthen the foundation of faith within the church. One such gift is the gift of leadership. Within the structure of this course, students will examine the Biblical understanding of leadership, develop their leadership skills and work to apply these skills within the church. The curriculum for this course emphasizes experiential learning and service work. Class size: 20.

402R - CHRISTIAN WORSHIP: 1/2 Credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: Junior or Senior. This class will take a closer look at form, hymns/songs and parts of the Lutheran church service. The student will gain hands-on technological experience learning sound systems, running sound for church services, and using/creating slide presentations. Projects will include: Creating a service using ProPresenter, editing .wav files in creating a mix of music and voice, creating a Christian Music video using Adobe Premiere Elements. This class may be taken for Theology or Technology credit. Class size: 15.

SOCIAL STUDIES – 3.5 credits needed to graduate

100SS – GEOGRAPHY: 1/2 credit. Course Length: Semester. Grade Level: 9. This course will provide an overview of world geography with an emphasis on map and Geographic Information System (GIS) skills. The five themes of geography: location, place, region, human-environment interaction, and movement will be covered. All freshmen are required to take this course. Class size: 27.

200SS – WORLD HISTORY – ANCIENT: 1/2 credit. Course Length: Semester. Grade Level: 10-11. This course will cover the history of the world from Creation through the industrial revolution. Class size: 27. (Offered in 2017-18.)

201SS – WORLD HISTORY – MODERN: 1/2 credit. Course Length: Semester. Grade Level: 10-11. This course will cover the history of the world from the industrial revolution to the present. Class size: 27. (Offered in 2017-18.)

203SS – UNITED STATES HISTORY 1: 1/2 credit. Course Length: Semester. Grade Level: 10-11. This course includes basic historical facts and periods in American history from the early colonization of America to the progressive movement. It is the study of the economic, political, and social changes that occurred in America from the organization of the English Colonies to the presidential administration of William McKinley. Class size: 27. (Offered in 2018-19.)

204SS – UNITED STATES HISTORY 2: 1/2 credit. Course Length: Semester. Grade Level: 10-11. This course includes basic historical facts and periods in American history from the early 1900's to the present. It is the study of the economic, political, and social changes that occurred in America from the Roosevelt administration to the current administration. Class size: 27. (Offered in 2018-19.)

305SS – UNITED STATES GOVERNMENT: 1/2 credit. Course Length: Semester. Grade Level: 12. This course is required for seniors and will cover the government at the national, state, and local levels. The rights and responsibilities of Christian citizens will also be emphasized. Class size: 27.

400SS1/SS2 – UNITED STATES HISTORY-ADVANCED PLACEMENT: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisites: A cumulative GPA of 3.0 or higher and instructor approval. This course will help students become familiar with historical facts and periods in United States history. An emphasis will be placed on understanding the causes, effects, and results of individual periods. Students will better understand the political, economic, and social situations today by studying the past. Higher level thinking skills will be stressed through reading, writing, and analyzing documents. This course specifically prepares students to take the AP History exam. Class size: 27. (Offered in 2018-19.)

410SS1/SS2 - WORLD HISTORY - ADVANCED PLACEMENT: 1 credit. Course Length: Year. Grade Level: 10-12 Prerequisite: A cumulative GPA of 3.0 or higher and instructor approval. Students will explore key themes of world history, including interaction with the environment, cultures, state-building, economic systems, and social structures, from approximately 8000 B.C.E. to the present. Students will also learn to apply historical thinking skills including the ability to craft arguments from evidence; describe, analyze and evaluate events from a chronological perspective; compare and contextualize historical developments; and analyze evidence, reasoning and context to construct and understand historical interpretations. This course specifically prepares a student to take the A.P. World History Test. Class size: 27 (Offered in 2017-18.)

Social Studies Electives: These courses are to be taken in the senior year. They are intended to complete the final credit required to graduate after earning 2.5 credits from a combination of the following courses: Geography, World History - Ancient, World History - Modern, United States History 1, United States History 2, AP World History, or AP US History.

301SS or 302SS (PSEO College in the Classroom) – PSYCHOLOGY: 1/2 credit. Course Length: Semester. Grade Level: 11-12. This course is an introduction to the discipline of psychology, including the principles, methods, vocabulary, and major theories in the study of human behavior. Applications of psychology for life and ministry will be examined. Biblical teaching will be brought to bear on the subject matter to enable the student to develop a Christian perspective of psychology. Students desiring to take this course for college credit must complete a Crown College and PSEO program applicant and have a qualifying GPA of 3.25 or higher. Students taking this is PSEO course will also have an online component and all evaluation of student work will be done by the Crown College professor. College credit for this course will appear on a Crown College transcript.
Class size: 25.

310SS – MACROECONOMICS: 1/2 credit. Course Length: Semester. Grade Level: 11-12. This course will deal with basic Macroeconomics theories such as: scarcity, factors of production, trade-offs and opportunities costs, types of economic systems, market demand and supply curve, partnerships and corporations, and business consolidation. The class will discuss the role of Christian interaction with different economic systems. Class size: 25.

SCIENCE AND REASONING DEPARTMENT

Mathematics – 3 credits needed to graduate

101MA1/MA2 – PRE-ALGEBRA: 1 credit. Course Length: Year. Grade Level: 9. Cannot take if you have received credit for Algebra I or higher. An introductory course to basic math and algebra skills needed in Algebra I. Class size: 20.

201MA1/MA2 – ALGEBRA I: 1 credit. Course Length: Year. Grade Level: 9-10. This course will cover basic algebra topics, with emphasis on equation solving, factoring, linear equations and application of concepts. Class size: 27.

202MA1/MA2 – GEOMETRY: 1 credit. Course Length: Year. Grade Level: 9-11. Prerequisite: Algebra I or qualifying performance on required Algebra Mastery Test. Primarily a study of plane geometry, this course stresses logical thought processes and studies the development of a geometrical system. It is built on and enlarged by means of undefined terms, definitions, postulates, and theorems through both inductive and deductive reasoning. Class size: 27.

203MA1 – CONSUMER MATH (first semester): 1/2 credit. Course Length: Semester. Grade Level: 11-12. This course is designed to introduce students to a variety of real-life math issues they will be facing, from banking concerns and investments to buying a home and paying taxes. Class size: 25.

203MA2 – PERSONAL FINANCE (second semester): 1/2 credit. Course Length: Semester. Grade Level: 11-12. This course addresses personal finance topics such as Christian stewardship, budgeting, credit cards, the impact of debt, and more. It is based on Dave Ramsey's Financial Peace University course. Class size: 25.

301MA1/MA2 – ALGEBRA II: 1 credit. Course Length: Year. Grade Level: 9-12. Prerequisite: Geometry. An in-depth continuation of the materials studied in Algebra I with emphasis on the theoretical aspects of Algebra as it examines the real number system. The course also touches on trigonometry, logarithms, and other advanced topics. Class size: 27.

401MA1/MA2 – PRE-CALCULUS: 1 credit. Course Length: Year. Grade Level: 10-12. Prerequisite: Must have passed Algebra II with a C or higher. Provides good preparation for college courses in Calculus, Abstract Algebra and Probability. Topics covered include conic sections, probabilities, and trigonometry. The course helps facilitate the student's move to college level math by presenting the material in a variety of methods. Class size: 27.

403MA1/MA2 – CALCULUS-ADVANCED PLACEMENT: 1 Credit. Course Length: Year. Grade Level: 11-12. Prerequisite: Must have passed Pre-Calculus with a B- or higher. This course covers basic differentiation and integration topics, with applications of both. Students are encouraged to take the Advanced Placement Calculus AB test in early May. Class size: 20.

SCIENCE – 3.0 credits needed to graduate

101SC – EARTH/SPACE SCIENCE: 1/2 credit. Course Length: Semester. Grade Level: 9-10. Students having passed Biology with a C or higher cannot enroll in the course. The class is an introductory science course. This course will give the student a broad view of science, the language it uses and the impact it has on society. The topics of Earth/Science will be chosen from Meteorology, Geology, Hydrosphere, and Astronomy. Class size: 24.

102SC – PHYSICAL SCIENCE: ½ credit. Course Length: Semester. Grade Level: 9-10. Cannot take if you have passed Biology with a C or higher. The Physical Science course will encompass the three broad themes of physical science; Motion and Forces, Energy & Work, Waves. Motion and Forces will examine Newton's Laws as we examine forces and how they impact motion. In the Energy unit we will examine energy transformations among the many types, work, energy sources and the impact of these on the environment. The Waves unit will examine mechanical, sound, and light waves and associated phenomena. Class size: 24.

104SC – LIFE SCIENCE: 1/2 credit. Course Length: Semester. Grade Level: 10-12. Prerequisites: Students need to have taken Physical Science and Earth & Space Science to enroll in this class. Students having passed Biology with a C or higher cannot enroll without instructor approval. Life Science is a practical science course providing students a deliberate and gradual introduction to Biology. The basic Biological concepts such as working with laboratory equipment, the language of Biology, and basic information regarding the plant and animal kingdom will be taught. Foundations of Life Science, Heredity and the Origin of Life, and Microbiology and Plant Biology are the major units covered in this class. This course is designed for students who may not be planning for a college career. Class size: 24. (Offered in 2017-18.)

105SC – ANIMAL SCIENCE: 1/2 credit. Course Length: Semester. Grade Level: 10-12. Prerequisites: Students need to have taken Physical Science and Earth & Space Science to enroll in this class. Students having passed Biology with a C or higher cannot enroll without instructor approval. Animal Science is a practical science course providing students a deliberate and gradual introduction to the Animal Kingdom. The basic biological concepts such as working with laboratory equipment, the language of biology, and basic information regarding the animal kingdom will be taught. Concepts of Invertebrates, Vertebrates, and Animal Behavior will be introduced. Also included will be discussion of the environment, ecosystems and

natural resources. The course concludes with study of the structure and function of the major systems of the human body. This course is designed for students who may not be planning for a college career. Class size: 24. (Offered in 2017-18.)

201SC – ENVIRONMENTAL SCIENCE: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Passed Biology and Chemistry with a C or better. Environmental Science is a hands-on science course. This course is a study of our environment and how it affects organisms. Areas of study include ecology, wildlife management, forestry, population, pollution, and soil science. The class is designed to help students appreciate and preserve our natural resources for future generations. Students will explore the three biomes found in our beautiful Minnesota environment. Class size: 20. (Offered in 2017-18.)

202SC1/SC2 – BIOLOGY: 1 credit. Course Length: Year. Grade Level: 9-10. Prerequisite: Sophomores, juniors, and seniors must have passed Physical Science and Earth and Space Science with a C- or higher. A survey of the life sciences with topics including the definition of life, biochemistry, cell structure, organization, genetics, taxonomy, the five kingdoms, and human anatomy. This class is designed primarily for sophomores taking their second year of science. Class size: 27.

203SC – EVERYDAY CHEMISTRY: 1/2 credit. Course Length: Semester. Grade Level: 10-12. Prerequisites: Passed Physical Science, Earth & Space Science, Life Science, and Animal Science. You should not take this course if you have passed Chemistry with a C or higher or if you intend to take the regular Chemistry course. This class is an introductory course designed to cover the main concepts of chemistry: Matter and Atomic Structure, Chemical and Nuclear Reactions, Applications in Chemistry. In the Matter and Atomic Structure unit the concepts of elements, matter classification and properties will be covered. Chemical and Nuclear Reactions will examine chemical bonds and how their rearrangements result in new compounds and we will look at basic structural changes in the atom during nuclear reactions. In the Applications in Chemistry unit we will examine the presence of chemistry in lives and industries. Students registering for this course will be strongly encouraged to also register for Conceptual Physics. Class size: 24. (Offered in 2018-19.)

204SC - CONCEPTUAL PHYSICS: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Successful completion of Physical Science, Earth & Space Science, Life & Animal Science or an equivalent. This course will cover the typical topics found in most physics texts but will be done conceptually with less emphasis on mathematics. This course is intended for students not planning on pursuing a science or engineering degree at a four-year college. Students registering for this course will be strongly encouraged to also register for Everyday Chemistry. Class size: 24. (Offered in 2018-19.)

301SC1/SC2 – CHEMISTRY: 1 credit. Course Length: Year. Grade Level: 10-12. Prerequisites: Must have received a C- or higher in Biology and Algebra I. This course studies the basic terms, theories, and applications of God's building blocks, the elements. The major topics include nomenclature, gas laws, periodic table, atomic structure, bonding, kinetics, acids and bases, and organic chemistry. This class is designed for the college-bound student; higher level thinking and problem solving are involved. Class size: 24.

405SC - ADVANCED BIOLOGY (HUMAN ANATOMY & PHYSIOLOGY): 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: Must have received a C- or higher in Biology and Chemistry or instructor approval. This is an in-depth study of human anatomy and physiology. This class is recommended for students who wish to take advanced science classes in preparation for a four-year college or have an interest in a life science occupation or who plan to enter a bio-medical profession. Class size: 20.

406SC - ADVANCED BIOLOGY (GENETICS AND BOTANY): 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: Must have received a C- or higher in Biology and Chemistry or instructor approval. This is an in-depth study of plant form and structure, classification of plants, the plant

kingdom and genetic principles. This class is recommended for students who wish to take advanced science classes in preparation for a four-year college or have an interest in a life science occupation or who plan to enter a bio-medical profession. Class size: 20.

410SC1/SC2 AP PHYSICS I: 1 credit. Course Length: Year. Grade Level: 11-12. Prerequisites: Must have received a C- or higher in Biology, Chemistry, and Algebra II. Pre-calculus is recommended. The AP Physics I course focuses on the big ideas typically included in the first semester of an algebra-based, introductory college-level physics sequence and provide students with enduring understandings to support future advanced course work in the sciences. Through inquiry-based learning, students will develop critical thinking and reasoning skills, as defined by the AP Science Practices. These skills will allow them to contemplate their place in this physical world created by God. Students will cultivate their understanding of physics and science practices as they explore the following topics: Kinematics; Dynamics using Newton's Laws; Simple harmonic motion; Impulse, linear momentum, and conservation of momentum; work, energy, and conservation of energy; Rotational motion; Electrostatics; DC circuits; Mechanical waves and sound. Laboratory activities are an integral part of the course and will accompany the coverage of the above concepts. Other in-class projects will include: egg-drop devices, 2-liter bottle water rockets, toothpick bridges, and the like. Students of this class will be expected to take the AP Physics I exam in early May. Class size: 24

403SC1/SC2 - INDEPENDENT SCIENCE RESEARCH: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: Must have passed Biology, Chemistry, and Algebra II, as well as receiving approval from the Science Department Chairperson. Students in this course will work with a research facility outside Mayer Lutheran High School. The science department chair will approve the placement of interested individuals into research settings most closely related to their interest area. Culmination of the course will be the publishing of their research project and/or its display in the Minnesota State Science Fair.

GENERAL PROGRAMS DEPARTMENT

HIGH SCHOOL TRANSITION

110 – Freshmen Seminar: 1/2 credit. Course Length: Semester. Grade Level: 9. The Freshmen Seminar is designed to prepare students for success in high school and beyond. This class is required for freshmen and will introduce students to the computer and internet technology. Instruction on specific programs utilized at Mayer Lutheran High School by both students and faculty include: Moodle, Windows Live, One Note, MLHS Email, OneDrive, PowerSchool, and Turnitin. Other technology topics taught include internet safety, ethics and etiquette. Additionally, students will learn basic, important skills to assist them with studying, organization, time management, note taking, test taking and reading comprehension. Class size is 27.

TECHNOLOGY COURSES - 1.0 credits needed to graduate

104T – MICROSOFT OFFICE: 1/2 credit. Course Length: Semester. Grade Level: 9-12. This course covers the Microsoft Office 2013 Suite of applications primarily focusing on Word, Excel, and PowerPoint. Also included are topics on understanding and caring for your personal computer. Class size: 27.

205T – DIGITAL PHOTOGRAPHY: 1/2 credit. Course Length: Semester. Grade Level: 10-12. The goal of this course will be to expose the student to the elements of good photography. Common compositional elements will be used to develop the student's creative eye. The student will also incorporate his/her photos into various projects suitable for printing and display. Image editing for the course will be done using Photoshop Elements and will provide an in-depth exposure to the tools, processes, and effects found in Photoshop Elements. Students taking the class must have access to a digital camera, or use their cell phone

as their camera. For best results, the minimum image size for a cell phone should be 8 megs. Class size: 15.

210T – MULTIMEDIA PRESENTATIONS: 1/2 credit. Course Length: Semester. Grade Level: 10-12. This course covers video editing using both Windows Movie Maker and Adobe Premiere Elements, website publishing, and advanced PowerPoint techniques. Class size: 15.

300T – COMPUTER SYSTEMS: 1/2 credit. Course Length: Semester. Grade Level: 10-12. In this course students will explore the various aspects of computer systems, including hardware, software, networking, and programming. Students will, whenever possible, engage in hands-on learning as well as participate in project-based learning. Class size: 15.

305T - PROGRAMMING 1: 1/2 Credit Course Length: Semester. Grade Level: 10-12. Prerequisite: B or higher in Algebra 1 or instructor approval. This course will provide a GUI-based programming experience to show students the ease of creating simple programs on the Windows platform. Over the course of the semester the students will develop a framework of programming concepts that will support continued development in any programming language. Course work will also be applicable to real-world applications of programming and, when possible, used to benefit others. Class size: 15.

310T - IT TEAM INTERNSHIP: 1/2 Credit Course Length: Semester. Grade Level: 11-12. Prerequisites: A in Computer Systems and a cumulative GPA of at least 2.5 and/or instructor approval. In this course students will serve on the IT team at Mayer Lutheran High School under the direction of the Technology Coordinator. Students will be responsible for a variety of different technology-related tasks. Students will engage in project and team-based tasks while being held accountable to complete documentation on a daily and weekly basis. Students will fill out reports on the projects they are assigned to and track hours spent on these projects.

402T - CHRISTIAN WORSHIP: 1/2 Credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: Junior or Senior. This class will take a closer look at form, hymns/songs and parts of the Lutheran church service. The student will gain hands-on technological experience learning sound systems, running sound for church services, and using/creating slide presentations. Projects will include: Creating a service using ProPresenter, editing .wav files in creating a mix of music and voice, creating a Christian Music video using Adobe Premiere Elements This class may be taken for Theology or Technology credit. Class size: 15.

SHOP COURSES – Elective Credit

101SH – WOODWORKING I: 1/2 credit. Course Length: Semester. Grade Level: 10-12. This course is designed to enable the student to learn the safe and proper operation of hand and power tools generally associated with a woodworking shop. Each student will have the opportunity to use each of the power tools in the shop in a safe and efficient manner. Through the construction of a variety of projects, the student will come to understand and appreciate the planning, construction, and finishing of items made from a variety of hard and soft woods. Class size: 12.

202SH – WOODWORKING II: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Woodworking I. The goal of the course is to enable the student to further his/her knowledge of woodworking. Students in Woodworking II will be required to select projects that will challenge them to do their finest work with an emphasis on projects involving a great deal of detail and needing very careful construction and assembly. Students will explore various techniques used to construct projects in the fields of cabinetry and small building construction. Work in this class will include independent work and a portion of the student's grade will be determined by their work ethic in class. Class size: 12.

303SH – WOODWORKING III: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: Woodworking I, Woodworking II, instructor approval. Woodworking III will focus on the skills necessary to enter the furniture or cabinetry profession. This will require the student to expand the skills learned in Woodworking II, including detailed planning and precision workmanship. Class size: 12.

FINE ARTS - 1 credit needed to graduate

MUSIC

102MU – GUITAR CLASS: 1/2 credit. Course Length: Semester. Grade Level: 9-12. Prerequisite: No previous guitar experience. This is an elective course for beginning guitarists with no experience on the instrument. Students will learn open chords, power chords, movable chords, single note (melody) playing, and accompaniment techniques. The course also includes music fundamentals, theory, songs, performances, listening, improvising, and learning to read standard music notation as well as tablature. Class size: 15.

201MU1/MU2 – WIND ENSEMBLE: 1 credit. Course Length: Year. Grade Level: 9-12. Prerequisite: Pass an audition with the band director or reasonable ability on your instrument. A performance oriented course that uses the God-given talents of young musicians to praise God through music. Musicians will study performance techniques including: basic theory, intonation, scales, tone, rhythm, balance and interpretation. Musicians will develop skills necessary to continue instrument performance/study after high school. Musicians will perform at least three major concerts a year in addition to various church service, pep band, and contest/festival performances. Wind Ensemble members also share their God-given abilities with audiences across America on biannual musical tours. Wind Ensemble tours on even-numbered years in the spring. Class size: 60.

202MU1/MU2 – CONCERT CHOIR: 1 credit. Course Length: Year. Grade Level: 9-12. Prerequisite: Pass an audition with the choir director. The Concert Choir members are selected through auditions each spring. The choir is involved in an active performance scheduling including home concerts and Sunday morning worship services in area Lutheran churches. Class size: 100.

VISUAL ARTS

101A – FUNDAMENTALS OF ART: 1/2 credit. Course Length: Semester. Grade Level: 9-12. Enhance your enjoyment of visual arts by studying elements of art and principles of design as you work with a wide variety of materials to create works of art. A short survey of art history, art movements, and artist's styles deepens your understanding of art's role in daily life. Class size: 20. (Offered in 2017-18.)

102A – CERAMICS I: 1/2 credit. Course Length: Semester. Grade Level: 9-12. Students will learn to make pots by a variety of methods. Basic glazing techniques and a historical overview of ceramics are also part of the course. Emphasis is on making well-designed, well-crafted pots, both by hand and on the wheel. Assignments provide a great deal of latitude for creativity. Class size: 16.

104A – DRAWING: 1/2 credit. Course Length: Semester. Grade Level: 9-12. Students will enhance their ability to draw, through observation and practice, with line, value, texture, perspective, volume, detail, composition, and the relationship of individual elements. Class size: 16.

201A – CERAMICS II: 1/2 credit. Course Length: Semester. Grade Level: 10-12. Pre-requisite: Ceramics I. Explore new ways to construct works of art from clay. Build on skills developed in Ceramics 1 and also learn casting, figure sculpture, glazing techniques, and advanced work on the

wheel. Much of the semester is spent working independently (with teacher instruction/demonstration) on individually chosen projects. Class size: 16.

202A – PAINTING: 1/2 credit. Course Length: Semester. Grade Level: 10-12. Prerequisite: Drawing. Students apply color and design theory to expressive communication on canvas. Subjects for paintings include still life, landscape, figure, and abstraction. The class also studies major movements in art and standards for evaluating paintings. Class size: 16.

203A – SCULPTURE: 1/2 credit. Course Length: Semester. Grade Level: 10-12. Prerequisite: at least one of the following classes - Drawing or Ceramics 1. A study of the basic additive and subtractive methods of creating three-dimensional forms. Students work with wire, clay, wood, plaster, and other materials to create pieces, which reflect proficiency with the materials and understanding of aesthetics. Class size: 16. (Offered in 2018-19.)

301A – STUDIO ART: 1/2 credit. Course Length: Semester. Grade Level: 11-12, but encourage students to wait until their senior year. Prerequisite: Two previous art courses, demonstrated expertise and interest, and art teacher approval. This is a course for students who wish to do advanced work in an area of art of their choosing. Each student completes a written project proposal for each work of art. Students may get tutoring from the instructor, other students, artists outside the classroom, and the internet. The internet will be used to research areas of art. Students may choose to spend the entire semester in one medium or may try several media. Each student will create a portfolio of their work in one area of art. The student may choose to create a 2-D Design, 3-D Design, Drawing, or Painting portfolio. The portfolio will be graded on quality of work, mastery of design, concept, concentration (a body of work that is unified by an underlying idea that has visual coherence), and breadth (works demonstrating a variety of design principles or drawing/painting techniques). Class size: 10.

PHYSICAL EDUCATION/HEALTH – 1.5 credits needed to graduate (including one semester of Health)

100PE – HEALTH: 1/2 credit. Course Length: Semester. Grade Level: 9-10. The emphasis and goal of this required class is for students to recognize and practice safe health habits. A wide variety of health topics are taught starting with mental health and self-esteem. A study of Erickson's stages of growth from birth to old age with an emphasis on adolescence helps students cope with the normal ups and downs of teenage life. Problems and diseases associated with body systems are studied. Learning about the components of physical fitness as opposed to physical skills (along with a fitness test), help students recognize their individual fitness level and help them start to think about and plan for becoming fit and remaining fit for a lifetime. The dangers and problems connected with substance abuse including alcohol, tobacco, and drugs are taught with the goal of students making God-pleasing choices that will affect their body now and in the years to come. Proper nutrition from all the basic food groups rounds out education of the three basic health habits of getting proper rest, exercise, and eating right. If time permits, basic first-aid instruction will be covered. Class size: 27.

201PE – FITNESS FOR LIFE: 1/2 credit. Course Length: Semester. Grade Level: 9-12. This course will have each student acquire knowledge about benefits of physical activity and about the principles of fitness. By participating in different activities, the student will have the opportunity to build all parts of health and skill-related fitness. Students will be involved with anaerobic and aerobic activities such as weight training, aerobics, stretching, circuit training, running, soccer, Tae-Bo, floor hockey, cross country skiing, jump rope activities, and other various activities. This class may be repeated as students increase their goals in their training program. Class size: 26.

301PE - COED I: 1/2 credit. Course Length: Semester. Grade Level: 10-12. This PE class helps students learn more about recreational activities, games and sports that can be done throughout life. Most of these units will be individual and dual activities. The activities in this class will be: archery, badminton, bocce ball, bowling, croquet, Frisbee golf, golf, pickleball, shuffleboard, darts, and ping-pong. A basic unit involves an in-depth study of the history, background, teaching skills, and game strategy followed by competitive games and tournaments. A written test and skills test complete the unit. Daily points for

participation are awarded based on sportsmanship, activity involvement, attitude, and respect for others. Class size: 24.

302PE - COED II: 1/2 credit. Course Length: Semester. Grade Level: 10-12. This PE class helps students learn more about team sports and fundamental skills. Most of these units will emphasize team sports and team activities. Basic skills are taught for skill improvement and testing to gain a fuller experience and appreciation of the activity. Team play will comprise the main time, which builds on cooperation, playing by the rules, good sportsmanship, positive interaction, support of teammates and treating opponents with respect. The activities in this class will be: speedball, soccer, volleyball, basketball, floor hockey, softball, track and field, and ultimate Frisbee. A written test and skills test complete the unit. Daily points for participation are awarded based on sportsmanship, activity involvement, attitude, and respect for others. Class size: 24.

400PE – ADVANCED PE: 1/2 credit. Course Length: Semester. Grade Level: 10-12. This class is designed for students to improve their power, strength, and quickness. Students begin by establishing a personal weight-lifting program. The three core lifts (bench, squat, and clean) are mandatory lifts. Auxiliary lifts for specializing are built into the program; three days a week will be core lifting and two days a week will be plyometric training and conditioning. Mayer LHS offers an excellent weight-room facility with lots of free weights and lifting stations. In addition, a full line of nautilus equipment is available as students' progress through an increasing program. This class may be repeated as students increase their goals in their training program. Class size: 20.

401PE – PRINCIPLES OF ATHLETIC TRAINING: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisite: Students taking this course should have taken Biology already. Students going into the medical field, teaching and/or coaching should consider taking this course. This upper-level class will be of interest to those that have an interest in the teaching and coaching field and/or the medical field; physical therapy, athletic training, nursing, doctor and/or sports medicine. The course is designed to lead students from general foundations to specific concepts relative to injury prevention, evaluation, management and rehabilitation. A wide variety of sports medicine topics will be the target starting with the history of athletic training. Other topics that are covered include: nutritional considerations, drugs and sports, first-aid emergency procedures, psychology of sports, injury/illness and there will be a hands-on unit in bandaging and taping. Class size: 15.

410PE – DYNAMIC HEALTH AND HUMAN MOVEMENT: 1/2 credit. Course Length: Semester. Grade Level: 11-12. The aim of this course is to enhance and expand upon the personal and community benefits of a dynamic health and human movement lifestyle. Further, this course is designed to foster and promote healthy attitudes, behaviors, and skills, which develop informed healthful living and enlightened care for self. This course is designed to optimize informed healthful living, balanced service to God and humanity and enlightened care for self, such that students are challenged to increase awareness, understanding, and informed critical appreciation for the six basic dimensions of health and wellness which are: social, mental, emotional, environmental, spiritual, and physical. This course does satisfy the graduation requirement of a 1/2 credit of health. Class size: 15.

INDEPENDENT STUDY: 1/2 credit. Mayer Lutheran offers independent study in two categories: 1) for high school credit and 2) for PSEO on campus or on-line credit.

Category 1: 1/2 credit. Semester/Grade 10-12. Additional credits may be earned through independent correspondence with North Dakota State University or another accredited institution under the supervision of a Mayer Lutheran High teacher. (See Independent Course section of the Academic Guide for more information.)

Category 2: 1/2 credit. Semester/Grade 11-12. Prerequisites: Vary by college. Contact the Guidance Counselor for more information.

These classes are taken either on the college campus or online at Mayer LHS under the supervision of a Mayer Lutheran teacher or media center specialist. Maximum of one Mayer LHS credit (2 PSEO online classes) per semester. Exceeding this number requires the approval of the principal.

100L1/L2 - LEARNING LAB: 1/2 credit. Course Length: Semester. Grade Level: 9-12. Prerequisites: GPA of 2.25 or lower, Individualized Education Program (IEP), working under an academic plan, or formal request through resource teacher, classroom teacher and/or Principal. Learning Lab is a semester tutorial, under the supervision of a licensed Special Education teacher. The goal of the class: provide students in grades 9-12 with extra support, make progress towards IEP and/or personal academic goals, offer remediation to classwork and homework when necessary, provide additional structure, and/or provide time for supervised homework completion. Class size is limited to 10. Maximum of 1 credit per enrollment duration at Mayer Lutheran unless administrative approval is given to exceed the 1 credit. Pass/Fail Grading.

202TA1/TA2 – TEACHER’S ASSISTANT (FACULTY): 1/2 credit. Course Length: Semester. Grade Level: 11-12 (Grade 11 requires special administrative permission). Prerequisites: GPA of 3.0 or higher and/or administrative approval, student in good standing and permission of a teacher. A teacher's aide is a Mayer Lutheran student who is well-qualified in a subject and has a strong interest in learning what the teaching ministry is about by assisting a teacher, helping other students learn, and developing as a Christian leader. An aide is assigned for one period and works under teacher supervision. Maximum of 1 credit. Pass/Fail grading.

203KA1/KA2 – KITCHEN ASSISTANT: 1/2 credit. Course Length: Semester. Grade Level: 11-12. Prerequisites: GPA of 2.5 or higher and/or administrative approval, student in good standing. A Kitchen Assistant works with the kitchen staff for one period each day assisting them with preparation, clean-up, and other tasks determined to be beneficial to the food service program. Applications should be made through the Guidance Counselor, and the Principal must give approval. Credit will be earned at the semester and will become part of the report card and permanent record. Maximum of 1 credit. Pass/Fail grading.