

Table of Contents  
2016-2017  
UPPER SCHOOL CURRICULUM

	Page
Introduction .....	2-4
Course Selection Overview .....	5
English .....	6-8
Fine Arts .....	9
Mathematics .....	10-12
Performing Arts .....	13-14
Physical Education .....	15-16
Science .....	17-19
Social Studies .....	20-21
World Languages .....	22-24
Appendix.....	25-31

(Exercise Requirement Opportunities; Service Hours Form;  
Co-Curricular Opportunities; Interscholastic Sports; AP Waiver  
Form; Independent Study Form)

Dear Upper School Family,

July, 2016

The purpose of the Upper School Curriculum Guide is to provide families with a succinct, informative, and transparent document that details what both our academic and co-curricular requirements are.

Please take a moment to read the opening pages of the 2016-17 Curriculum Guide. Here, you will find brief descriptions of the four main requirement categories and an Overview of courses for grades 9-12. Next, you will find concise descriptions of the courses offered within the respective disciplines. ***As our academic year will now be on a semester model, in this year's Guide you will notice several important changes: new courses in math (Calculus and AP Calculus BC); the names of courses to more accurately reflect the demanding, college-preparatory nature of our classes; and the choice of English electives to replace English 12 as the sole English class for a student's senior year.***

The faculty and I are pleased with these changes to the curriculum because we firmly believe that our academic offerings can never be stagnant and uninspiring. But curriculum in a school like ours is a living entity representative of students' needs and interests and best practices in an independent school education.

I hope you will find this document useful as your main source of information about the Upper School curriculum and graduation requirements.

Everett R. McKinney  
Head of Upper School

## Graduation Requirements at The Prairie School

In order to graduate from The Prairie School, a student must fulfill requirements in four areas: Academics, Exercise Requirement, Service, and Co-curricular Participation.

### Academics

A student must accumulate a minimum of 22.5 academic credits, and each year is expected to enroll in a minimum of five academic classes. To promote a well-rounded academic foundation, the required course credits per discipline are as follows:

English 4 credits; Math 3 credits; Science 3 credits (specifically in the areas of life, chemical, and physical science); Social Studies 3 credits; World Languages 3 credits (all in one language); Visual and Performing Arts 1 credit; Physical Education 1.25 credits; Public Speaking .5 credit

Additional academic graduation requirements include:

- Senior status - minimum of 5.5 credits, including 5 academic courses each semester
- Completion of two Interim Experiences with a grade of PASS - one during the student's junior year and one during the senior year

Detailed information about the Interim Experience can be found on the School's website ([www.prairieschool.com](http://www.prairieschool.com)) under the tab, Academics>Interim.

### Exercise (required participation each semester)

In order for students to maintain physical fitness, they must be physically active throughout the academic year. The School requires every student to exercise at least three times a week for a minimum of twenty minutes during each session. Students satisfy the exercise requirement in one of three ways: active participation in interscholastic sports, enrollment in a PE Activity class, or commitment to an approved personal fitness program. Please see the list of Exercise Opportunities located in the Appendix of this Guide.

### Service (minimum of 25 hours annually)

The school requires students to be active in community service throughout their years in the Upper School. Service is defined as volunteer work for the School, a civic community organization, and certain religious activities that are pre-approved by the Service Hours Coordinator (e.g. soup kitchens, mission trips, etc.). It does not include work done at home for relatives/family and friends. A student is required to complete 25 hours of service by May 1 of each academic year. A desirable goal is partial completion (12 hours) of this requirement by February 15. Students may work ahead (during the summer) to complete their service hours for the upcoming year and are encouraged to do so. Of the 100 hours needed for graduation, we encourage students to earn 20 hours (minimum) through non-Prairie School organizations.

**Co-curricular Participation (3 points annually)**

Participation in theatre, music, interscholastic athletics, and a variety of clubs supports our students' personal growth and enhances their applications to competitive colleges and universities. Each student is required to have a minimum of 3 points of co-curricular activity each year. Students are encouraged and expected to commit to one major co-curricular activity (team sport, theatrical/musical production) per year. In some instances where this is not possible, bona fide off-campus activities such as private music lessons, off-campus drama productions, and club sports are generally considered co-curricular. In such cases, a student must submit for approval to the Upper School Office a waiver that details how s/he intends to satisfy the co-curricular requirement in an alternate way.

**Co-curricular Progress**

Satisfactory or unsatisfactory progress toward completing the exercise, service, and co-curricular requirements will be noted annually on the year-end transcript as a grade of Pass or Fail. Students who do not meet the annual and cumulative requirements for exercise, service, and co-curricular may be placed on Academic Probation until their deficits in these areas have been removed. Seniors who fail to meet all academic and co-curricular requirements before the established deadlines will not be eligible for graduation until they have fulfilled ALL graduation standards.

Grade	English	Fine Arts	Math	Performing Arts	P.E./Health	Science	Social Studies	World Languages
9	English 9	Art I,II,III	Algebra 1 Geometry	Concert Choir I,II Symphonic Orchestra I,II Intro. to Tech. Theatre I,II Tech. Theatre I,II Tech. Theatre Design I,II Intro. to Acting I,II Musical Theatre II Theatrical Makeup II Directing I	Health & CPR I,II Fitness & Activity I,II Stretch & Strengthen I Theatrical Dance I Contemporary Jazz II Tap Dance II	Biology Honors Chemistry Physics Honors Physics Robotics I,II	World History 9	Chinese 1 French 1 Spanish 1 Chinese 2 French 2 Spanish 2
10	English 10 Public Speaking (Gr. 10 or 11)	Art I,II,III	Intermediate Algebra Geometry Algebra 2	AP Music Theory Concert Choir I,II Symphonic Orchestra I,II Intro. to Tech. Theatre I,II Tech. Theatre I,II Tech. Theatre Design I,II Intro. to Acting I,II Musical Theatre II Theatrical Makeup II Directing I	PE Activity I,II Stretch & Strengthen I Theatrical Dance I Contemporary Jazz II Tap Dance II	Chemistry Honors Chemistry Physics Honors Physics Robotics I,II	World History 10 or AP World History	Chinese 2 French 2 Spanish 2 Chinese 3 French 3 Spanish 3
11	English 11 Public Speaking (Gr. 10 or 11)	Art I,II,III	Geometry Algebra 2 Precalculus A Precalculus AB Prob. & Stats. AP Statistics	AP Music Theory Concert Choir I,II Symphonic Orchestra I,II Intro. to Tech. Theatre I,II Tech. Theatre I,II Tech. Theatre Design I,II Intro. to Acting I,II Musical Theatre II Theatrical Makeup II Directing I	PE Activity I,II Stretch & Strengthen I Theatrical Dance I Contemporary Jazz II Tap Dance II	Anatomy & Physiology I,II Chemistry Honors Chemistry Physics Honors Physics Robotics I,II AP Biology AP Environmental Science	U.S. History 11 or AP U.S. History	Chinese 3 French 3 Spanish 3 Chinese 4 French 4 Spanish 4
12	Creative Writing I Literary Studies in Diversity II Literary Labyrinths I,II Non-Fiction Reading & Writing I,II and/or AP English 12 Capstone Project	Art I,II,III	Algebra 2 Precalculus A Precalculus AB Calculus AP Calculus AB AP Calculus BC Prob. & Stats. AP Statistics	AP Music Theory Concert Choir I,II Symphonic Orchestra I,II Intro. to Tech. Theatre I,II Tech. Theatre I,II Tech. Theatre Design I,II Intro. to Acting I,II Musical Theatre II Theatrical Makeup II Directing I	PE Activity I,II Stretch & Strengthen I Theatrical Dance I Contemporary Jazz II Tap Dance II	Anatomy & Physiology I,II Chemistry Honors Chemistry Physics Honors Physics Robotics I,II AP Biology AP Chemistry AP Environmental Science	Economics I,II Intro. to Psychology I,II Government & Politics I,II Comparative Religions I,II AP World History	Chinese 4 French 4 Spanish 4 Chinese 5 French 5 Spanish 5 AP French 5 AP Spanish 5

## **ENGLISH**

### **4 credits required for graduation plus Public Speaking**

#### **English 9 – Literary Touchstones (1 credit)**

This course introduces students to the literary touchstones of world civilization. While the literary works are examined in their historical context, students discover that many of the traditions, values, and ideas that they take for granted had their origins in, and are reflected in, the mythical archetypes of this ancient and medieval literature. Emphasis is placed on vocabulary acquisition and application, literary analysis, narrative writing, discussion, and creative projects. Students are also guided through the basics of formal research in an essay integrated with their World History 9 course.

#### **English 10 – World Literature (1 credit)**

This course challenges students through higher expectations and more intellectually-demanding texts than in English 9. Students will be expected to sharpen the skills practiced in English 9 as they explore a greater variety of writing styles and write more frequently. Students work more independently to develop their research skills in an essay integrated with World History 10 course. In tandem with the required Public Speaking course taken in Grade 10, different types of presentations and speaking opportunities are also a significant part of English 10. Ultimately, students will pursue the study of world literature to better understand the core literary texts of human ideas and world culture through reading, writing, speaking, and listening - as well as gain greater awareness and knowledge of other times and places, leading to interest in and empathy toward other cultures and their people.

#### **Public Speaking (.25 credit)**

This course focuses on training oral presentation skills, including mature presence, poise, self-awareness, and projecting presence. Students will analyze effective and ineffective speaking styles, learn to be aware of their own and others' habits as oral presenters, and prepare and deliver various types of speeches. Normally, the student will complete this one-term course in the sophomore or junior year. **Note:** This course is required for graduation.

#### **English 11 – American Literature (1 credit)**

This course explores the definition of the American story and questions the concept of shared experience. Does "America" mean the same thing to everyone? What voices are most prominent? Which get forgotten? Students in this course will read texts featuring characters with a variety of experiences within the American landscape. Emphasis is placed on informal and formal writing (expository, reflective, and creative), formal discussion and debate, oral presentations, and creative projects. Students also engage in a college preparatory research process integrated with their US History course.

### **English 12 (1 credit)**

In addition to the successful completion of the Senior Literacy and Research Capstone Project, seniors must take two different English 12 electives (one each semester) or AP English 12. English electives may be taken in addition to the AP English 12 course.

### **Literacy and Research Capstone Projects**

Students' experience with literature and the world will culminate in two Capstone projects. First, a connective theme will tie together the reading, writing, speaking, and thinking in this class. Accompanying the theme will be a problem (or set of problems) that has been explored by authors both past and contemporary. In addition to reading several shared texts - selected by the instructor - students will choose from an array of literature to read independently. Throughout the year, students will complete reflective, expository, and creative pieces to demonstrate how their chosen works of literature are helping to answer the question. The goal will be to synthesize these perspectives at the end of the year.

Secondly, students will use their non-fiction summer reading to begin a year-long investigation into a personally and socially relevant question of their choosing. At the end of the year, students will "cap" their research by creating a product that they will share with their classmates, the school, and greater community.

### **Creative Writing Term I (.5 credit)**

The format of this workshop-style class is two-pronged. One prong will invite students to read, reflect upon, and discuss accomplished works of poetry, short story, and drama with a critical eye--learning about the elements of craft and structure, style and voice--to help inform their own writing. The other, more important prong will invite students to write side by side, reading and constructively critiquing each other's' work, sharing successes and struggles, and creating a personal writing portfolio.

### **Literary Studies in Diversity Term II (.5 credit)**

In this course, students will venture beyond societal stereotypes by examining works of literature and film that dare to explore our human diversity. Issues explored could include ones of ethnicity and race, class and politics, gender and sexuality, both historical and contemporary. Through research, reflection, personal narratives, discussion, and creative activities, they will also consider and interrogate their own assumptions, viewpoints, and values.

### **Literary Labyrinths Term I, II (.5 credit)**

Featuring innovative and complex fiction, this course will draw students into a labyrinthine world of multiple layers, unreliable storytellers, and unexpected connections featuring stories designed to produce heated discussions, eye-opening realizations, and innovative responses about the nature of reality.

**Non-fiction Reading & Writing Term I, II (.5 credit)**

Students in this course will read as writers and write as readers while they examine the communication act from both rhetorical and aesthetic standpoints. Writing and reading units may include memoir, investigative journalism, science writing, humor writing, and persuasive writing.

**\*AP English (1 credit)**

The Advanced Placement course is open to students seeking a rigorous curriculum of literary analysis and writing similar to many college freshman classes. Designed and structured as a seminar, the course is organized around various genres, themes, and writing styles in major works of world literature. Emphasis is placed upon reading, analysis, discussion, and writing, with ample opportunities for students to practice their writing skills. **Prerequisite:** Recommendation of the department.

## **FINE ARTS**

**1 credit total of Fine Arts and/or Performing Arts (see p. 13) required for graduation.**

This credit can come from a Fine Arts class.

**Art (.5 credit)**

Art Term I

Art Term II

Students who wish to take any of the above Art courses for credit during the upcoming school year MAY expect the following medium to be offered: glassblowing, sculpture, painting, photography, drawing, design, printmaking, and fiber.

# MATHEMATICS

3 credits required for graduation.

**Note: All students in Algebra 2 and beyond must have a TI-83 Plus or a TI-84 Plus graphing calculator. Students in Algebra 1 and Geometry should have a scientific calculator; a graphing calculator is not required.**

**A grade of C- or better is needed to proceed to the next level of study in mathematics.**

## **Algebra 1** (1 credit)

This course introduces basic concepts of algebra while helping students to develop their skills in symbolic manipulation and their fluency in the “language of algebra”. This material provides a necessary foundation for many of the topics students will study in future mathematics and science courses. There is an emphasis on problem solving and application. Linear functions are thoroughly investigated. Other topics include real numbers, quadratic functions, exponential functions, systems of equations, polynomials, radicals and rational expressions. Scientific calculators will be used where appropriate.

## **Geometry** (1 credit)

This course introduces logic and the concept of an axiomatic system. Students learn to justify and communicate their reasoning both through formal proofs (two-column, flow and paragraph proofs) and informally as they solve a variety of problems. Geometry software is used by the students to discover and reinforce many important concepts. Topics studied include reasoning and proof, area, perpendicular and parallel lines, triangles and congruence, quadrilaterals, transformations, similarity, right triangles, circles, surface area and volume. Scientific calculators will be used where appropriate. **Prerequisite:** Algebra 1

## **Intermediate Algebra** (1 credit)

This course provides a bridge between Algebra 1 and Algebra 2. Based on teacher recommendation, this course can be taken after completing either Algebra 1 or Geometry. The course begins with an extensive review of basic algebraic concepts with a carefully paced development of topics up to and including an introduction to multiple Algebra 2 principle. Topics of study include the real number system, functions, linear equations, systems of equations, exponents and radicals, polynomials and factoring. Students use varied approaches to problem solving including graphical, numeric, symbolic and verbal. **Prerequisite:** Algebra 1 or Geometry

## **Algebra 2** (1 credit)

This course incorporates a review of the basic concepts from Algebra 1 and provides an introduction to topics in higher mathematics. Students continue to develop their skills in symbolic manipulation and in communicating through mathematics. There is an emphasis on problem solving and application. Students are encouraged to see problems from both a geometric and an algebraic viewpoint through the use of graphing calculators. Students study

linear, quadratic, polynomial, power, radical, exponential, logarithmic and rational functions. Other topics include solving equations and systems, matrices and determinants, real and complex numbers. Graphing calculators will be used where appropriate. **Prerequisite:** Geometry

### **Precalculus A** (1 credit)

This course continues the study of advanced algebra topics that begins in Algebra II. Its primary goals are to improve students' algebraic and problem-solving skills while continuing to study polynomial, rational, exponential and logarithmic functions. Students are also introduced to trigonometric functions. Graphing calculators will be used where appropriate. **Prerequisite:** Algebra 2

### **Precalculus AB** (1 credit)

This advanced course focuses on the study of functions and trigonometry in preparation for Calculus. Polynomial, rational, exponential and logarithmic functions are studied. There is an extensive study of trigonometry. This rigorous course aims to improve students' problem-solving skills, ability to work and think independently and ability to reason logically in a fast-paced environment. **Prerequisite:** Algebra 2 and recommendation of the department. **Note:** This course is the prerequisite for AP Calculus.

### **Calculus** (1 credit)

In this course, students will study the branch of mathematics that deals with rates of change in continuous and varying quantities. The class will include exercises in the graphical, numerical, analytical and verbal representation of functions through the study of limits, differentiation and basic integration. Students will use technology to help solve problems, interpret results, verify conclusions, and determine the reasonableness of solutions. A graphing calculator is required. **Prerequisite:** Precalculus A or Precalculus AB

### **Probability and Statistics** (1 credit)

This course is designed to improve the basic statistical skills of students, as well as to broaden their mathematical foundations. Students study both inferential and descriptive statistics and learn the procedures and techniques of elementary probability theory. Extensive use is made of the graphing calculator. Emphasis is given to practical applications and relevance to other academic disciplines. **Prerequisite:** Algebra 2

### **\*AP Statistics** (1 credit)

Advanced Placement Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The syllabus incorporates the recommendations of the College Board AP program. Students will frequently work on projects involving the hands-on gathering and analysis of real world data. Computers and calculators will allow students to focus deeply on the concepts involved in statistics. **Prerequisite:** Algebra 2 and recommendation of the department.

**\*AP Calculus AB** (1 credit)

This course represents the equivalent of one semester of college calculus including differential and integral calculus and their applications in science. The syllabus incorporates the recommendations of the College Board AP Program for the “AB” syllabus. Graphing calculators are used for exploration of new ideas and as aids in problem solving. Throughout the course, there is an emphasis on developing ideas analytically, graphically, numerically, and verbally.

**Prerequisite:** Precalculus AB and recommendation of the department.

**\*AP Calculus BC** (1 credit)

This course represents both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. The syllabus incorporates the recommendations of the College Board AP Program for the “BC” syllabus. **Prerequisite:** AP Calculus AB and recommendation of the department.

# PERFORMING ARTS

**1 credit total of Fine Arts (see p. 9) and/or Performing Arts required for graduation.**

These credits can come from a combination of Performing Arts classes including music, theatre, and technical theatre. With the exception of introductory and AP courses, students can re-enroll in performing arts classes an unlimited number of times.

## Music

### **Concert Choir I, II** (.25 credit per term)

Open to all Upper School students, Concert Choir performs vocal music from a variety of style periods. Performances include the Ardent Arts Concert (Oct.), Jubilate Concert (Dec.), Racine Symphony Concert (Dec.), and Finale Concert (April). Choir students are encouraged to repeat this class.

### **Symphonic Orchestra I, II** (.25 credit per term)

In these ensembles, students master music for chamber orchestra and jazz ensemble. Performances include the Ardent Arts Concert (Oct.), Jubilate Concert (Dec.), and Finale Concert (April). Music students are encouraged to repeat this class. **Prerequisite:** Students need to have achieved high school proficiency (Class B or better) on their instrument.

### **\*AP Music Theory** (1 credit)

In AP Music Theory students study the structure, design, and language of music. In addition to historical perspective, the course content includes composing, sight singing, analysis, and dictation. This class is a college level course open only to students with strong musical backgrounds. AP Music Theory is an academic class; however, if it is taken as a sixth academic class, it can fulfill the Arts graduation requirement. Students enrolled can register for the AP Music Theory Exam. **Prerequisite:** Instructor approval.

## Technical Theatre

### **Introduction to Technical Theatre I, II** (.25 credit)

This one-term course is a hands on introduction to the understanding, designing, crafting and execution of theatrical productions as well as prepares students to function as a stage crew member in Prairie productions. Students will gain experience in, and exposure to, the necessary production trades (scenic, lighting, costume and sound), that create the world of a theatrical production. **Note:** Enrollment limited to 16.

### **Technical Theatre Workshop I, II** (.5 credit)

This course provides students with the opportunity for hands-on experience in the art and techniques of technical theatre. Students realize practical theatrical designs and technical solutions to design problems through work on Performing Arts Department productions.

**Prerequisite:** Introduction to Technical Theatre and/or approval of instructor. **Note:** Enrollment limited to 18.

**Technical Theatre Design I, II (.5 credit)**

This course will explore several areas of theatrical design, including, but not limited to, scenic, lighting, sound and prop design. Students will assist in one of the design areas of a current production event. Each designer will read, research and create elements relevant to the production process. **Prerequisite:** Introduction to Technical Theatre and/or approval of instructor. **Note:** Enrollment limited to 12.

**Theatre****Introduction to Acting I, II (.25 credit)**

This course focuses on the basics of acting. Voice, movement, introduction to character development, and improvisation are studied in addition to scripted work.

**Musical Theatre II (.25 credit per term)**

Students will discover the beginnings and developmental trends in musical theatre as they critique, analyze, and experience this art form. They will develop skills of acting the song. Students will also attend live musical performances during the term. Offered even numbered years. **Prerequisite:** Introduction to Acting and/or approval of instructor.

**Theatrical Makeup II (.25 credit per term)**

This is an introductory class in theatrical stage makeup, devoted to character analysis, makeup design, and application. The purpose is to provide students with an overview of the subject matter and the basic technical skills to solve practical makeup challenges intelligently. Offered odd numbered years. **Prerequisite:** Introduction to Acting and/or approval of instructor.

**Directing I (.25 credit per term)**

This course will focus on an introduction to the basic principles of directing. Script analysis, director-actor communication, blocking and stage composition/picturization will be explored. Students will participate in direction of short scenes and/or one-act plays, culminating in the student-directed one acts. **Prerequisite:** Introduction to Acting and/or approval of instructor.

# PHYSICAL EDUCATION/HEALTH

1.25 credits required for graduation.

## 9th Grade

### **Healthy & CPR I, II (.5 credit)**

This course is a survey of health and wellness issues facing freshmen. The objectives of this class are achieved by student participation in role-playing and hands-on activities. Healthy Choices units include issues on personal safety, alcohol and drugs, human sexuality, nutrition, and social media.

In First Aid and CPR class, all Upper School students will be certified in CPR, AED and basic first aid through the American Red Cross. This course is required of all freshmen for graduation. To earn course certification, students must score 80% on tests and pass all practical skills.

### **Fitness & Activity I, II (.5 credit)**

Students learn the basic concepts of lifetime fitness goals through various activities. In a laboratory setting, students begin with health-related fitness concepts and come to an understanding of these concepts through hands-on activities. The students will utilize all of our athletic facilities.

## 10th through 12th Grade

### **PE Activity I, II (.25 credit)**

Activity classes offer a variety of lifetime activities, team activities and fitness activities for students. These will include the following: strength and cardio training, tennis, golf, ultimate frisbee, touch football, disc golf, volleyball, fencing, team handball, softball, archery, step aerobics, pickle ball, badminton, and speedminton.

### **Stretch and Strengthen I (.25 credit)**

Using a combination of Yoga, Pilates, Calisthenics, and Dance warm-ups, this course will focus on stretching and strengthening techniques. Using your own body for weight and resistance, these techniques will improve your health and decrease your risk of injury in day to day activities. The main focus is to increase flexibility and strengthen all muscles, in particular your core. Students can expect to see results in all ranges of movement, energy, balance and posture.

### **Theatrical Dance I (.25 credit)**

Students are introduced to basic elements of movement vocabulary, proper placement and technique of dance as it relates to musical and theatrical choreography. Space, time, force and motivation are examined; concepts that can be applied to any genre of dance. Topics will be approached through improvisation, movement studies, readings, performance/video viewings and written assignments.

**Contemporary Jazz II (.25 credit)**

The course will explore a number of contemporary dance styles from jazz and hip-hop to different social dance steps. All of these styles of movement are fun and energetic. They include elements such as kick, leaps, turns and isolations. Time, space and musicality are all incorporated into movement. Students will learn basic choreography structure and have opportunities to freestyle and develop group compositions of their own.

**Tap Dance II (.25 credit)**

Tap is one of the oldest dance forms in this country and involves rhythm, dynamics and varying sounds. This course will present basic fundamentals of tap dance movement, technique and leg/foot coordination done to various types of music. Tappers will learn a graduated warm up to loosen ankles and knees for proper execution of skills. They will be given structured lessons and be required to establish a vocabulary for basic tap, including the understanding of timing and phrasing.

# SCIENCE

**3 credits required for graduation, specifically in the areas of biology, chemistry, and physics**

## **Biology** (1 credit)

Biology is a course designed to survey basic concepts and principles of life. Emphasis is placed on understanding topics through various laboratory activities to enhance learning by discovery. Areas covered in this course include the kingdoms of living organisms, cellular biology, genetics, forensics, microbiology, and ecology.

## **Chemistry** (1 credit)

Students will be exposed to the fundamentals of chemistry through the investigation of chemical topics pertinent to everyday life. Emphasis will be placed on a qualitative understanding of the basic principles with only a minor emphasis on mathematical relationships. Topics studied include atomic structure; moles and chemical reactions; nuclear and petroleum-based energies and pollution; organic chemistry and the chemistry of food; detergents; and medicines.

## **Honors Chemistry** (1 credit)

Students will study the chemical and physical behavior of matter from both a quantitative and a qualitative point of view. Considerable time will be spent in the laboratory reinforcing concepts and discovering new relationships. Because of the quantitative nature of many concepts, students must have sound, basic algebra skills and experience with logarithms. **Prerequisite:** Prior or concurrent enrollment in Algebra 2

## **Physics** (1 credit)

In this course, students will experience the science of motion, light, energy, and sound in a highly interactive and conceptual way. Through a series of labs and extended projects, students will learn many practical applications of physics to our daily lives. The concepts covered will mirror those of the Physics course, but the level of mathematics will not be as demanding.

## **Honors Physics** (1 credit)

Physics is a study of the basic laws of nature and is the foundation for all other sciences. This is a traditional high school physics course that makes extensive use of mathematical problem-solving techniques. A course of this type is expected by colleges as a prerequisite for beginning study in the sciences or engineering. The major difference between this course and the survey course described below is the level of mathematical rigor. Students spend a considerable amount of time in the laboratory and use computers to help collect and analyze data. **Prerequisite:** Algebra 2

**Robotics I (.5 credit)**

Students are introduced to the concepts of electricity, electronics, microcontrollers, computer programming and robotics through reading assignments, online simulations and hands on activities. By designing and building various robots and other electronic devices, students will learn about and apply the concepts of electricity, resistance and Ohm's law, transistors and current amplification, motors and motor control. Students will also be introduced to 3D drawing using Tinkercard or Google Sketch-Up and have the opportunity to print their designs using 3D printers. Grades will be based upon successful completion of projects, online activities and to a lesser extent the understanding of electricity and electronics evaluated quizzes. Sophomore, junior or senior standing required. **Note:** Enrollment limited to 16 students

**Robotics II (.5 credit)**

Students will apply the fundamental concepts of robotics, electronics and programming toward the design and construction of a motor-driven robotic or electronic device to accomplish a series of student designed and instructor approved tasks. When appropriate, projects may be designed with the goal of participation in external robot competitions. This course may be repeated for credit but must include different robotic designs and task. Due to the independent nature of this course, students should have very strong programming skills, a sound knowledge of electronics and possess the self-discipline and motivation to conduct an independent project in a timely manner. **Prerequisite:** Robotics I or instructor approval. **Note:** Enrollment limited to 16 students

**\*AP Biology (1 credit)**

AP Biology is a college level biology course designed to conform to the goals established by the AP program of the College Board. The course is designed in the image of a typical first year collegiate biology course taken by students majoring in science and science-related areas. The College Board requires several extended laboratory experiments. Therefore, the students are required to attend 7:30 a.m. labs when necessary. **Prerequisite:** Chemistry

**\*AP Environmental Science (1 credit)**

AP Environmental Science is a college level environmental science course designed to conform to the goals established by the AP program of the College Board. The course is intended to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. **Prerequisite:** Biology and prior or concurrent enrollment in a chemistry course

**\*AP Chemistry (1 credit)**

AP Chemistry is a course designed to conform to the goals defined by the AP program of the College Board. The course aims to duplicate the experiences and the level of difficulty of an introductory college chemistry class designed for science and engineering majors. We will study redox reactions, electrochemistry, and thermodynamics, in addition to the topics studied in Chemistry, all in much greater conceptual and mathematical detail. Lengthy, complex lab experiments designed to complement the classroom portions of the course are conducted

approximately once every rotation and begin at 7:30 a.m. **Prerequisite:** Chemistry, prior or concurrent enrollment in Physics

**Anatomy and Physiology I** (.5 credit)

In this elective science course students will study the structure and function of the integumentary (skin), skeletal, muscular, cardiovascular and respiratory systems of the human body. Lectures will be supplemented with labs including dissections of a fetal pig and an adult pig heart. Junior or senior standing is required.

**Anatomy and Physiology II** (.5 credit)

In this elective course students will study the human urinary, digestive, reproductive, endocrine and nervous systems with an emphasis on the special senses. Lectures will be supplemented with labs and will include dissections of a fetal pig, a sheep brain and a cow eye. Junior or senior standing is required. Prior enrollment in Anatomy and Physiology I is NOT a requirement.

# **SOCIAL STUDIES**

**3 credits required for graduation.**

## **World History 9** (1 credit)

This course introduces the student to the historical development of political, economic, social, and cultural institutions from the evolution of the first humans through the emergence of powerful political and economic states in Asia, Africa, the Middle East, the Mediterranean World, and Europe. The development of writing skills, critical reading of primary and secondary sources, and organizational skills are an integral part of the course. Students are guided through the basics of formal research in an essay integrated with their English 9 course.

## **World History 10** (1 credit)

Students continue their study of the historical process begun in World History 9. Emphasis is placed first term on economic, political, cultural, social and artistic developments in Europe. A global perspective emerges later as students study the nineteenth and twentieth centuries. Students complete a major research project and examine current issues as they inquire about their past and tie that past to the present world. Students are guided through the basics of formal research in an essay integrated with their English 10 course.

## **United States History** (1 credit)

This course is designed to give students a broad overview of United States history and the political, economic, and social processes that combined to create this country. A textbook and a variety of supplemental materials are used which stress critical and analytical thinking skills. Through the careful investigation, analysis, and examination of primary and secondary sources, students formulate a coherent understanding of those factors that shaped the United States. Students are guided through the basics of formal research in an essay integrated with their English 11 course. **Note:** Either U.S. History or AP U.S. History must be taken to fulfill graduation requirements.

## **\*AP United States History** (1 credit)

The purpose of this course is to provide students with an opportunity for a more rigorous exploration of United States history emphasizing independent thought. The course of study emphasizes the areas of United States history that are stressed in the AP exam. A college level text and a variety of supplemental materials are used. Advanced analytical writing skills are emphasized and student initiative is stressed. Students who participate in this class should anticipate college level expectations in the study of U.S. history, and should note that the reading and writing load is substantial. Students are guided through the basics of formal research in an essay integrated with their English 11 course. **Note:** Either US History or AP US History must be taken to fulfill graduation requirements.

**\*AP World History (1 credit)**

As described in the AP World History materials, “The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study.” The time period studied is 8000 B.C.E. to the end of the twentieth century. Student evaluations are shaped by the AP exam and consist of primary and secondary source analyses, essays, and multiple choice tests.

**Economics I, II (.5 credit)**

“Everyone must, to some extent, act as his own economist—in his private life and as a citizen—and both he and the community will be better served if he is well informed and can think clearly and objectively about economic questions.” National Task Force on Economic Education. This course is a basic introduction to macroeconomics and microeconomics. Critical thinking using economic reasoning is emphasized.

**Introduction to Psychology I, II (.5 credit)**

This one-term senior elective students will explore the basic concepts and terms in the study of Psychology. After looking at the discipline’s history, methodologies and schools of thought, the course will break down into various units such as Behaviorism, Biology and Behavior, Developmental Psychology, Intelligence, Personality, Stress and Health and Abnormal Psychology.

**Government and Politics I (.5 credit)** This course will focus on the structure and dynamics of American government, along with an examination of citizenship and civic responsibility. The course will primarily focus on the Constitution and Constitutional Convention, the evolution and growth of the modern federal government and contemporary American politics. Students will study federalism, individual political participation, civil rights and liberties, and the expansion of the size and scope of the federal government during the twentieth century. Students will also engage in a series of informed debates on current political debates in order to better form their own educated opinions both on specific issues and broader political ideologies. The hope is that they will finish the course as better prepared citizens.

**Comparative Religions I, II (.5 credit)**

This one term senior elective broadly examines major world religions and philosophical questions. Students will address such topics as the nature of God, humanity’s place in the universe, and good and evil (special emphasis is placed on ethical behavior) and examine them from the point of view of, for example, the Buddha, Nietzsche, Aristotle or even The Simpsons.

# WORLD LANGUAGES

3 credits required in one language for graduation.

## Chinese

**Please note: a grade of “C-” or better is needed to proceed to the next level.**

### Chinese 1 (Mandarin) (1 credit)

This is an introductory course designed for the students who have had no previous study of Mandarin Chinese. Speaking and listening skills are emphasized through the use of multimedia, classroom exercises and other teaching methods. Chinese writing, pinyin and tonal systems are introduced. Culture, history and other aspects of the language are taught.

### Chinese 2 (Mandarin) (1 credit)

Students who have successfully completed Mandarin Chinese 1 continue their study of grammar, vocabulary, writing, reading and culture. Conversation, writing and speaking are emphasized.

### Chinese 3 (Mandarin) (1 credit)

Students who complete this course satisfactorily will have a solid grasp of the basic vocabulary and grammar needed to carry out a conversation. Students will practice their reading, writing, listening, and speaking skills, using a variety of multimedia, workbook exercises, composition topics, short readings, movies, and listening exercises.

### Chinese 4 (Mandarin) (1 credit)

The goal of this course is to develop functional, communicative language ability using reinforcement and expansion. Students are expected to begin the course with knowledge of grammatical structures and vocabulary from previous courses. Students are exposed to more Chinese words, and they will be able to recognize them and use them correctly. Emphasis is placed on speaking, reading and writing Chinese words.

### Chinese 5 (Mandarin) (1 credit)

The goal of this course is to improve communication skills. A discussion format and communicative activities emphasize student participation. The course features high interest topics and integration of language and culture through Chinese art, music and literature. Thematic units are used to increase both written and spoken expression.

## French

**Please note: a grade of “C-” or better is needed to proceed to next level.**

### French 1 (1 credit)

This is a course for Upper School students who have had no previous study of French or who are interested in learning a second foreign language. The course uses an oral-aural approach in which speaking and listening are emphasized through classroom exercises, videos, and a workbook. Basic vocabulary, reading, and writing skills are taught through the study of cultures where the language is spoken.

**French 2** (1 credit)

Students who have successfully completed French 1 continue their study of grammar, vocabulary, writing, reading, and culture.

**French 3** (1 credit)

This course completes the presentation of grammatical structures at the beginning level and introduces intermediate concepts. Testing is proficiency based, requiring competence in reading, writing, listening, and speaking. Students practice the four skills through pair work, written workbook exercises, compositions, short readings, and listening exercises.

**French 4** (1 credit)

French 4 offers a combined course of grammar, oral expression, and literary study to promote the advancement of the four language skills. The review and study of intermediate and advanced grammatical concepts prepare students to use a higher level of language in both spoken and written contexts, and French 4 prepares the more conscientious student for success in the French 5 AP Language course. Emphasis is placed on self-expression in paired activities and group discussions relevant to the literature or thematic material being studied. Throughout the year, students read and discuss a short novel and several short stories.

**French 5** (1 credit)

The goal of this course is to further intermediate communication skills. A discussion format and communicative activities emphasize speaking and listening skills. Thematic units are used to increase both written and spoken expression, and a grammar review workbook is used to further grammatical skills.

**\*AP French 5 - Language** (1 credit)

This course prepares students to take the AP French Language examination. Those who take this course need to have a strong grasp of the vocabulary and grammatical structures taught in previous courses. Students read a novel as well as other selections. A discussion format emphasizes speaking and listening skills. In addition, students are expected to increase their vocabulary and to improve their grammatical skills through the use of a grammar review workbook and the writing of essays. Thematic units provide topics of class discussion designed to enhance contemporary vocabulary and reading comprehension as well as an up-to-date view of French culture. **Prerequisite:** Approval of French 4 instructor.

**Spanish**

**Please note: a grade of “C-” or better is needed to proceed to the next level.**

**Spanish 1** (1 credit)

This is an introductory course designed for students who have had little or no previous exposure to Spanish, or students who would like to begin the study of a second foreign language. The course emphasizes listening and speaking skills and introduces the study of cultures where the language is spoken.

**Spanish 2** (1 credit)

Students who have successfully completed Spanish 1 continue their study of vocabulary, grammar, and culture. Communication is also emphasized in this course.

**Spanish 3** (1 credit)

Students who complete this course satisfactorily have a solid grasp of the basic vocabulary and grammar needed to express themselves at an elementary level. Students practice reading, writing, listening, and speaking through pair work, written workbook exercises, compositions, short readings, and listening exercises.

**Spanish 4** (1 credit)

The goal of this course is to develop functional, communicative language ability at the intermediate level using reinforcement, expansion, and synthesis. Students are expected to begin the course with knowledge of grammatical structures and vocabulary emphasized in previous courses. Class time is spent practicing grammatical structures and vocabulary in meaningful conversation.

**Spanish 5** (1 credit)

The goal of this course is to improve communication skills while learning about the Hispanic world. A discussion format and communicative activities emphasize student participation. The course features high-interest topics, a review of selected grammatical topics, and an integration of language and culture through the active use of art, music and literature from the Spanish-speaking world. Active personalized and real communication about actual issues and experiences are stressed.

**\*AP Spanish 5 - Language** (1 credit)

AP Spanish Language is intended for students who wish to develop at a high level their proficiency in all four language skills: listening, speaking, reading and writing. Students who choose this course need a solid knowledge of the language and a minimum of 45 minutes per night to devote to the course.

\* Students may elect to take the AP Exam in May. A score of three or better on a scale of five on this national exam qualifies the student for advanced placement and/or credit upon entrance into many colleges.

## **Exercise Requirement Opportunities**

All exercise requirement forms can be accessed electronically from Google Drive. Students are expected to complete and submit all forms electronically.

### **Approved On-Campus Exercise Activities**

- Involvement in school-sponsored Interscholastic Sports
- Involvement in a PE Activity class
- Involvement as dancer in an onstage musical
- An approved and supervised personal fitness activity program at the JAC:
- Dance Class
- Weight Training
- Aerobics
- Walking/Running program

### **Process to meet the Exercise Requirement (with an Off-Campus Personal Fitness Program)**

- Complete an Exercise Requirement Form (found online).
- Obtain pre-approval of plan from Director of Fitness and/or the Chair of Physical Education Department
- Maintain a log (found on Google Drive) of activities weekly and note that participation must be verified by a sponsor. (Parents do not qualify as sponsors.)

### **Examples of Off-Campus Personal Fitness Exercise Activities (subject to approval as outlined above)**

- Dance with organized studio
- Supervised personal fitness training
- Club sports (e.g. basketball, soccer, volleyball, etc.)
- Tennis (organized lessons and/or matches i.e. tournaments)
- Horseback riding
- Gymnastics with organized team/club
- Swimming with organized team/club
- Curling with organized team/club
- Bowling with organized team/league
- Hockey with organized team/league

Appendix

**SERVICE HOURS - The Prairie School**

Student Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Advisor: \_\_\_\_\_

Dates or time period of service: \_\_\_\_\_

Number of service hours earned: \_\_\_\_\_

Description of service performed: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Signature: \_\_\_\_\_

Comments (optional):

\_\_\_\_\_

\_\_\_\_\_

Appendix

**CO-CURRICULAR OPPORTUNITIES AND POINTS**

**Athletics**

Team Member	3
Manager	1-3*

**Performing Arts**

Plays, musicals	3
Stagecraft/Tech	1-3*
Regional/State	
Solo/Ensembles Contests	1
Music Lessons	1

**Publications**

Mindscape (literary magazine)	1
Yearbook	1
Editor-in-charge	3

**Academic Competitions**

Forensics	1-2*
Geography Bowl	1
Model O.A.S.	1-2*
Model U.N.	1-2*
ROV	1
Science Olympiad	1
World Languages Contests	1-2*

**School-Wide Organizations**

C.L.A.S.S.	1-2*
Honor Committee	1
Student Government	1

**Outside-of-School Activities\***

Scouts	
Youth Groups	
Club Sports	
Religious activities (must be pre-approved by Upper School Co-curricular Coordinator)	
Other (outside) activities submitted for review (e.g. Dance, Equestrian Training, Music Lessons)	

\*Credit assigned by coach/director/faculty advisor/teacher based on evaluation of participation

Appendix

**INTERSCHOLASTIC SPORTS OFFERINGS**

**Fall**

- Boys' soccer
- Cross country (boys' and girls')
- Girls' tennis
- Girls' volleyball

**Winter**

- Basketball (boys' and girls')

**Spring**

- Boys' baseball (co-op with Racine Lutheran)
- Boys' tennis
- Girls' soccer
- Golf (boys' and girls')
- Track (boys' and girls')

Appendix

Request for Waiver of The Prairie School's Limited AP Rule  
(Juniors: 2 AP's; Seniors: 3 AP's)  
School Year 2016-2017

Student Name \_\_\_\_\_ Advisor Name \_\_\_\_\_

Grade next year:

Course(s) requested for waiver:

---

---

Please explain why you desire the waiver and why you feel you can manage the workload successfully.

---

---

---

---

Signed \_\_\_\_\_ Date \_\_\_\_\_

Parent Signature \_\_\_\_\_

**Due to the challenges of scheduling multiple AP courses for students, it is possible that even if a request for additional AP courses is approved, it may not be possible to schedule them.**

Return this form upon completion to the Upper School office.

Appendix

**INDEPENDENT STUDY PROPOSAL**

The opportunity to undertake an Independent Study is offered to students who are interested in and capable of doing work outside of, or in addition to, the regular curriculum (an Independent Study may not be taken if the course is offered in regular curriculum). With Independent Study work, students should know that it is their responsibility to research and organize their study; the faculty's primary responsibility is supervision and evaluation, not actual teaching (the faculty supervisor must be a current employee of the Prairie School who is qualified to oversee the course). In addition to this form, a complete syllabus, including all course materials, assessments, and deadlines signed by the faculty member supervising the study, must be submitted.

As the study requires a remarkable amount of dedication and responsibility on the part of the student, certain criteria must be met before the student's request can be considered. The student must possess a cumulative GPA of 3.5 or higher, and be free of any behavioral or honor contracts. Additionally, the student should be caught up on service hours and his/her exercise requirement.

By mid-term, should the student earn a grade less than 70%, the faculty supervisor has the right to terminate the study.

Once submitted, a majority vote of the Academic Council is required for approval of the study.

Student \_\_\_\_\_

Title of the Project \_\_\_\_\_

Faculty sponsor of Course \_\_\_\_\_

Amount of credit requested \_\_\_\_\_

Anticipated time required to complete the course, in terms of hours per week (for each credit, students should anticipate in excess of 4 hours per week be spent on the study) \_\_\_\_\_

Course will run \_\_\_\_\_ term(s) starting \_\_\_\_\_

Anticipated date of completion of the Course \_\_\_\_\_

**This project is to receive a letter grade, which will be computed into the GPA, and the course and credits will appear on the transcript. Should the student wish to drop the study, he/she must do so in accordance with the guidelines for a regular course add/drop as stipulated in the Family Handbook.**

**p. 2 of 2 - INDEPENDENT STUDY CON'T**

I understand the terms and conditions of this Independent Study:

Faculty sponsor signature \_\_\_\_\_

Student signature \_\_\_\_\_

Parent signature \_\_\_\_\_ Date \_\_\_\_\_