# Forest Lake Area Community School

# Registration Guide 2020-2021

# **Graduation Requirements**

Students must earn a total of 26 high school credits in order to graduate. In addition, many of these credits must come from specific content areas.

Below are the graduation requirements broken down into specific departments. For clarity, specific courses that fulfill the graduation requirements are listed. Please note that many of these classes have grade level or additional restrictions for registration. See the course catalog for more information.

# Language Arts (4.0 Credits)

- English 9 A & B (1.0 Credit)
- English 10 A & B (1.0 Credit)
- English 11 A & B (1.0 Credit)
- Speaking Course (0.5 Credit)
  - Communication Theory & Practice
- English Elective (0.5 Credit)

#### Economics (0.5 Credits)

- Economics or
- Agricultural Economics

#### Math (3.0 Credits)

- Algebra 9 A & B (1.0 Credit)
- Geometry A & B (1.0 Credit)
- Algebra II A & B (1.0 Credit)

# Social Studies (3.0 Credits)

- Citizenship & Government (0.5 Credit)
- Geography 9 (0.5 Credit)
- World History A & B (1.0 Credit)
- U.S. History A & B (1.0 Credit)

# Science (3.5 Credits) Class of 2022 & Beyond

- o Physics A & B (1.0 Credit)
- o Chemistry A (0.5 Credit)
- o Biology A & B (1.0 Credit)
- Earth & Space Science (0.5 Credit)
- Science Elective (0.5 Credit)

# Science (3.5 Credits) Class of 2021

- Science 9 A & B (1.0 Credit)
- Chemistry A & B (1.0 Credit)
   or
   Physics A & B ( 1.0 Credit)
- Biology A & B ( 1.0 Credit)
- Earth & Space Science (0.5 Credit)

# WEIGHTED GRADES

Students are encouraged to take challenging courses that prepare them for college. Students are also encouraged to take elective courses as a means of exploring areas of interest and as a means of creating a balanced schedule. The primary purpose in taking any course is to learn and develop skills.

We recognize that the grades earned in courses does matter when students apply to college and scholarships. Therefore, courses awarding college credit are weighed at a value of 1.25. These include:

- 1. Advanced Placement (AP) courses
- Concurrent enrollment courses (earn college credit while taking them in the high school environment), including CIS (University of MN), College Now (Southwest State University), and Pine Technical & Community College
- Post-Secondary Education Options (PSEO)
- 4. Articulated courses (earn college credit that may only be recognized by the college through which it is earned) are not weighted. These include: Floral Design, Psychology of Childhood, and Auto Technology.

Courses offered with weighted grades and the weight values can be found below.

Please see Ranger U for additional information.

# Weighted Courses

#### Agriculture (CTE)

- CIS Animal Science
- Plant Science
- Concepts
  Greenhouse
- Technology
- Landscape Design & Construction

#### Art

AP Music Theory

#### Business Education (CTE)

- Business Information
   Systems
- Business Computer Applications
- Principles of
  - Marketing
- College Introduction to Business
- Human Relations in Business

#### Language Arts

- AP English Language & Composition
- CIS University Writing
   & Critical Reading
- CIS Introduction to Literature
- CIS Advanced Public Speaking

#### Math

- AP Calculus I
- AP Calculus II
- AP Statistics
- AP Computer Science
- AP Computer Science Principles
- CIS College Algebra through Modeling
- CIS Basic & Applied Statistics

#### Science

- AP Biology
- AP Chemistry
- AP Physics
- AP Physics -Mechanics
- CIS Human Physiology

#### Weighted Grade Values

Grade	Non -Weighted Grade Value	Weighted Grade Value
Α	4.0	5.0
A-	3.7	4.625
B+	3.3	4.125
В	3.0	3.75
B-	2.7	3.375
C+	2.3	2.875
C	2.0	2.5
C-	1.7	2.125
D+	1.3	1.625
D	1.0	1.25
D-	.7	.875

#### FACS (CTE)

Exploring Education

#### Health Science (CTE)

- Intro to Health Care
- Emergency Medical Responder
- Emergency Medical Technician

#### Industrial Tech (CTE)

Engineering/Drafting I

#### Social Studies

- AP Human Geography
- AP World History
- AP US History
- AP Psychology
- CIS Microeconomics
- CIS Macroeconomics

#### World Language

- CIS Chinese III
- CIS Chinese IV
- French V
- Spanish V

CTE: Career Technical Education

# MInimum Preparation Requirements for MN Public Institutions

Below you will find the minimum high school preparation requirements for baccalaureate programs. University of Minnesota requirements apply to Twin Cities, Crookston, Morris, and Duluth campuses. Minnesotat State Colleges and Universities System requirements apply to Bemidji, Mankato, Moorhead, St. Cloud, Metropolitan State, Southwest (Marshall), and Winona.

# University of Minnesota Requirements:

- 4 years of English: Emphasis on writing, including reading and speaking instruction, as well as literary comprehension.
- 4 years of mathematics: Including two years of algebra (one of which is intermediate or advanced Algebra), 1 year of Geometry, and a 4th year math course (integrated math, pre-calc, or calculus which is preferred). Students are encouraged to take a math or quantitative methodology course in their senior year that is considered to be the next course in their academic progression.
- 3 years of science: Including one year each of a biological and a physical science, all with significant laboratory experience.
- 3 years of social studies: Including one year each of geography and U.S. history.
- year each of geography and U.S. history.
  2 years of a single second language: Not required if English is not your first language.
- 1 year of visual or performing arts (theater, music, dance or media arts).
- \* Specific colleges (i.e. Carlson School of Management) may have additional requirements.

# Minnesota State Requirements:

- 4 years of English: Including writing, literature, and speech.
- 3 years of mathematics: Including one year each of elementary algebra, geometry, and intermediate or advanced algebra.
- 3 years of science: Including one year each of biological and physical science, with signficant laboratory experience.
- 3 years of social studies: Including one year each of U.S. history and geography (or a course that includes a geography component such as World History, Western Civilization, or Global Studies).
- 2 years of a single second language.
- 1 year of visual and/or performing arts (theater, music, dance or media arts).

Colleges may admit some students who have not met these requirements. The method of meeting these preparation requirements after admission will be determined on a case-by-case basis and may require the student to take additional course work.

Further information is available on the Web: University of Minnesota – www.umn.edu Minnesota State Universities – www.minnstate.edu

Please note that the high school prep requirements listed are only for the University of Minnesota and Minnesota State systems. Requirements for all colleges and universities vary and can change. Confirm with the college of your choice for their high school prep requirements.

# **Agriculture & Natural Resources**

The Agricultural Education Department offers courses in a wide ranging variety of subjects. Keep in mind that **Agricultural Economics meets the economics graduation requirement**. Articulated courses offer the opportunity to earn college credit and certification from certain community or technical colleges. Also, students interested in a career in Agriculture, Food, or Natural Resources should strongly consider taking classes from the Agriculture Department.

# **Courses Shown Below**

Click title to see course description and prerequisites

# **General Agriculture**

Collapse All

# Agricultural Economics

Course: 0650 Grade: 11-12

Agricultural businesses were the original startup companies, and any successful business comes down to economic decision-making. In this hands-on class, you'll learn how to anticipate market trends, secure resources, and make rational, data-based decisions through market simulations and interactive group collaboration. We'll also touch on supply and demand, price-setting, the globalization of trade, public policy, commodity markets and food safety, and how they impact everyday business. You'll walk out of this class confident about making healthy day-to-day economic decisions while saving and investing for the future. If you're an FFA member, you'll get added leadership and career development training, too.

\*This course meets the required economics credit for graduation.

# **Animal Science**

Collapse All

Companion Animal Science



# **Plant Science**

Collapse All

# Plant Science - Concepts (10-12)

Course: 0501 Grade: 10-12

Give your green thumb a workout in the warmth of our high school greenhouse! This course is designed as an overview of the characteristics of plants, so you'll get your hands dirty and learn all about plant anatomy and growth. You'll walk away confident in your ability to identify common plants - and care for them - so you'll be able to impress the gardening experts in your life. You'll also participate in a Supervised Agricultural Experience Program (AKA a hands-on, out-of-class experience) in this course. If you're an FFA member, you'll get added leadership and career development training, too.

# Companion Animal Science (9-12)

Course: 0306 Grade: 9-12

Dogs and hamsters and parrots - oh my! Learn how to take care of your favorite pets, from their nutrition and safety, to training and setting the up for long-term health. The course will focus on dogs, cats, rabbits, birds, reptiles, guinea pigs, rodents, and fish - with lots of hands-on and problemsolving - so it's great for any pet owner or aspiring animal-related professional. You'll also participate in a Supervised Agricultural Experience Program (AKA a hands-on, out-of-class experience) in this course. If you're an FFA member, you'll get added leadership and career development training, too.

# Leadership

Collapse All

#### Youth Leadership A

Course: 0001 Grade: 9-12

Are you a captain on your sports team? Dreaming of owning or leading a business someday? Do you wish you could convince everyone to take an Ag. course, because you just can't get enough? Even if leading comes naturally to you, you won't get far without effective communication, team building, citizenship and organizational skills. So take some time to discover how you're wired and how your unique skills will help those around you thrive. You"ll learn how to communicate effectively and persuasively through public speaking opportunities, serve in the community, help educate your peers about issues and options in agriculture, and coordinate events that will impact your school for the better. You'll also participate in a required Supervised Agricultural Experience Program (AKA a hands-on, out-of-class experience) in this course. If you're an FFA member, you'll get added leadership and career development training, too. Students do not need to follow this course with Youth Leadership B.

# Youth Leadership B

Course: 0004 Grade: 9-12 career development training, too.

# Landscape Design & Construct (9-12)

Course: 0502 Grade: 9-12

Bump up your curb appeal! In this class, you'll get to know common Minnesota landscaping plants, create designs using Computer Aided Drafting (CAD) software, and learn to build hardscapes - like retaining walls and patios that will add oomph to your designs and value to any home. This course will explore the process of creating greenscape and hardscape plans and carrying them through to completion, so we'll cover how to source and handle materials, install them safely and manage all aspects of a landscaping project. Hands-on (and - ahem - outdoor) learning will be an important part of this class. You'll also participate in a Supervised Agricultural Experience Program (AKA a hands-on, out-ofclass experience) in this course. If you're an FFA member, you'll get added leadership and career development training, too.

# Greenhouse Technology (10-12)

Course: 0504 Grade: 9-12

Surround yourself with beautiful topical flowers in the dead of a Minnesota winter! Hang out in a greenhouse, learning plant production, identification, disease prevention, pest management, and equipment care. Learn how to maintain and manage a commercial greenhouse and learn what it takes to create healthy environments for specific plant species. Put your new growing and business skills into practice to raise funds for the agriculture department at the spring plant sale. You'll also participate in a Supervised Agricultural Experience Program (AKA a hands-on, out-of-class experience) in this course. If you're an FFA member, you'll get added leadership and career development training, too. Successful completion of this course may enable students to earn 2 college credits from Hennepin Technical College (Greenhouse Infrastructure Technology LNDC 1160). This course also has a potential articulation agreement with several area colleges. See instructor for details.

\* Applicable to the University of Minnesota Science Requirement.

# Youth Leadership B

Course: 0004 Grade: 9-12

Students do NOT need to complete Youth Leadership A to take this course Do you want to make your community a better place? In this class, you'll learn to see your community - your school, your neighborhood, your family, your church, your lunch table - as a learning laboratory. You'll take an honest look at your community, describe the needs you see, and then go to work putting together a plan for addressing those needs. You'll get to take part in the Agricultural Education Open House, community landscaping projects, banquet planning, National Chapter Award, and Agriculture in the Classroom activities. In short, you'll have practical opportunities to become an invested, informed student leader within the agricultural department. You'll also participate in a required Supervised Agricultural Experience Program (AKA a hands-on, out-of-class experience) in this course. If you're an FFA member, you'll get added leadership and career development training, too.

with several area colleges. See instructor for details.

\* Applicable to the University of Minnesota Science Requirement.

### Floral Design (9-12)

Course: 0505 Grade: 9-12

You can't have a successful event without a great floral arrangement! Whip out your shears and create floral arrangements, centerpieces, bows and corsages - putting the best design tools and principles into use. Learn how to identify and care for cut flowers and understand their specific uses in design work. Get a first-hand look at the floral industry as you plan and price out the flowers for a wedding. If you're an FFA member, you'll get added leadership and career development training, too.

#### Art

#### One credit in the arts is required between grades 9-12.

This requirement can be met through either visual arts courses (offered in the Art Department) or performing arts courses (offered in the Music Department).

Students must take Intro to Art before taking additional art classes.

#### Courses Shown Below

Click title to see course description and prerequisites

#### **Art Courses**

Collapse All

#### Introduction to Art (9-12) \( \times \)

Course: 1002 Grade: 9-12

# Intro to Art fulfills the prerequisite to take other art courses

What is Art? This course will provide a foundation for creating visual art and develop an understanding of the language of art. Through hands-on experiences, students will have the opportunity to explore a variety of media and techniques in creating their own artworks. In addition to creating art, students will strengthen skills in critical and creative thinking through discussion and reflection activities. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# Related Arts (Mixed-Media & Jewelry) (10-12)

Course: 1410 Grade: 10-12

# Prerequisite: C- or higher grade in Intro to

Art

This course will cover several areas of study: jewelry techniques such as metal fabrication (cutting, piercing, soldering, stone setting), casting, glass fusing, containers (basketry, boxes, holding vessels), mosaics, and bookmaking. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# Drawing & Printmaking

Collapse All

# Drawing & Printmaking (10-12)

Course: 1310 Grade: 9-12

# Prerequisite: C- or higher grade in Intro to

Art

This course will develop drawing skills with an emphasis on perspective and shading techniques. Fine art printmaking techniques will include dry point engraving, lithography, block printing and embossing. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# Advanced Drawing & Printmaking

Course: 1320 Grade: 10-12

Prerequisite: B- or higher in Drawing &

Printmaking, or instructor permission/approval

This course is an extension of Drawing and Printmaking. Students will explore the two main areas of Drawing and Printmaking at a more in-depth, advanced level. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# Art Appreciation (9-12)

Course: 1700

# Art Through the Ages A/B ~

Course: 1705/1706

# **Drawing & Painting**

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# **Drawing & Painting**

Course: 1110 Grade: 9-12

Prerequisite: C- or higher grade in Intro to

Art

This course will be divided into two main study areas: Drawing, with an emphasis on forms and the human figure using pencil, ink, oil pastels and chalk; and Painting, exploring techniques in acrylic, tempera, and watercolor. Short histories of each area will be incorporated into the course as well as appreciation for, and critiquing of, all types of artwork. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# Advanced Drawing & Painting

Course: 1120 Grade: 10-12

Prerequisite: B- or higher in Drawing and

Painting, or instructor permission/approval

This course is designed for the more motivated and focused individual. Students will develop a more in-depth study of their work and interests. Individuals will be encouraged to develop a portfolio. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)





# Singleton Art Classes

Collapse All

# Lost in Space/3D Art (9-12)∨

Course: 1003 Grade: 9-12

Prerequisite: Intro to Art

Lose yourself in the third dimension. Lost in Space/3D Art is a foundation course covering various three-dimensional Art materials and media. In this class, emphasis is placed on the creative application of design as it applies to three-dimensional Art forms. Some units of study may include the following Art projects: 3D perspective drawing, realistic and abstract sculpture, ceramic sculpture, hand-built pottery, weaving, and architecture. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# Art Exploration (9-12)

Course: 1006 Grade: 9-12

#### Prerequisite: Intro to Art

Explore your creativity through art! This course builds upon foundations learned in Intro to Art. Students will further explore art tools and materials to discover their own style, voice and interpretation. This class will further investigate art in our world from personal, social and cultural perspectives. This course will fulfill .5 of the 1.0 Art credit requirement needed for graduation. (See Credit Requirements in the Academic Overview section of the Registration Guide.)

# **Economics**

Students are required to take 0.5 credits of economics. Courses that meet the economics requirements are taught by three different departments. To assist you in understanding your options, all economics offerings are listed on this page.

# The Economics graduation requirement may be met by any one of the following courses:

Click title to see course description and prerequisites.

Collapse All

# Economics (taught by social studies)

Course: 7201 Grade: 11-12

Economics is the study of how people coordinate their wants and desires, given scarce resources and the decision-making mechanisms, social customs & political realities of their societies. Decisions made by consumers, workers, investors, managers and government officials interact to determine the allocation of scarce resources. Specifically, we will be examining the following contents: 1) Introduction to Economics, 2) How Markets Work, 3) Business and Labor, 4) Money, Banking and Finance, 5) Measuring Economic Performance, 6) Government and the Economy and 7) The Global Economy.

# Agriculture Economics (taught by agriculture)

Course: 0650 Grade: 11-12

Agricultural businesses were the original start-up companies, and any successful business comes down to economic decisionmaking. In this hands-on class, you'll learn how to anticipate market trends, secure resources, and make rational, data-based
decisions through market simulations and interactive group collaboration. We'll also touch on supply and demand, price-setting,
the globalization of trade, public policy, commodity markets and food safety, and how they impact everyday business. You'll walk
out of this class confident about making healthy day-to-day economic decisions while saving and investing for the future. If you're
an FFA member, you'll get added leadership and career development training, too.

\*This course meets the required economics credit for graduation.

# **English Language Arts**

Four Language Arts credits are required in grades 9-12. However, students are encouraged to take as many Language Arts elective courses as their schedules allow.

# **Courses Shown Below**

Click title to see course description and prerequisites

# **Graduation Requirements**

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Requirement	Course Options	
9th Grade English (2 classes)	English 9 A&B	
10th Grade English (2 classes)	English 10 A&B	
11th Grade English (2 classes)	English 11 A&B	
Communication (1 class minimum)	Communication Theory &	
additional courses may be taken as electives	Practice	
English Elective Requirement (1 class)	In addition to the requirements above, 1 additional class is required for graduation (.5 credit)	

# Communication Theory & Practice $\vee$

Course: 4100 Grade: 11-12

Students are required to take Speech, Communication
Theory and Practice, or Argumentation. Communication
Theory and Practice prepares students to demonstrate
effective communication skills in personal, community and/or
work settings. Presentation is the core of class activity as
students analyze communication situations, solve problems,
participate in dialogue and reflect on their communication
practices and observations. Emphasis is on effective speaking
and listening in a variety of communication situations. This
course meets the Language Arts Communication
requirement.

# **Required Courses**

Collapse All

## English 9 A/B

Course: 4991/4992

Grade: 9

Students will engage in a variety of reading and writing activities, many of their own choice, as well as selected literature and writing assignments. Students will develop the following skills: analysis and interpretation of novels, drama, short stories, nonfiction and poetry, research methods, formal speaking, grammar and vocabulary in the context of writing.

# English 10 A/B

Course: 4004/4005

Grade: 10

Students will read and analyze literature in small groups, projects, and writing. Students learn to identify literary themes and will examine text through literary lenses. Emphasis is given to writing and responding to literature in order to develop strong literacy skills. A variety of genres is covered, such as poetry, novels, dramas, and short stories. Students will analyze and respond to literature in several ways, including thematically examining the "American Dream".

# English 11 A/B

Course: 4006/4007

Grade: 11

Students will read a diverse selection of texts, including poetry, short stories, drama, novels, and non-fiction books. Additionally, students will write a variety of texts, including a personal narrative, expository essay, critical analysis, and a research-based argumentative paper. Throughout the course, students will engage in grammar and vocabulary study designed to increase their ability to navigate both technical and college-level texts. Upon completion, students will be prepared for choosing 12th grade elective courses aligned with their college and career interests.

# **English Electives**

Collapse All

# Writing Workshop (12)

Course: 4207 Grade: 12

Writing Workshop gives students the opportunity to explore the various modes of writing they will encounter in high school, professional, and post-secondary settings, including narrative, expository, and argument. Students will write and revise a variety of short pieces and three major papers. Throughout the course, students will build essential writing skills. This course meets the writing or elective requirement for 12th grade students in the 20-21 school year.

# Creative Writing (11-12)

Course: 4210 Grade: 9-12

Creative Writing helps students discover the process of art-making with words. It accomplishes this by developing an awareness of the students' five senses, expanding their imaginations, and alerting them to the relationships between things and people. Exercises focus on writing scripts, short fiction, and poetry. Examples of various authors' works will provide a basis for writing. This course meets the Language

Arts elective requirement but NOT the writing requirement.

# Literature of the Imagination (11-12)

Course: 4301 Grade: 11-12

This course centers on the imagination. It examines hypotheses about our beginnings, the reasons for our behavior, our ideals of heroism, our need to make a better world, and our curiosity about our future life. Throughout the term, literature of various cultures will be studied in the format of myths, legends, fantasy, folklore, horror stories, and science fiction. Students will also be reading and studying three novels: Frankenstein by Mary Shelley, Fahrenheit 451 by Ray Bradbury, and a choice novel. This course meets the Language Arts Literature requirement for the 2020-2021 school year for 12th graders needing the literature requirement or a Language Arts elective.

# **British Literature (10-12)**

# World Literature (11-12)

Course: 4306 Grade: 11-12

World Literature provides college-bound students with an excellent background in acclaimed literature. Studies include major writings that have influenced American culture. A variety of genres are read with emphasis on different perspectives. This course provides challenging reading material and is recommended for students who enjoy discussing a variety of concepts. This course meets the Language Arts Literature requirement for the 2020-2021 school year for 12th graders needing the literature requirement or a Language Arts elective.

# Introduction to Media (10-12)

Course: 4407 Grade: 9-12

Students will learn about the elements and structure of forms of media. Multiple approaches for the interpretation and analysis of television, newspapers, magazines, the internet and film will be explored. These will be examined for their historical, social, and cultural significance as well as basic production elements. Attention will also be paid to the ever-changing role of advertising in mass media. This course meets the Language Arts elective requirement.

# **Family & Consumer Science**

The Family and Consumer Sciences (FCS or FACS) is the comprehensive body of skills, research, and knowledge that helps people make informed decisions about their well being, relationships and resources to achieve optimal quality of life. In FCS or FACS classes, students will develop skills, knowledge, attitudes, and behaviors that are needed for creative and critical thinking, character development, interpersonal communication, practical knowledge and career preparation.

The Family and Consumer Sciences Department offers electives for students to explore interests and potential careers in the areas of financial literacy, child and human development, culinary arts, fashion, interior design, and sewing.

#### Courses Shown Below

Click title to see course description and prerequisites

# Culinary

Collapse All

#### Food Choices (10-12)

Course: 2600 Grade: 9-12

DID SOMEONE SAY FOOD? Learn how food plays a role in overall health and nutrition, particularly for teenagers. Students will learn to find their way around the kitchen, and develop basic food preparation skills to produce healthy, delicious meals and snacks. Students will analyze their eating habits using nutrition software and provide a meal for classmates and guests.

#### Culinary Science (9-12)

Course: 2601 Grade: 9-12

What makes popcorn pop? Why does bread rise? Ever wonder what all of those ingredients are in your food and what they do? Students will examine why foods change when heated, frozen, or mixed together by preparing a variety of recipes within the major food groups.

#### Cultures & Cuisine (9-12)

Course: 2605 Grade: 9-12

Explore different cultures around the world, and learn their food customs first-hand by preparing them! Discover the different cultures of food, including historical, familial, ethnic, regional and more. Build on basic cooking skills and explore the role that food plays around the world. Students will prepare and taste a wide variety of foods. Must be open to trying new foods.



## **Financial**

Collapse All

## Financial Skills for Life (11-12)~

Course: 2706 Grade: 11-12

This course will furnish students with financial skills needed for personal resource management now and in the future. The course addresses a wide range of topics including: goal setting and planning for major purchases, banking, checking, savings, handling credit, purchasing insurance, making housing and rental payments, paying bills, budgeting, preparing personal income tax statements, preventing common consumer complaints, and selecting investment options. An ongoing online banking simulation game is played throughout the course.

# **Internship Opportunities**

Forest Lake Area High School is looking to create ways for students to learn by doing. Internship opportunities will be added here as they become available.

# **Courses Shown Below**

Click title to see course description and prerequisites

# Career Launch

Collapse All

# Career Launch A - Explore

Course: 2413 Grade: 11-12

Prerequisite: Students must have completed, or are registered for at least 3 pathway specific CTE courses.

Make your passion a paycheck. In this course, you will explore your career pathway focus, participate in job shadow experiences, develop professional skills (resume building, interview skills, etc.), and earn an industry credential(s). Students will then utilize these skills in a real world setting. You will have the opportunity to develop applicable skills that align with your career goals; and explore post secondary education & training options that support those career goals. The class incorporates online learning components with potential opportunities for release days so that students can pursue individualized experiential learning opportunities. This course aligns with the Minnesota Technical Careers/Occupations Program Standards.

This course may be repeated.

# Career Launch B - Experience

Course: 2414 Grade: 11-12

Prerequisite: Students must have completed at least 3 pathway specific CTE courses and Career Launch A.

Turn learning into earning. Participate in a real world work based learning experience related to your career goal! Students will identify their planned career area of interest; and the teacher will place them with an appropriate business partner. Students will be released from school to participate in this hands on work based learning opportunity in which you will earn high school credit, earn money, and learn applicable skills. As you gain real world experience, you'll keep a log of what you're learning and identify next steps for your career development. This course has online learning components. This course aligns with the Minnesota Technical Careers/ Occupations Program Standards. Taking Career Launch A & B in same academic year is preferred but not required.

This course may be repeated.

# **Mathematics**

Students must have a minimum of 3 credits in Math with completion of Algebra I, Geometry and Algebra II.

For those students interested in Astronomy, Business Administration, Chemistry, Dentistry, Engineering, Geology, Mathematics, Medicine, Nursing, and Physics, the recommended mathematics sequence is: Algebra I, Geometry, Algebra II, Pre-Calculus, and Calculus.

Students who are not headed into a technical field should consider taking CIS Algebra.

Most college programs recommend mathematics through Algebra II B,. Many colleges, including the University of Minnesota, require four high school math credits.

# **Courses Shown Below**

Click title to see course description and prerequisites

# Required Math Sequence

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Algebra 9 A/B

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Course# 5491/5492 Grade: 9-12

Prerequisite: Successful completion of Algebra 8B

This course covers fundamental algebra topics students need for high school math courses as well as post high school careers and education. Topics covered include: Quadratic equations, exponent rules, fractions with variables, function work, systems of linear programming and terms of polynomial functions. A graphing calculator is required for this course.

Geometry A/B

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Course: 5111/5112 Grade: 9-12

Prerequisite: Successful Completion of Algebra 9B

Geometry is the study of logical reasoning, lines, planes, and their relationship to triangles, quadrilaterals, circles, and other plane figures. Emphasis is given to writing deductive proofs. Students will apply concepts of shape, space and measurement to illustrate and describe the physical world and solve problems. Students will use measurements directly and indirectly, review equations from algebra and graph in two dimensions.

Algebra II A/B

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Course: 5031/5032 Grade: 9-12

Prerequisite: Successful Completion of Algebra 9B

Algebra II is an extension of Algebra I. This course includes the study of linear, quadratic, rational, polynomial, exponential and logarithmic equations. Students are required to have a graphing calculator equivalent to a TI-83 or better for this course.

\* Students are encouraged to complete this course by the end of 11th grade in order to prepare for the state MCA Math exam.

# **Math Electives**

Collapse All

# CIS College Algebra through Modeling A/B (11-12)

Course: 5425/5426 Grade: (11-12)

#### Prerequisite: Successful Completion of Algebra IIB with a C or higher.

Top 50th-20th Percentile Class Rank, or teacher recommendation

This course introduces students to the art of mathematical prediction through algebraic modeling and elementary probability theory. The class covers techniques of representing the behavior of real-world data with algebraic equations, including linear, polynomial, exponential and logarithmic functions. Students will learn to develop equations that accurately represent the behavior of real-world data. Problems are draw from various disciplines. While students practice traditional algebraic methods, they will also use the spreadsheet program Excel extensively to investigate the behavior of data sets. The class will also strengthen students' ability to communicate and evaluate mathematical reasoning. This course satisfies the University Mathematical Thinking requirement.

# CIS Basic and Applied Statistics A/B (11-12)

Course: 5451/5452 Grade: 10-12

Basic and Applied Statistics is an introductory statistics class designed to engage students using a modeling and simulation approach. It emphasizes understanding and applying statistical concepts and procedures using visual and quantitative methods for presenting and analyzing data using inferential techniques. Successful completion of this course may enable students to earn 3 semester credits from the University of Minnesota.

# Consumer Math (11-12)

Course: 5030 Grade: 11-12

#### (Teacher Recommendation Required)

Consumer Math applies the student's knowledge of arithmetic and algebra to everyday situations. Topics will include personal finances, gross and net income, personal banking, transportation, consumer credit, taxes, housing, investments and insurance.

# Pre-Calculus A/B/C (10-12)

Course: 5245/5246/5247

Grade: 10-12

#### Prerequisite: Successful Completion of Algebra IIB

Pre-Calculus A, B and C are designed primarily for the student who is very much interested in the study of mathematics or one who knows he/she will need more courses in mathematics or science in his/her educational development beyond high school. Some of the topics covered in this course are: the number system, mathematical induction, series, sequences, limits, analytic geometry, functions, complex numbers, proof, graphing procedures, absolute value, slope functions, and trigonometry. Upon successful completion of Pre-Calculus, a student would have the trigonometry background to go on to Calculus. Students are required to have a graphing calculator equivalent to a TI-83 or better for this course.

# **Physical Education**

1.0 Physical Education credits are required (0.5 in grade 9 and 0.5 in grade 10). A 0.5 Credit in Health Education is required in grade 10. Beyond the required courses physical education offers a wide variety of physical education courses that challenge the mind, body and spirit. Total body wellness is a critical component to the college bound student, athlete, and young adult.

## **Courses Shown Below**

Click title to see course description and prerequisites

# Required Courses

Collapse All

# Physical Education 9 (9)

Course: 6491 Grade: 9

The Physical Education program gives students an opportunity to explore a variety of physical activities. Basic sports skills, understanding of rules and appreciation of sports, as well as physical fitness, are stressed.

Health (10-12)

Course: 6000 Grade: 10-12

Topics covered include self-esteem, stress reduction, depression and suicide prevention, promotion of healthful nutrition, prevention of tobacco, alcohol & drug use, promoting healthy relationships and prevention of HIV/STD's and unintentional pregnancies.

# Physical Education 10 (10-12)

Course: 6100 Grade: 10

The content of this course will include studying the importance of exercise for good health; practicing safe training techniques; completing self assessment for cardiovascular fitness, muscular strength, muscular endurance, body composition and flexibility; interpreting assessment results; setting goals for a fitness plan, and writing a personal fitness plan. These concepts of fitness will be reinforced in the following class activities: flag football, softball, soccer, tennis, badminton, basketball, volleyball, wrestling, social dance, team handball & ultimate frisbee.

#### **Elective Courses**

#### Collapse All

#### Outdoor Education I (11-12)

Course: 6110 Grade: 11-12

Prerequisite: Successful completion of Phy Ed 10

This course offers the opportunity to gain experience in fall or spring season outdoor education activities such as bicycling, canoeing, water safety, orienteering, and related outdoor recreational activities that promote physical fitness. The impact of recreational activity on our environment will receive special attention. Class sessions will be held outdoors as well as in the classroom. Field trips will be scheduled during certain units for the practical application of skills and knowledge learned during regular class sessions.

#### Outdoor Education II (11-12)

Course: 6111 Grade: 11-12

#### Prerequisite: Successful completion of Phy Ed 10

This course offers the opportunity to gain experience in winter season outdoor education activities such as Nordic skiing, Alpine skiing, snow caving, winter survival, orienteering, broomball and related outdoor recreational activities that promote physical fitness. The impact of recreational activities on our environment will receive special attention. Class sessions will be held outdoors as well as in the classroom. Field trips will be scheduled during certain units for the practical application of skills and knowledge learned during regular class sessions.

#### Team Sports (11-12)

Course: 6115 Grade: 11-12

#### Prerequisite: Successful completion of Phy Ed 10

This course offers the opportunity to gain further experience in team sports. Class activities may include basketball, volleyball, softball, soccer, flag football, floor hockey, ultimate frisbee, and team handball. Students will work to improve skills and knowledge of strategies in team sports.

#### Individual & Dual Sports (11-12)

Course: 6116 Grade: 11-12

#### Prerequisite: Successful completion of Phy Ed 10

This course offers the opportunity to gain experience in lifetime fitness by incorporating a variety of lifetime activities such as badminton, ice skating, golf, pickle ball, bowling, archery, tennis and recreational games.

#### Cardio, Core & Conditioning (11-12)

Course: 6118 Grade: 11-12

#### Prerequisite: Successful completion of Phy Ed 10

This is an advanced Health/Physical Education course aimed at those students who are motivated to reach a higher level understanding of exercise physiology in the classroom and desire a rigorous physical activity class that will challenge them physically & mentally. The content of the course will include exercise physiology, muscle fitness, nutritional information and will incorporate exercises which promote strength, increase flexibility and improve cardiovascular fitness. Activities will include free weights, jumping rope, jogging, circuit training and aerobic exercise. The student will use various methods to determine body composition, as well as perform a battery of pre-tests and post-tests.

#### Aerobic & Strength Training I (11-12)

Course: 6119 Grade: 11-12

#### Prerequisite: Successful completion of Phy Ed 10

This course is designed for students to improve their overall fitness by utilizing the principles of muscle physiology and proper weight lifting exercises. Students will work to improve their muscular strength, muscular endurance, flexibility, and body composition

#### Aerobic & Strength Training II (11-12)

Course: 6129 Grade: 11-12

#### Prerequisite: Successful completion of Aerobic & Strength I with a C or higher or instructor approval.

This course is designed for students who want to continue to improve their overall fitness level. Students will utilize the knowledge and skills learned in Weight Training I to meet their individual goals. The model used will be the Forest Lake Strength and Conditioning program (weight training and plyometrics are included in this program).

# Science

**College Planning:** Students planning on education beyond high school may need extra science courses as prerequisites for admission to college, NCAA, or vocational programs. Students should contact the program of their choice for specific courses necessary for admission.

# **Courses Shown Below**

Click title to see course description and prerequisites

# Class of 2021

Requirement	Course Options
9th Grade Science	Science 9 A & B (9)
Physical Science (2 classes)	Chemistry A & B (10-12)  OR  Physics A & B (10-12)
Earth & Space Science (1 class)	Earth & Space Science (11-12)
<b>Biology</b> (2 classes) taken in	Biology A & B (11-12)
grades 11 or 12	

# Class of 2022 and beyond

Requirement	Course Options
Physics taken in grade 9	Physics A & B (9-12)
Chemistry (1 class) taken after Physics	Chemistry A (10-12) OR Food Chemistry (10-12)
Biology (2 classes) taken in grades 11 or 12 after Chemistry	Biology A & B (11-12)
Earth & Space Science (1 class)	Earth & Space Science (11-12)
Science Elective (1 class)	Applied Science (9) Environmental Science (11-12) Ecology (10-12) Human Anatomy & Physiology (12) Criminalistics (10-12) MN Forests (10-12) Chemistry B (10-12) Astronomy (10-12) Meterology (10-12)

# Required Courses

Collapse All

# Physics A & B (9-12)

Course: 6905/6906 Grade: 9-12

Prerequisite: Successful completion of Algebra 8B

Physics A and Physics B fulfills the 1.0 credit physical science graduation requirement for the graduation class of 2020

Physics A and Physics B is a required course for the graduating classes of 2022 and beyond.

In Physics A, students will study Newton's laws of motion and investigate motion, energy, and momentum. These investigations will include lab work, models, graphs, and mathematical equations. In Physics B, students will study sound, light, electricity, magnetism and heat through lab activities that drive our discussion and problem solving.

# Chemistry A (10-12)

Course: 6701 Grade: 10-12

Prerequisite: Successful completion of Algebra 9B

Chemistry A fulfills the 0.5 credit physical science graduation requirement for the graduating class of 2022 and beyond.

Chemistry A and Chemistry B fulfills the 1.0 credit physical science graduation requirement for the graduating class of 2020 and 2021.

Chemistry focuses on the interaction of matter and energy in chemical reactions. Concepts include periodic trends, chemical bonding, writing formulas for compounds and reactions, Students will perform experiments individually and collaboratively.

# Biology A & B (11-12)

Course: 6601/6602 Grade: 11-12

Recommendation: Completion of Chemistry or Physics prior to taking this course. Successful completion of these courses will satisfy the one credit in biology required for graduation.

What makes people sick? Why are people alive? What hidden worlds exist beyond people's eyes? Biology A takes students through a journey that investigates these questions as well as the nature of life and living organisms. Students become scientists as they discover organisms that inhabit both visible and invisible spaces. Students will pursue the nature of cells, life's energy, and human body systems. The focus of this course is on problem solving in science through activities and lab investigations. Jeans or Genes? Join Biology B to crack the genetic code. Investigate past, present, and future secrets held in DNA. Heredity, adaptation, genetic engineering, selective breeding and mutation are some of the topics explored in Biology B. Students will learn to apply experimental techniques to discover how DNA and genes operate. Students will also link the structure and function of DNA and genes to evolutionary change and the struggle for existence. Students who received credit for Field and Forensic Biology A/B cannot receive credit for Biology A/B. Students who received credit for Biology A/B cannot receive credit for Field and Forensic Biology A/B.

# Earth & Space Science (11-12)

Course: 6806 Grade: 11-12

In this required course, students will investigate Earth and Space through four major units: space, plate tectonics, geologic time, and climate change. Students will explore star composition and galaxy motion using light evidence, read about Icelandic volcanoes, and evaluate the human interaction with Earth's four spheres (atmosphere, geosphere, biosphere, and hydrosphere). This course is offered in two different formats: traditional or hybrid (both in the classroom and online). Students enroll in the traditional course and are placed in the hybrid section through their dean.









# **Elective Courses**

Collapse All

# **Applied Science**

Course: 6500 Grade: 9

Prerequisite: No other high school science courses have been taken. Students have not met the math requirements for Physics A and B. Students may not self-register for this course, instructor permission is required at the time of registration.

The Applied Science course is designed to build foundational science skills and will address many of the science process and engineering standards. For those approved for the course, this will meet their ½ credit science elective. This course will discuss science method, and students will participate in experimental design, measurement, and data analysis. Topics covered will range from consumer science and energy issues to new research and product design.

# Environmental Science (11-12)

Course: 6605 Grade: 11-12

This is a course that focuses on the complexity of natural and environmental systems. Through the application of the scientific method, students will participate and initiate research projects that examine all aspects of environmental stability. In their research, students will analyze the way humans impact and interact with their natural environments, and learn what is being done to preserve and conserve environmental areas into the future.

# Ecology (10-12)

Course: 6600 Grades: 10-12

Minnesota is a biologically diverse state because we exist at the convergence of three major land biomes and we are home to three different freshwater biomes. In this course, students will study the characteristics of the biomes of the world with special attention being given to the biomes of Minnesota. During the course of this study, students will also learn about classification and claudistics, energy roles in an ecosystem, succession, chemical and biological water testing, and environmental issues facing Minnesota's future.

and Forensic Biology B.

# Human Anatomy & Physiology (12)

Course: 6611 Grade: 12

#### Prerequisite: Successful completion of either Biology A/B or AP Biology A/B/C.

This high life-science course is organized around the core principles of anatomy and physiology, such as homeostasis, chemical interactions, structure and function relationships, and the levels of organization. Modeled around an introductory college-level course, students will use scientific literature, class discussion, case studies, and specimen dissections to understand the details of eight major body systems. This class is a great option for students interested in pursuing a career in health care or a related field.

# Criminalistics (10-12)

Course: 6612 Grades: 10-12

Discover the differences between the Hollywood version CSI and true forensic science. This course is designed to investigate the real-world applications of using science in the analysis of crime scene evidence. Students will study the many jobs of the criminalist and learn how to apply forensic science principles through units focused on processing crime scenes, fingerprints, DNA, handwriting analysis, tool marks, blood and blood spatter, determining time of death, forensic anthropology, and forensic entomology.

## MN Forests (10-12)

Course: 6608 Grades: 10-12

Our diverse forests are one of the most unique characteristics of Minnesota's natural resources. Students in this course will study basic plant biology and taxonomy as it pertains to Minnesota flora. Students will apply this new knowledge to design, set-up, and conduct a long-term inquiry based plant experiment. Students will also study the techniques used for various forestry field skills, positives and negatives of different logging techniques, forest pests and diseases, and spend time looking at the current environmental issues facing the health and future of our Minnesota forests.

# Chemistry B (10-12)

Course: 6702 Grade: 10-12

Prerequisite: Successful completion of Chemistry A.

Chemistry B is an elective credit for the graduating class of 2022 and beyond, and highly recommended for students that wish to attend a 4-year university.

Chemistry A and Chemistry B fulfills the 1.0 credit physical science graduation requirement for the graduating class of 2020 and 2021.

This course is ideal for the student who asks the question: "Why are certain gases poisonous or why do some substances dissolve in water and others don't?" Chemistry focuses on the interaction of matter and energy in chemical reactions. Concepts include, stoichiometry, acids and bases, gases, rates and organic. Students will perform experiments individually and collaboratively. Chemistry B allows for opportunities to complete several inquiry type labs.

# Astronomy (10-12)

Course: 6807 Grade: 10-12

The purpose of this course is to enable students to develop and apply knowledge of the universe and compare the conditions, properties, and motions of bodies in space. Emphasis will be placed on concepts basic to Earth, including materials, processes, scientific laws, history, and phenomena. Astronomy is the scientific study of the contents of the entire Universe. This course will provide the student with a study of the universe and the conditions, properties, and motions of bodies in space. The content includes, but is not limited to, historical astronomy, space exploration, astronomical instruments, the celestial sphere, the solar system, the earth as a system in space, the earth/moon system, the sun as a star, and stars.

# Meterology (10-12)

Course: 6805 Grade: 10-12

Meteorology introduces students to basic weather concepts, instrumentation, and maps. Students will learn about various aspects of weather, including the atmosphere, seasons, severe weather, and much more. Weather data will be collected from instruments used by the students outside and around the school.

# Social Studies

Students are encouraged to take as many elective courses as their schedule allows.

# **Courses Shown Below**

Click title to see course description and prerequisites

# **Graduation Requirements**

Requirement	Course Options
	Geography
9th Grade Social Studies (2 or 3 classes)	AND
	Citizenship & Government
World History (2 classes)	
recommended for 10th or 11th grade	World History A & B
Should be taken before US History	
U.S. History (2 classes)	
recommended for 11th or 12th grade	U.S. History A & B
should be taken after World History	
Economics (1 class)	Economics
	OR
taken in grades in 11 or 12	Agriculture Economics

# **Required Courses**

Collapse All

# Citizenship & Government (9)

Course: 7495 Grade: 9

This course satisfies the ½ credit requirement in Citizenship & Government needed for graduation from Forest Lake Area High School. This course includes the study of civic skills, civic values and principles of democracy, rights and responsibilities, government institutions and political processes, as well as relationships of the United States to other nations and organizations.

# Geography (9)

Course: 7496 Grade: 9

This course satisfies the ½ credit requirement in Geography needed for graduation from Forest Lake Area High School. This course includes the study of geospatial skills and human geography. Human geography units include: Introduction, Population, Cultural, Political, Agricultural, Environmental, Economic, and Urban.

# World History A & B (10-12)

Course: 7022/7023 Grade: 10-12

World History A and B satisfy the 1 credit requirement in World History needed for graduation from Forest Lake Area High School. The courses are chronological in context and are designed to be primarily taken within a given school year. Major units of study in World History A cover a time frame beginning with the earliest record of humanity and ending around 1450 CE. World History B continues from there and concludes with the Post World War II era.

## **Elective Courses**

Collapse All

#### Political Science (10-12)

Course: 7208 Grade: 10-12

This course addresses the following topics: principles and origins of U.S. Government, the Constitution, federalism, political parties, voters and voter behavior, the electoral process, mass media, public opinion, interest groups, Congress, the presidency, the bureaucracy, economic policy, foreign policy, national defense, the courts, civil liberties, civil rights, comparative political and economic systems, and state and local government. Guest speakers include elected officials, members of political parties, and interest group advocates.

# Contemporary Social Issues (11-

12)

Course: 7300 Grade: 11-12

Contemporary Social Issues is a social studies elective course where students study various dynamic issues facing today's society enabling them to discover their values and responsibilities as citizens in that society. Students utilize different learning methods to research, discuss, debate and formulate opinions on controversial topics that students have the opportunity to choose and explore.

# Psychology (10-12)

Course: 7306 Grade: 10-12

Psychology is the scientific study of the behavior and mental processes of humans and animals. The course of study will concentrate on the following areas: introduction to psychology, methods and experimentation, biological influences on behavior, heredity and environment, physiology of the brain, sleep and consciousness, theories of learning and memory, and psychological disorders and their treatment.

# Sociology (10-12)

Course: 7307 Grade: 10-12

Sociology is the scientific study of human interaction and human group behavior in modern societies. This course covers the following concepts which are basic to sociology: (1) the role of the sociologist; (2) the structure and function of society; (3) social processes and institutions; (4) collective and deviant behavior; (5) racial and ethnic relations; (6) communication and propaganda; (7) culture: the product of group experience; and (8) current social issues as related to sociology.

# United States History A & B (11-12)

Course: 7001/7002 Grade: 11-12

Recommended: Passing grade in World History A/B
U.S. History A and B will satisfy the one credit
requirement for U.S. History in order to meet the
graduation requirements. Students complete a two term
study of the history and development of the United
States from the beginning of Native American Indian
discovery through European colonization to the present
day. Major themes of study include the convergence of
cultures from the Americas, Europe and Africa; the
American Revolution; the Civil War; industrialization; the
emergence of modern America, World War I and II; and
the postwar United States to modern day.

## Economics (11-12)

Course: 7201 Grade: 11-12

Economics is the study of how people coordinate their wants and desires, given scarce resources and the decision-making mechanisms, social customs, and political realities of their societies. Students will examine microeconomic components of the economy such as price, competition, business, budgeting, and credit. We will also examine macroeconomic issues related to the ecomony as a whole through employment and labor issues, banking, the role of the government in the economy, and selected topics on global economics.