

WADENA-DEER CREEK HIGH SCHOOL

COURSE CATALOG



2018-2019

- *Course Planning Information*
 - *Graduation Requirements*
 - *College Requirements*
 - *Senior to Sophomore*
(College in the High School)
- *Course Descriptions*

GENERAL INFORMATION ON COURSE PLANNING

Before choosing your classes, you must

1. Know the requirements for graduation.
2. Read the course descriptions carefully and determine if you are eligible to take the course at your grade level and if there is a prerequisite. A prerequisite is a course that must be taken before taking a more advanced course. (Ex: You must successfully complete Metals I before taking Metals II.)

Minimum Requirements for Graduation:

1. You must have satisfactorily completed all the work in grades seven and eight or have the approval of the principal to enroll in the ninth grade. Graduation credit requirements are met through courses taken in grades nine through twelve.
2. Students in the class of 2019 must earn a minimum of 52 credits. Thirty-four of these credits are required and are listed below.

CLASS OF 2019 MINIMUM CORE REQUIREMENTS FOR GRADUATION

GRADE 9

English 9	2 credits
Civics	2 credits
Physical Science	2 credits
P.E./Health	2 credits
Algebra	2 credits

GRADE 10

English 10	2 credits
U.S. History	2 credits
Biology	2 credits
Geometry	2 credits
P.E./Health	2 credits

GRADE 11

World Geography	1 credit
World History	1 credit
English 11	2 credits
Algebra	2 credits
Chemistry or POE (11-12)	2 credits

GRADE 12

Economics	1 credit
Social Studies Elective	1 credit
English Elective	1 credit
English Elective	1 credit
Fine Art/Music (9 - 12)	2 credits

TOTAL REQUIRED CREDITS = 34 credits

In addition to the 34 required credits listed above, a graduating student must also complete a minimum of 18 other elective credits in grades 9-12 for a total of 52 credits.

Note: Students must also take the tests required by MN to graduate.

Choose from the following courses for science 11/12 requirement: Chemistry or Principles Of Engineering (Physics)

Choose from the following courses for two English 12 requirements: Mythology, Real World English, Film Studies, English 1101, English 1205, or Public Speaking 1120

Choose from the following courses for Social Studies Elective requirement: Psychology, Contemporary Affairs, or Sociology

A total of 2 credits in Art and/or Music are required for all students.

6 credits of math are required to graduate, including four credits of Algebra and two credits of Geometry.

To take college courses through M|State, Fergus Falls, students must have a 3.2 G.P.A. as a junior, 2.8 as a senior, and pass an entrance exam.

MINNESOTA STATE UNIVERSITIES HIGH SCHOOL PREPARATION REQUIREMENTS (Minimum Requirements)

English (including composition and literature) **Some colleges do not accept journalism	4 years	8 W-DC credits
Math (2 years of Algebra and 1 year of Geometry)	3 years	6 W-DC credits
Science (including 1 year each of a biological science, a physical science, and an additional science elective-each with a significant lab experience)	3 years	6 W-DC credits
Social Studies (including 1 year each of Civics, U.S. History, and World Geography & History)	3 years	6 W-DC credits
World Language (a single language)	2 years	4 W-DC credits
Specified Elective (visual or performing arts or other world culture study)	1 year	2 W-DC credits

NOTE: University of Minnesota, Twin Cities requires 4 years of math for admissions.
See colleges websites for most up to date information.

Core Units Required for NCAA Certification

Core Area	Division I	Division II
English Core	4 years	3 years
Math Core (Higher than Algebra I)	3 years	2 years
Science Core (Including at least one year of lab science)	2 years	2 years
Additional English, Math, or Science	1 year	3 years
Social Science Core	2 years	2 years
Additional Core (English, Math, Science, Social Science, Foreign Language Computer Science, Comparative Religion/Philosophy)	4 years	4 years
TOTAL CORE UNITS REQUIRED	16	16

**There are also GPA and ACT/SAT requirements for NCAA eligibility along with graduating from high school.

**Courses at W-DC that NCAA does not recognize as CORE classes: Algebra I, Basic Algebra I, Basic Geometry, Basic Algebra II, Fundamentals of Chemistry, Film Studies and Real World English.

**NCAA Division I will require 10 core classes before senior year of high school. 7 of the 10 must be a combination of English, math or science.

“Senior to Sophomore” Program at Wadena-Deer Creek High School

At Wadena-Deer Creek High School eligible juniors and seniors can take up to 29 college credits while never leaving the building. These courses are taught in our building by our staff. At WDC we offer college courses in algebra, biology, English, and calculus. These courses provide students college level rigor and experience. Here is the best part, it costs the students and parents nothing. There are no fees, no tuition bills, and no costly books! The agreement between WDCHS and M|State covers all the expenses. Students who successfully complete the program will save their families over \$5,000.00 in tuition alone! At WDC students can complete their freshman year of college during high school and become a “*Senior to Sophomore*”.

“Senior to Sophomore” courses at WDC include:

- College Writing 1101
- Writing about Literature 1205
- Public Speaking 1120
- General Biology I 1122
- General Biology II 1123
- College Algebra 1114
- Functions/Trigonometry 1115
- Calculus I 1134

There are also many online course options available; students interested should see the school counselor.

“Articulation Agreement” at Wadena-Deer Creek for the following courses:

Central Lakes College – Brainerd/Staples

- Small Gas Engines
- Computer Applications
- Plant Science
- Metals III

An articulation agreement is when a high school course can take the place of a college course at that specific college only.

ART

GENERAL ART

1 CREDIT

GRADES 9-10-11-12

Note: Students must pass this prerequisite class for ALL other art classes.

General Art is a course meant to introduce students to art at the senior high level. Emphasis will be placed on the basic skills and art techniques using a wide variety of media. Visual planning of artistic projects both realistic and abstract are also objectives of a beginning artist. Units include perspective drawing, drawing (pencil, color pencil, ink), basic color wheel and color schemes, design principles of layout, abstract themes, painting and pastels.

DRAWING

1 CREDIT

GRADES 9-10-11-12

Prerequisite - General Art

Using the elements of design (line, form, tone, texture and color), students will develop individual solutions to specific line and shaded drawing problems. The course will include using pencil, charcoal, pastel, colored pencil, marker and ink. Emphasis will be placed on developing an understanding of all forms and media of drawing.

CERAMICS

1 CREDIT

GRADES 10-11-12

Prerequisite - General Art

The art of making, firing and glazing objects made of clay. Students will receive instruction on the potter's wheel, ceramic carving and hand building techniques. Emphasis will be on the construction of the design on both functional and sculptural pieces as well as the application of underglazes and glazes.

PAINTING

1 CREDIT

GRADES 10-11-12

Prerequisite - General Art

This course is an extension of the fundamentals learned in General Art. Each student will receive individualized instruction and will work on various assignments in watercolor, watercolor pencils, acrylics and pastel on paper as well as canvas panels. Subject matter will include Sumi-e painting and styles that range from realistic to abstract. Students will complete a painting that demonstrates their own personal painting style.

SCULPTURE

1 CREDIT

GRADES 10-11-12

Prerequisite - General Art

This course is designed as a means to allow students to express ideas and create images in a three-dimensional form. Students will construct three-dimensional sculptures using materials such as toothpicks, paper, papier-mâché, plaster of Paris, model magic, clay, wire, and recycled objects. Modeling (shaping three-dimensional objects by using a pliable substance) and carving (the process of producing three-dimensional objects by a "taking away" method) will be used.

GRAPHICS DESIGN

1 CREDIT

GRADES 10-11-12

Prerequisite - General Art

In Graphic Design the student will work on producing top quality imagery using the elements and principles of art when presenting artwork as radial balance designs, lettering, positive/negative work, page layout, advertising, process designs and product packaging.

BUSINESS EDUCATION

WHY TAKE BUSINESS COURSES?

You will need basic business skills in your personal life and in any career you choose. Get some of those skills before you graduate. Some of the benefits of enrolling in business courses in high school are:

- Students graduating with business backgrounds will be better prepared as college business majors.
- Students are trained in the use of computers.
- Students are better prepared for personal management of finances.
- Business courses help to integrate all other content areas. You need to use your English, history, math, and most importantly, your critical thinking skills.
- Students are better prepared for small business ownership or for a career in marketing.
- Students develop both job skills and knowledge for higher-paying employment upon graduation.

COMPUTER APPLICATIONS

1 CREDIT

GRADES 9-10-11-12

All students should take this course. Get the experience and preparation you need to be successful in the world of business and computers. Emphasis will be on Microsoft Excel (Spreadsheets), Microsoft Word and Access. Programs such as PowerPoint and Publisher will also be covered.

Students in this course will also have the opportunity to acquire an official Certiport specialist certification in Excel. This certification is Microsoft affiliated and will help set you apart when applying for jobs and scholarships.

CAREER DEVELOPMENT

GRADES 10-11

1 CREDIT

“What are your future plans?” This class will help students determine what career might be right for them and give them the opportunity to investigate it in-depth. Students will use decision-making skills to prepare to seek, obtain, and maintain a job or occupation. Students will also explore budgeting for college. Field trips, guest speakers, Internet, and class discussions will be several of the instructional methods used.

GAME DESIGN

GRADES 9-12

1 CREDIT

Students in game design will learn the basics of game design using a fully online system. Students will learn how to use problem solving skills to create games based on a set program using a drag and drop method of coding. At the year-end students will create their own original game to be debuted to the class or school.

BUSINESS MATH

GRADES 10-11-12

1 CREDIT

This course will help anyone who enters the world of business. Whether you are to become a business owner, employee, or manager. The following topics are taught in order to better prepare you for the world of business: Real world algebra use, probability and statistics, basic accounting principles, payroll computations, banking math, checking account activities, and market analytics.

PERSONAL FINANCE

GRADES 11-12

1 CREDIT

Students in personal finance will learn topics such as checking book management, personal budgeting for real world living, preparation of personal taxes, investing in stocks, bonds and other assets for building wealth. Students will also learn about different types of insurance they will need and how to evaluate their choices for the maximum benefit. In addition, the class will also utilize the stock market game, guest speakers and field trips when appropriate.

ACCOUNTING I

GRADES 10-11-12

2 CREDITS

Every student considering entering into business or owning their own business NEEDS THIS COURSE. Incorrect financial management is the biggest reason new businesses fail. Learn how to properly keep track of your finances and prepare the necessary financial statements needed to succeed. (Balance Sheet, Income Statement, Statement of Equity). Students will learn how to maintain the books of a fictional business through a simulation packet at semester end. After completion, students will have a working knowledge of basic accounting to successfully maintain a business.

BUSINESS LAW

GRADES 10-11-12

1 CREDIT

Business Law will provide students with an understanding of the legal framework of our society. Students will learn topics that include history, development, and classification of laws, personal and business law related to everyday life, contract law, the court system and courtroom procedures, legal terminology, constitutional rights, ethics, technology law, intellectual property, social responsibility, international law and consumer protection. Students will learn the fundamentals necessary to operate a business and structure it so to ensure optimal possible success.

BUSINESS INTERNSHIP (Job Shadowing Experience)

GRADE 11 & 12

1 CREDIT

Through this class students will complete work through career exploration and a job shadowing experience. This program is an out of classroom placement with the approved community/business mentor and school supervisor. Students are encouraged to seek job placement on their own behalf with guidance from the supervising instructor. Student evaluations will be based on teacher/business mentor observations as well as weekly reports.

COMMUNITY SERVICE/LEADERSHIP (Volunteer Experience)

GRADES 11 - 12

1 CREDIT

Community Service will focus on students becoming active citizens in meeting the needs of our school and community through volunteer service. This is an opportunity for students to "make a difference."

Time will be spent helping others in schools, nursing homes, hospitals and charitable organizations. Student evaluations will be based on teacher/community mentor observations as well as weekly reports.

SCHOOL SERVICE (Teacher's Aide)

GRADES 11-12

1 CREDIT

Students work with teachers in an elementary (K-4 or 5-6), junior high (7-8) or senior high setting (9-12). School service student responsibilities may include: working one on one with students; duplicating; correcting papers and filing; bulletin boards; computer work; and other miscellaneous duties as needed.

CEO (Creating Entrepreneurial Opportunities)

2 CREDITS

GRADES 11-12

CEO Class requires a short application, which is available in the school office.

Central Minnesota CEO class is a non-traditional class which provides a hands on, student directed business experience. Students will tour approximately fifty different businesses in Central Minnesota. Relationships are developed with local business people as each student works with an adult business mentor. Students plan and carry out a class event and actually start their own small business. Business protocol becomes second nature. The class is always hosted in a business. Those businesses have been Stern Rubber and McKechnie Tooling in Staples and Homecrest Outdoor Living and Kal's Kars and Motorsports in Wadena.

CEO Class provides a wealth of information for all students, not just those interested in starting businesses. Student evaluations will be based on supervisor/coordinator observations as well as weekly reports and end of the quarter research activities. Check out the centralmnceo.com website for more information.

MARKETING & DISTRIBUTIVE EDUCATION

MARKETING I

GRADE 10-11-12

1 CREDIT

This is a semester class that explores three fundamentals of marketing. Topics include advertising, promotion and sales. Hands on activities will include making magazine ads, radio commercials, video commercials and others. Students will complete the course with a hands on project by marketing their own product/service/company using basic skills and concepts learned through the course.

SPORTS AND ENTERTAINMENT MARKETING

GRADE 11-12

1 CREDITS

Prerequisite – Must have passed Marketing I to enroll in class.

Students will cover specific marketing fields including sports, entertainment, and tourism and hospitality. A variety of group discussions and projects as well as guest speakers will be used throughout the course. Possible field trips to explore marketing of professional and minor league teams depending on availability.

ON THE JOB TRAINING

GRADE 12

2-4 CREDITS

Prerequisite – Must be concurrently enrolled in Career Development or Personal Finance.

On the job training experience at a local business is a major part of this class. Student will be gainfully employed at an approved business learning the skills of sales, marketing, business management, and other work experience. Student will usually receive pay for performing this job successfully.

ENGLISH/LANGUAGE ARTS

ENGLISH 9 GRADE 9

2 CREDITS

This course is required for all freshmen. It is split equally between the study of written and spoken communication skills. One-half of class time will be spent briefly reviewing basic grammar functions and then concentrating on the designated universal problem areas in our English language. Emphasis will be placed on proper sentence structure and grammatical usage in both written and oral situations. Students will learn the writing process and an essay structure during student writing projects. The two types of writing will be narrative and descriptive. The remainder of study will emphasize learning and polishing speaking/listening skills through readings, lectures, and discussions; however, the major thrust will be spent learning to be a more effective speaker by preparing and delivering a number of speeches drawn from the Minnesota State High School League speech categories. The required texts include *Romeo & Juliet* and *To Kill a Mockingbird*.

ENGLISH 10: American Literature GRADE 10

2 CREDITS

Prerequisite: English 9

This course is required for all sophomores. The literary focus is a survey of U.S. literature, studying authors and literary movements from early Native American literature through present day literature. The class will provide students an opportunity to improve and apply the language arts skills necessary for achieving a satisfying life now and as an adult: reading, viewing, writing, speaking, listening, and critical thinking skills. The two types of writing will be expository/informative and persuasive speaking opportunities will include informative and persuasive presentations as well as debate. The required texts include *The Things They Carried* and/or *The Scarlett Letter*, *The Great Gatsby*, and *Of Mice & Men*.

ENGLISH 11: British Literature GRADES 11

2 CREDITS

Prerequisite: English 10

This course is required for all juniors. The literary focus is a survey of British literature, including the major works *MacBeth*, *Animal Farm*, and *Pygmalion*. Key writing projects include creating a short story, analyzing literature, and “i-searching”. Parts of speech and punctuation are reviewed.

ELECTIVES

MYTHOLOGY GRADES 11-12

1 CREDIT

Prerequisite: English 10

Mythology is a class for students who enjoy reading and learning from stories whose ideas are often different from ours. While ancient Greek mythology is the main focus of the course, mythologies of Egypt, China and Norway are included. By reading and discussing the mythology, students will gain insight into how and why those stories have become a part of our modern day lives.

FILM STUDIES

GRADES 11-12

1 CREDIT

Prerequisite: English 10

This course is designed to help students gain an appreciation for the art form that is cinema. Students will learn about everything from camera angles to specific formulaic elements in film. This will all lead to a culminating film project, which is the creation of a screenplay and film. Other units to be covered include camera techniques, film history, movie marketing, genres, and specific actors and directors.

REAL WORLD ENGLISH

GRADES 11-12

1 CREDIT

Prerequisite: English 10

It is for anyone who wishes to improve their general standard of English, be it for enhancing job prospects or simply for personal satisfaction. Students will develop clear speaking and listening skills; increase their vocabulary and workplace English; learn English that will help in their chosen careers; and use grammar that is accurate and clear. Students will delve into the English as applied in the real world. Some projects could be creating your own website, blog or vlog; writing a school newspaper; editing and filming a digital newspaper.

ENGLISH 1101 - COLLEGE WRITING (College Course)

GRADES 11-12

1 HS CREDIT

3 COLLEGE CREDITS

Prerequisite: Entrance by examination.

This is a college level course offered by Wadena-Deer Creek High School through the Concurrent Enrollment Program at Minnesota State Community and Technical College – M|State. To be eligible to take the entrance exam a junior must have a cumulative 3.2 G.P.A. or higher and a senior must have a cumulative 2.8 G.P.A. or higher.

College Writing is an introductory writing course designed to prepare students for later college and career writing. The course focuses on developing fluency through a process approach, with particular emphasis on pre-writing and revision.

Meets MnTC Goal Area 1.

This is an introductory writing course designed to prepare students for later college and career writing. The course focuses on developing fluency through a process approach, with particular emphasis on revision. Students will consider purpose and audience, read and discuss writing and further develop their own writing processes through successive revisions to produce polished drafts. Course work will include an introduction to argumentative writing, writing from academic sources and a short research project.

Recommended Entry Skills

An entering student should be able to read and comprehend introductory college level texts and/or essays and compose sentences and paragraphs that represent coherent thinking using "standard" English.

ENGLISH 1205 – WRITING ABOUT LITERATURE (College Course)
GRADES 11-12

1 HS CREDIT

3 COLLEGE CREDITS

Prerequisite: *Students must pass 1101 with a C or better.*

This is a college level course offered by Wadena-Deer Creek High School through the Concurrent Enrollment Program at Minnesota State Community and Technical College – M|State.

Writing about Literature is the second required English course necessary to complete the Minnesota College competency expectation. This course provides students with additional opportunities to develop fluency through a process approach by continuing work with pre-writing and revision. Students will read critically from a variety of genres as they continue to give attention to organization, syntax, usage, point-of-view, and voice in their essays. Coursework will include argumentative writing and writing from sources.

Meets MnTC Goal Area 1.

- This course builds on the foundations of College Writing and provides students with additional opportunities to develop fluency in their writing through a process approach. Students will read critically from a variety of literary genres, explore meaning through academic research and respond through discussion and writing.

Recommended Entry Skills

- An entering student should be able to write an essay that is acceptable in either the academic or professional world. Students should also be able to read and comprehend college-level texts.

COMM 1120 – INTRODUCTION TO PUBLIC SPEAKING (College Course)
GRADES 11-12

1 HS CREDIT

3 COLLEGE CREDITS

Prerequisite: *Entrance by examination.*

This is a college level course offered by Wadena-Deer Creek High School through the Concurrent Enrollment Program at Minnesota State Community and Technical College – M|State. To be eligible to take the entrance exam a junior must have a cumulative 3.2 G.P.A. or higher and a senior must have a cumulative 2.8 G.P.A. or higher.

This course clarifies the process of oral communication, clarifies the basic principles of public speaking, and allows the student to increase the application of these principles both while speaking and while listening. This course meets MnTC Goal Area 1.

FAMILY AND CONSUMER SCIENCE

CONSUMER FOODS AND NUTRITION GRADES 9-10-11-12

1 CREDIT

NOTE: This is a prerequisite for ALL other Foods classes. Take your cooking skills and knowledge to the next level with Consumer Foods. We will study the essential nutrients and how our health is directly related to our food choices. We will also cover a number of different food preparation techniques, using your culinary skills to create a variety of delicious dishes. This class is very hands-on and you will spend much of the semester working in the foods lab and with groups. Within each unit, we will have several labs where you will apply what you learned in the classroom by preparing nutritious and delicious foods in the lab! Careers in food and nutrition along with skills needed for these careers are examined.

GLOBAL FOODS (formally International Foods) GRADES 9-10-11-12

1 CREDIT

Prerequisite – Consumer Foods.

The focus of this course is to examine how food meets various needs and is a central aspect of any culture. After a review of “basics” needed in Foods instruction – kitchen safety and sanitation, time management and work habits, food preparation terms, etc., students will look at the various needs food provides and various types of food customs. A study of various cultural foods follows, where food customs and choices of various countries are examined and sampled. The course also includes a study of Regional US foods, a brief unit on entertaining, a study of herbs, spices, and seasonings, and some practice in garnishing foods. A short unit on outdoor cooking may be discussed if time allows.

BAKING (formally Gourmet Foods) GRADES 10-11-12

1 CREDIT

Prerequisite – Consumer Foods.

The emphasis of this course is to learn advanced techniques of preparing special and difficult to make foods, food presentation and serving styles. The students will explore the Elements and Principles of Design and how they apply to food presentation. After a review of the “basics” needed in Foods instruction-kitchen safety and sanitation, time management and work habits, food preparation terms, etc., the students will gain cooking knowledge and practical application of Cakes and Cake Decorating, Garnished and Presentation, Buffets: Cheese trays and Hors D’oeuvres, fancy cookies; candies, fruits and vegetables; salads; soups, stews, and sauces; casseroles and combination foods; meat, poultry, and fish; and beverages. The final project will be to prepare a Gourmet Four Course Meal for Guests.

FAMILY LIFE SKILLS AND RELATIONSHIPS GRADES 9-10

1 CREDIT

Family Life Skills and Relationships is an introductory course to Family and Consumer Science. It begins with a study of basic human needs and the importance of belongingness and “family”. An examination of each student’s values and needs and personality / interest inventories. The students will include an analysis of relationships and needs in relationships. Dating relationships, family relationships, engagement and marriage. Students will research the costs and preparations required for a wedding and then will participate in the planning and performance of a “class wedding”. The students will finally explore the study and applications of skill needed for a successful marriage and family relations such as communications, listening skills, and problem solving and conflict resolution skills. They will also look at goal setting, decision-making, stereotyping and family roles and purposes. The students will be actively involved through discussions, activities, projects, a book read related to this subject area and a variety of field trips/speakers related to topics in this course.

FABRIC ARTS (formally Quilting 101)

GRADES 9-10-11-12

1 CREDIT

This course will use the elements and principles of design in selecting appropriate patterns for their textile projects, quilt history, the basic textile construction techniques, use of safety procedures in operating and caring for the construction equipment and apply math, science and communication skills within this area of design. Students will learn the latest techniques to create a quilt of their own. There will be demonstrations, a field trip to quilt shop/machine quilter, lectures and videos, but generally individualized instruction. This course will allow students to long arm machine quilt their own quilt. This will involve loading the quilt on a frame, positioning the top quilt top, batting and backing. They will then use technical skills to guide the quilter along the quilt top.

Students will be required to complete a pillowcase, quilt project, hand stitches and booklet of samples. Students are responsible for the costs of the projects made during this class.

ADVANCED FABRIC ARTS (formally Adv. Quilting)

GRADES 9-10-11-12

1 CREDIT

Prerequisite: Fabric Arts

This would be for the student who has completed Creative Design. Students would be able to make more advanced quilt design. Much of this class will be self-directed once the student has chosen their fabric and pattern. This course will allow students to long arm machine quilt their own quilt. This will involve loading the quilt on a frame, positioning the top quilt top, batting and backing. They will then use technical skills to guide the quilter along the quilt top.

The student is responsible for all the costs for the projects made during this class.

APPAREL AND INTERIOR DESIGN

GRADES 11-12

1 CREDIT

This semester-long course will be divided into two areas of design-fashion and apparel. The elements and principles of design will be covered before either area is explored, as these are central in both areas.

In Fashion Design, students will explore the elements and principles of design in clothing, the history of fashion, marketing and buying clothing items, careers in fashion design and marketing. Field trips and/or guest speakers involved in fashion careers will be part of the course.

In the Interior Design portion of the course, students will examine the elements and principles of design for interior design; styles and “looks” in interior design; information about window treatments, furniture, wall treatments; and careers in interior design. Budgeting for interior design purchases will also be discussed. Field trips and guest speakers in the area of interior design will be part of the course when possible

CHILD AND HUMAN DEVELOPMENT

GRADES 10-11-12

1 CREDIT

Although not everyone plans on raising a family, we all interact with child sometimes in our lives. This course focuses on making informed decisions that improve individual, family and community health. Parenting responsibilities, conception, pregnancy, prenatal care, birth, child growth and development from infancy to age 12 as well as parenting skills with research based information. Students will analyze and identify ways to meet the physical, emotional, mental and social needs of a child. Methods of discipline and guidance will be analyzed. Instructional resources include speakers, demonstrations, videos; practical experiences to local child care settings and the “Baby Think It Over”-a baby simulator. Students will have opportunities for field trips within the community such as the local birthing center and various child care settings in the community.

EARLY CHILDHOOD EDUCATION (formally CHILD PSYCHOLOGY)

GRADES 10-11-12

1 CREDIT

Prerequisite: Child and Human Development

This advanced course is designed for students with a career interest in early childhood, elementary or secondary education or working with children and families. Topics of discussion include developmental theories, preschool programs, families in crisis, health and safety for children, discipline, and teaching techniques, communication skills, and problem solving. Learning will occur through readings, hands on experiences, lectures, field trips, guest speakers, videos, observations in a variety of education settings-early childhood and elementary sites, job shadowing experience, and preschool laboratory opportunity.

DESIGNING AND BUSINESS PRODUCTION

GRADES 11-12

1 CREDIT

Prerequisite: Must get instructor approval and completed Fabric Arts and Adv. Fabric Arts

This is an independent course for those students who wish to look at starting their own business must relate to Family and Consumer Science Skills or related occupations. The students will develop a business plan. They will develop an operating plan and organizational structure to initiate their business. The students are to assume they are presenting/pitching their business plan to potential investors with the objective of securing financing for their business venture.

INDUSTRIAL EDUCATION

GENERAL WOODWORKING GRADES 9-10-11-12

1 CREDIT

General Woods is a beginning woodworking class designed to give students a general knowledge of woodworking. Many small projects will be built to give students a working knowledge of all the machines in the woodshop.

WOODWORKING I GRADES 9-10-11-12

1 CREDIT

Prerequisite – General Woodworking.

Woods I is a machine woodworking class using all the machines in the woodshop. A required project will take up most of the time. The rest of the quarter will be used for student-designed projects.

ADVANCED WOODWORKING GRADES 10-11-12

2 CREDITS

Prerequisite - Sequence up to and including Woods I with at least a "C" for a grade.

A semester class where students will advance the skills learned in Woods I by building larger projects. Suggested projects will be a gun cabinet or grandfather clock although it may be modified to make a hutch, bookcase, wardrobe, etc. Students will be financially responsible for project materials.

CONSTRUCTION GRADES 10-11-12

4 CREDITS

Prerequisite – Woods Course and Teacher Recommendation. Construction is a practical course for all people wishing to maintain their own home or for those thinking about entering the construction field. In addition to studying construction techniques, students will work with a partner to build a model home that covers all the aspects of planning and building a home.

METALS I TECHNOLOGY GRADES 9-10-11-12

1 CREDIT

Metals I is a basic study of metal working processes that can be used around the home or on the job. Processes will be studied, demonstrated and then applied in learning activities.

Units to be explored: Arc Welding, Gas Welding, Sheet Metal, Thread Cutting, Soldering, Heat Treating, Hacksaws, Chisels, Machining, Finishing Metal.

METALS II TECHNOLOGY GRADES 9-10-11-12

1 CREDIT

Prerequisite - Metals I.

Metals II builds and refines skills learned in Metals I and moves into the machine shop area. Units to be expanded: Sand Casting, Lathe, Milling Machine, Shaper, Mass Production, and Sheet Metal.

Activities: Tool Box, Punch Set, Parallel Clamp, Monster Maul, Ice Fishing Equipment, Cooler, and Pop Cooler.

SMALL GAS ENGINES

GRADES 9-10-11-12

1 CREDIT

Small Gas Engines is a hands-on class that allows students to develop skills that can be used at home or on the job. The activities consist of one-half shop work and one-half related study. Shop-work will consist of disassembly, reconditioning, and assembly of a small gas engine. Student will also troubleshoot and tune-up engines. The diesel, gas turbine, rotary, jet and auto engines will also be explored.

This class articulates to Central Lakes College, Brainerd/Staples.

AGRICULTURE ENGINEERING AND TRANSPORTATION TECHNOLOGY

GRADES 9-10-11-12

1 CREDIT

Transportation Tech. and Ag. Engineering is an exploratory course emphasizing hands on activities. Students will design and construct projects related to agriculture, transportation and power. Activities include building the following: Metric Dragster, Mouse Trap Vehicle, Diesel Engines, Fluid Power, Transmissions, Toothpick Bridge, Paper Tower, Rubber powered vehicles and model airplanes.

INTRODUCTION TO ENGINEERING DESIGN (IED) PLTW

GRADES 9-12

2 CREDITS

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work. Hands on activities include creating of a Puzzle Cube, 3D solids modeling and production of toy car parts, and student developed product design, development, and testing in cooperation with students from other states. After successful completion of the End of the year Assessment (EoA), student can earn up to 3 college credits transferrable to many local and national universities. Local cooperating universities include U of M Twin Cities, Saint Cloud State, Minnesota State Univ. Mankato, NDSU, UND.

PRINCIPLES OF ENGINEERING/PHYSICS (POE) PLTW

GRADES 11-12

2 CREDITS

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Hands on activities include extensive work with VEX robotics, bridge and truss construction, and model making. After successful completion of the End of the year Assessment (EoA), student can earn up to 3 college credits transferrable to many local and national universities.

CIVIL ENGINEERING AND ARCHITECTURE (CEA) PLTW

GRADES 11-12

2 CREDITS

Prerequisite - IED or POE

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software. Students must complete either IED or POE to be eligible for enrollment. After successful completion of the End of the year Assessment (EoA), student can earn up to 3 college credits transferrable to many local and national universities. Local cooperating universities include U of M Twin Cities, Saint Cloud State, Minnesota State Univ. Mankato, NDSU, UND.

ENGINEERING DESIGN AND DEVELOPMENT (EDD) PLTW **GRADES 11-12**

2 CREDITS

In this capstone course, the knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.

DIGITAL MEDIA (Computer based in lab setting) **GRADES 10-11-12**

1 CREDIT

This hands-on course allows students the opportunity to exercise their creativity with still images with current technological tools. Students will be shown multiple ways to capture and modify images combining the art of photography with current digital enhancement tools. Students may be charged a small material fee for color printing of personal projects.

INTRODUCTION TO AGRICULTURE **GRADES 9-10-11-12**

1 CREDIT

This course incorporates three previous Ag. Classes: Food & Fiber, Plant & Horticultural Science, and Animal/Companion Animal Science. This course is strongly suggested for membership in the FFA.

Students will explore concepts concerning the food and fiber system. Class will accommodate to the students interests and abilities. Plant Science, Animal Science, Mechanics, Technology, Leadership, Agricultural Business, and the FFA will be major topics. This course will also investigate scientific concepts related to the biology of animals. Specific topics will include: biological systems, anatomy, nutrition, genetics, reproduction, selection, care and management, and evaluation. Applications to current issues and community will also be presented. Growth, reproduction, propagation and production of agricultural and horticultural plants will be a major emphasis of this class.

PLANT AND HORTICULTURAL SCIENCES **GRADES 9 – 12**

1 CREDIT

Prerequisite - None.

Growth, reproduction, propagation and production of agricultural and horticultural plants will be the major emphasis of this class.

For Whom Intended: All students with an interest in agriculture and horticulture.

EXPECTED LEARNER OUTCOMES

Upon completing this class a student will:

1. Understand the growth and reproduction of plants.
2. Develop a basic understanding of soils and their management.
3. Develop skill in the identification of weeds, horticultural plants and agricultural crops.
4. Develop an understanding of pesticides and plant control chemicals.
5. Develop principles of landscape and floral design.

ANIMAL/COMPANION ANIMAL SCIENCE

GRADES 9 – 12

1 CREDIT

Prerequisite – None.

This course will investigate scientific concepts related to the biology of animals. Specific topics will include: biological systems, anatomy, nutrition, genetics, reproduction, selection, care and management, and evaluation. Applications to current issues and community will also be presented. This course is accepted as science credit at the University of Minnesota.

EXPECTED LEARNER OUTCOMES

Upon completing this class a student will:

1. Develop an understanding of the factors that influence animal health.
2. Develop knowledge of disease organisms and how they can be controlled.
3. Gain an understanding of the importance of sanitation in maintaining animal health.
4. Expose the student to federal regulations pertaining to animal health.

SUPERVISED AGRICULTURAL EXPERIENCE

GRADES 10-11-12

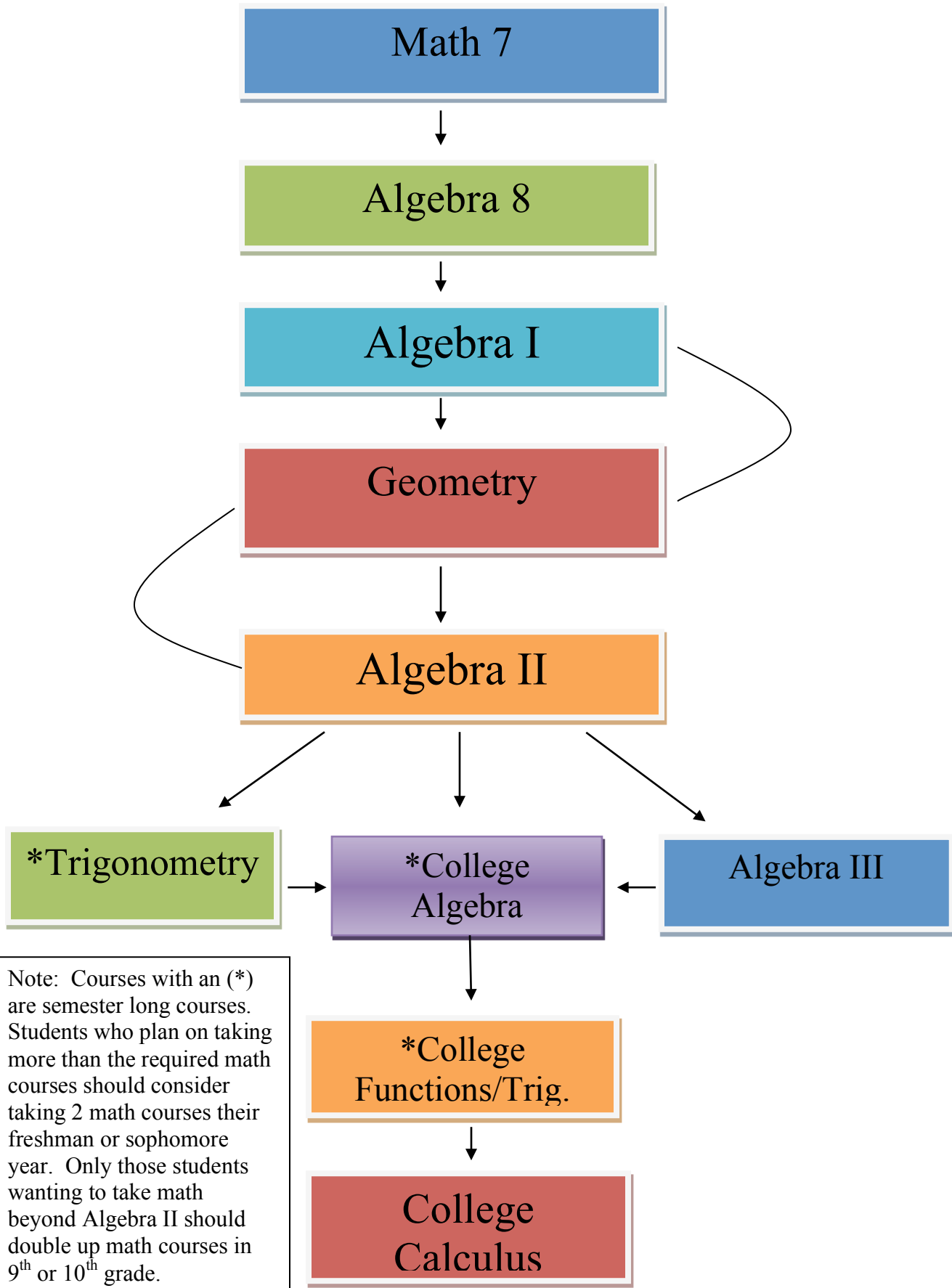
1 CREDIT

Prerequisite – Membership in the FFA and Instructor's Permission

This course is intended for FFA members who request credit for off or on-farm placement. Completion of SAE records, the Minnesota State Degree, and regional interviews are required for completion of this course.

For Whom Intended: FFA members in pursuit of the Minnesota State and American Degrees.

Flow Chart for Mathematics



Note: Courses with an (*) are semester long courses. Students who plan on taking more than the required math courses should consider taking 2 math courses their freshman or sophomore year. Only those students wanting to take math beyond Algebra II should double up math courses in 9th or 10th grade.

MATHEMATICS

The Minnesota Academic Standards in Mathematics are organized into five general strands:

- 1) Mathematical Reasoning
- 2) Number Sense, Computation, and Operations
- 3) Patterns, Functions, and Algebra
- 4) Data Analysis, Statistics, and Probability
- 5) Spatial Sense, Geometry, and Measurement

All of the above standards are embedded in the seventh and eighth grade mathematics classes taught at WDC. The standards are also embedded in grades 9-12 in the following math classes: Algebra I, Algebra II, and Geometry.

ALGEBRA I

GRADES 9-10-11-12

2 CREDITS

Algebra I is a continuation of the linear concepts introduced in Math8/Algebra. Quadratics will be introduced in this course which will include graphing and solving techniques and applications therein. Polynomials, Exponents, Factoring, Exponential Functions, Radical Functions and rational functions and equations will be worked on as well. The Pythagorean Theorem and the Distance formula will be used in real world applications. Statistics, Data Analysis and Probability are also included in this course. Exponential growth and decay models will be introduced along with right triangle trigonometric ratios as time allows.

GEOMETRY

GRADES 9-10-11-12

2 CREDITS

Prerequisite - Algebra I.

Geometry is a student's first and possibly only exposure to a true system of logic within high school math courses. The process of inductive reasoning is the first concept taught to the students taking this course and it is this process that students will use throughout the course to make geometric discoveries. Time will also be spent creating definitions of geometric terms, constructing geometric figures, and learning deductive reasoning for the task of writing proofs.

ALGEBRA II

GRADES 10-11-12

2 CREDITS

Prerequisite-Algebra I and Geometry (although Geometry and Algebra II may be taken simultaneously for students who wish to take more math courses in the future, i.e. Calculus)

This course builds upon the concepts previously learned in both Math8/Algebra and Algebra I. The study of polynomial operations will be revisited, including factoring. Simplifying radical expressions and the study of complex numbers will be included in this course as well. An in depth study of polynomial functions including the Remainder and Factor Theorems and the Rational Zero Theorem will be part of this course. The exponential and logarithmic families will be worked on extensively along with their applications. Probability and Statistics will also be studied more closely including permutations and combinations, simulations, and sequences and series. Lastly, the study of right triangle trigonometry will be explored including the study of oblique triangles and the Laws of Sine and Cosine.

ALGEBRA III
GRADES 11-12

2 CREDITS

Prerequisite-Algebra I, Algebra II and Geometry

In this course, students will be introduced to Matrices. Students will learn how to perform matrix operations as well as use Matrices to conduct transformations of geometric figures, solve systems of equations, find inverses and more. A unit on Conic Sections including circles, parabolas, ellipses, and hyperbolas will be introduced. Students will study the equations and graphs of each conic section; they will be able to graph all 4 by hand and on the TI-Nspire graphing calculator. Probability and Statistics will also be studied more closely including permutations and combinations, simulations, and sequences and series. Lastly, the study of trigonometry will be explored including the study of oblique triangles and the Laws of Sine and Cosine. Trigonometric graphs and inverses will also be included in this course.

TRIGONOMETRY
GRADES 11-12

1 CREDIT

Prerequisites-Algebra II and Geometry (This is a semester course.)

The purpose of this course is to extend mathematical opportunities to students who wish to continue their study of mathematics, but possibly are not ready or pursuing the rigor of a college course.

Students will learn how to use right triangle trigonometry to solve real-world applications. Students will also incorporate the law of sines and cosines for oblique triangle applications. The study of the unit circle will be central to the development of the fundamentals of trigonometry. Time permitting; students will study the topics of sequences and series, statistics, and probability.

COLLEGE ALGEBRA (MATH 1114)
GRADES 11-12

1 CREDIT

4 COLLEGE CREDITS

1 WDC AND 4 COLLEGE CREDITS THROUGH MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE-FERGUS FALLS (This is a semester course.)

Prerequisite-Algebra II & Geometry– Successful completion of college entrance exam. A student must have a cumulative G.P.A. of 3.2 as a junior or 2.8 as a senior to take the exam.

College Algebra is designed to give the student bound for college, university, or technical college an extensive study of high-level mathematics in an atmosphere similar to that of a post-high school course. The course will include the study of rational and polynomial functions, exponential and logarithmic functions, inverse functions, quadratic equations, inequalities, matrices, progressions, complex numbers, theory of equations and variations, and linear equations in one, two or three unknowns.

FUNCTIONS/TRIGONOMETRY (MATH 1115)
GRADES 11-12

1 CREDIT

4 COLLEGE CREDITS

1 WDC AND 4 COLLEGE CREDITS THROUGH MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE-FERGUS FALLS (This is a semester course.)

Prerequisite: College Algebra (Math 1114) or successful completion of college entrance exam. A student must have a cumulative G.P.A. of 3.2 as a junior or 2.8 as a senior to take the exam.

Pre-Calculus is designed to give the student bound for college, university, or technical college an extensive study of high-level mathematics in an atmosphere similar to that of a post-high school course. Students will use trigonometric functions, right triangle trigonometry, radian measure and circular functions, identities, equations, inverse functions, oblique triangles, complex numbers, vectors and polar coordinates. Included will be a study of the Conic sections and time permitting, and introduction to limits and sequences.

CALCULUS I (MATH 1134)
GRADE 12

2 CREDITS

5 COLLEGE CREDITS

1 WDC AND 5 COLLEGE CREDITS THROUGH MINNESOTA STATE COMMUNITY AND TECHNICAL COLLEGE-FERGUS FALLS (This is a year long course.)

Prerequisite: Functions/Trig (Math 1115) or successful completion of college entrance exam. A student must have a cumulative G.P.A. of 3.2 as a junior or 2.8 as a senior to take the exam.

Calculus I is geared for the college bound student. This course includes limits and continuity, derivatives, definite and indefinite integrals of algebraic, trigonometric, exponential and logarithmic functions, and applications of the derivative and definite integral.

Two principle concepts form the nucleus of calculus: these are the derivative and the integral. The derivative can be thought of as a rate of change. We may use the derivative to find such things as the velocity of the rocket or the maximum values of a function. The integral may be used to find the area generated under the curve, or to calculate volumes, centers of gravity and lengths of curves.

MUSIC

CONCERT BAND Grades 9-12

2 CREDITS

In order to be a member of the concert band, you must have prior approval from the band director if you have not been in band the previous year. *Students moving into to the district who wish to participate in the band program must have been currently active in the band program in their district and do must do a playing assessment prior to participating in band.* Concert band is a full year class. Concert Band meets daily and strives to improve and advance the individual musical skills through participation and performance in a large ensemble. Students need to exhibit self-discipline and maturity as musicians. Members will continue to develop and master musical concepts such as pitch, tone control, balance, expression, style, blend and basic music theory. In addition to large group classroom experience, members will have the opportunity to perform in various musically settings, such as collegiate honor bands, MMEA/MBDA sponsored honor bands, MSHSL large group/solo/ensemble contests, jazz band, and pep band. 10th & 11th grade will have the opportunity to audition for All-State Band. Attendance is required for any public concerts, homecoming, band clinic, MSHSL Band Contest, Commencement, and Memorial Day Services. Members are expected to participate in pep band events. ****Band members must be in band program the entire academic year prior to any band trip.**

CONCERT CHOIR GRADES 9-12

2 CREDITS

The Wadena-Deer Creek High School Concert Choir represents the most advanced music students in grades 9-12, through an audition process. Selected on the basis of vocal maturity, capability and choral experience, students with a sincere interest in singing and dedication to quality are encouraged to audition. Study of choral skills will continue as music selections ranging from Early Sacred to present-day Contemporary styles will be studied and performed. The Concert Choir will represent WDCHS in MSHSL sponsored music contests, performance tours, exchange concerts and field trips, schedule permitting. Winter, Spring and "Pops" concerts are also part of Concert Choir's school year agenda. Attendance at performances is expected for every student because these performances are a central aspect of the course. Absences must be cleared prior to the performance through the director by the parents or guardians. An unexcused absence will result in a reduced grade for the current grade period. Continued enrollment in choir will be at the discretion of the director by using various singing assessments. Audition schedules will be determined following pre-registration.

****Choir members must be in choir the entire academic year prior to any choir trip.**

CONCERT BAND/CONCERT CHOIR GRADES 9-12

2 CREDITS

This is an option for those students who wish to be part of both Concert Band and Concert Choir. Each class meets every other day.

For class description see individual ensemble category.

GUITAR GRADES 9-12

1 CREDIT

This classroom setting for guitar is designed for the **beginning** guitar student. Students will learn different strumming techniques as well as solo and small ensemble guitar playing. Fundamentals of music will be included in the course such as note reading, rhythm, melody and harmony. Students will have performance opportunities within the classroom.

PHYSICAL EDUCATION AND HEALTH

PHYSICAL EDUCATION GRADE 9

1 CREDIT

Activities offered include: tennis, softball, volleyball, basketball, badminton, broomball, floor tennis, pickle ball, flag football, soccer and recreational games. The focus of the class is also based in cardiovascular fitness and strength training. This class will use the walking/running track extensively, as well as give students exposure to WDC's 28 ft. climbing wall.

PHYSICAL EDUCATION GRADE 10

1 CREDIT

PE 10 builds on cardiovascular fitness and strength training knowledge and skill acquired in PE 9. The focus of the class remains based in cardiovascular fitness and strength training. Advanced skills in tennis, softball, volleyball, basketball, badminton, broomball, floor tennis, flag football, soccer and recreational games are expected from students. This class will use the walking/running track extensively, as well as give students more exposure to WDC's 28 ft. climbing wall.

HEALTH EDUCATION GRADE 9

1 CREDIT

Health education is the study of the five components of health and how they affect your life. The five components include physical, social, mental, emotional and spiritual health. The topics covered are based in these five components and include topics such as wellness, self-esteem, physical fitness, disease, personal care, drug use/abuse, and nutrition, weight management, eating disorders, alcohol and tobacco, relationships, STI's and AIDS. Students are required to keep a health journal throughout the semester.

Evaluation is based on tests, quizzes, written assignments, individual and group projects, class participation in activities and discussion.

HEALTH EDUCATION GRADE 10

1 CREDIT

Health 10 is a continuation of the study of the five components of health. The five components include physical, social, mental, emotional and spiritual health. The topics covered are based in these five components and include topics such as decision making, stress management, emotional and mental health, suicide prevention, marriage-parenthood-families, consumer health. First Aid and CPR are emphasized. Organ donation, meth use, and other current health topics will be covered. Students also work through the "Class Action" curriculum which addresses civil liability associated with alcohol use as related to DWI, violence, vandalism, date rape, and other alcohol related situations. Students are required to keep a health journal throughout the semester. Students also complete and fulfill a wellness contract to change one basic health habit during the semester.

Evaluation is based on tests, quizzes, written assignments, individual and group projects, class participation in activities and discussion.

ADVANCED PE
GRADES 11-12

1 CREDIT

Advanced PE is for students who have a desire to attain a high level of fitness. This class will be physically challenging. Your pulse rate will be high and you will sweat. Activities include Advanced Weight training, Pilates, P90X, Step Aerobics, Distance Running, Flexibility, and Strength Bar Routines. Other activities that may be included are use of WDC's 28 ft. climbing wall and curling. This class is for students who are serious about fitness.

Evaluation will be based on student participation, fitness knowledge, and fitness testing results.

LIFETIME FITNESS
GRADES 11-12

1 CREDIT

Lifetime Fitness will explore fitness activities that can be done over a lifetime. This class may not be as physically demanding as Advanced PE. It will require an understanding that most lifetime fitness activities are individual/partner based activities. Very few team activities will be done in this class. Activities include weight training, speed walking, distance running, biking, in-line skating, rock wall climbing, curling*, golf, tennis, bocce ball, bowling*, disc golf, and softball.

*Bowling/curling will require a fee.

Evaluation will be based on student participation and activity knowledge.

W.I.N. (What's Important Now)
GRADES 9-10-11-12

1 CREDIT

This class will combine weight training principles while focusing on speed and strength to enhance athletic performance. A high degree of fitness will be achieved through high intensity anaerobic and aerobic exercises, weight training, plyometrics, agility and flexibility. This class is for students that are WDC athletic participants.

REACH

REACH
GRADE 9-12

2 CREDITS

REACH stands for Responsibility, Education, Accountability, Character, and Hard Work. REACH class is a positive structured learning environment, a safe place for students to belong, connect, and support each other. Students will set weekly goals for themselves in the areas of personal, academic, and family. The curriculum is guided by the needs of the students and may cover topics such as communication skills, social skills, problem-solving, self-image, drug/chemical awareness, healthy relationships, etc. If you are a student that is interested in improving yourself and learning some healthy strategies for life, REACH is a class that can help you do that.

If you are interested in this class, speak with Mrs. Kiser, Mr. Church or Mrs. Kraska.

SCIENCE

PHYSICAL SCIENCE

GRADE 9

2 CREDITS

This course will study the physical world and investigations in physics and chemistry. It will include an experimental approach to understanding how things work.

BIOLOGY

GRADE 10

2 CREDITS

Prerequisite: Student must have passed 9th grade physical science or take physical science and biology simultaneously.

This course represents an introduction to basic concepts of biological science. The basic concepts taught are directed to ten unifying themes of modern biology. Those ten unifying themes are listed in the Expected Learner Outcomes.

The basic concepts and unifying themes are learned through study and investigation of units of selected topics including origin, evolution and diversity of living things, relationship of photosynthesis and respiration to life processes, energy and life, reproduction and development, heredity, human biology and ecology.

This course is structured to emphasize problem solving and inquiry by the student. Laboratory exercises and activities are utilized as a framework for student inquiry and problem solving. Scientific problem-solving skills are developed and learned through the laboratory experiences.

Skills to be taught: the problem solving skills are conceptual and are demonstrated and manifested by the student showing understanding of the ten unifying themes through laboratory reports, tests, and assigned projects.

CHEMISTRY

GRADES 11-12

2 CREDITS

Prerequisite – Must have passed 9th grade Physical Science

Chemistry deals with the development of Chemistry as a science. Student will learn not only about Chemistry but also about how scientific information is obtained and how models and theories are developed. Students will be expected to use scientific calculators while solving word problems – using basic formulas and Algebra as an aid in the study of these models and theories. Course includes a final exam.

HUMAN ANATOMY AND PHYSIOLOGY I

GRADES 11-12

1 CREDIT

This course will investigate how the human body functions. Techniques of studying the human body will be demonstrated by use of various instruments. Topics to be studied: the structure and systems of the human body. Primarily, integumentary, skeletal, muscle, and nerve systems.

HUMAN ANATOMY AND PHYSIOLOGY II

GRADES 11-12

1 CREDIT

This course will investigate how the human body functions. Techniques of studying the human body will be demonstrated by use of various instruments. Topics to be studied: the structure and systems of the human body. Primarily, integumentary, skeletal, muscle and nerve systems.

INTRODUCTION TO ENVIRONMENTAL SCIENCE

GRADES 11-12

2 CREDITS

Suggested Course Preparation/Critical Skills:

Successful completion of Biology and the ability to work effectively in science laboratories and class discussions.

Course Description:

Environmental Science has evolved as an interdisciplinary study that seeks to describe problems caused by our use of the natural world. In addition, it seeks some of the remedies for these problems. First, it is important to understand the natural processes (both physical and biological) that operate in the world. Second, it is important to appreciate the role technology plays in our society. Third, the complex social processes that are characteristic of human population must be understood and integrated with knowledge of technology to fully appreciate the role of humans in the natural world.

This course introduces students to environmental concepts and issues from an interdisciplinary approach. Environmental issues and controversies will be explored from ecological, biological, social, economic, ethical and governmental policy positions. The students will gain an understanding of the basic scientific method, tools and techniques needed to understand and analyze environmental issues such as populations growth, resource depletion, industrial and municipal pollution (air, water and trash), global warming and ozone depletion. Students will be required to complete a project dealing with a current environmental issue.

Learning Methods:

Laboratory investigations, lectures, class and group discussions, hands-on activities, reports, library and internet searches, and tests.

ENVIRONMENTAL SCIENCE II

GRADE 12

2 CREDITS

Prerequisite: Introduction to Environmental Science

Course Description:

Environmental Science II is a curriculum that is designed to advance students in their knowledge of major ecological concepts and the environmental problems that affect the world in which we live. There is an urgent need for environmental education. This program provides one way in which students can become aware of the interactions of people and their environment. The curriculum focuses on concepts that are real-life issues. It promotes awareness and understanding of practical everyday problems that affect their lives. It also relates important environmental issues to the lives of the students and their families. Students will survey components of ecosystems, including energy flow and the structure and dynamics of populations and communities. Students review the processes that affect natural environments, examine the impact of human activities on ecosystems, and discuss current environmental issues.

BIOLOGY 1122 (College Course)
GRADES 11-12

1 HS CREDIT
4 COLLEGE CREDITS

Prerequisite: successful completion of college entrance exam. A student must have a cumulative G.P.A. of 3.2 as a junior or 2.8 as a senior to take the exam.

This course is a study of the cellular organization of an organism, its physiology and its genetics. The emphasis on cellular study includes its basic organization, metabolic activities (cellular respiration and photosynthesis), reproduction and heredity. Students will also study organic evolution and ecological interactions. Lab work will include outdoor activities, microscopic work, molecular genetics and genetics principles. The first semester in a 2-course sequence of general biology.

BIOLOGY 1123 (College Course)
GRADES 11-12

1 HS CREDIT
4 COLLEGE CREDITS

Prerequisite: successful completion of college entrance exam. A student must have a cumulative G.P.A. of 3.2 as a junior or 2.8 as a senior to take the exam.

Course Description: A study of the entire animal organism with special emphasis on systems and requirements for life. The emphasis is comparing animal systems. A study of plants examining transport, reproduction and growth. Lab work will include animal dissection and comparative anatomy and physiology. Plant lab work will involve plant systems.

PRINCIPLES OF BIOMEDICAL SCIENCE (Forensics)
GRADES 9-12

2 CREDITS

In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

AVIATION
GRADES 9-12

2 CREDITS

The course will provide the foundation for advanced exploration in the areas of flying, aerospace engineering, and unmanned aircraft systems. Students will learn about the engineering process, problem solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will also learn about the wide variety of exciting and rewarding careers available to them. The course will inspire students to consider aviation and aerospace careers while laying the foundation for continued study in grades 10 through 12 and beyond.

SOCIAL STUDIES

CIVICS

GRADE 9

2 CREDITS

This is a general social studies course that covers the political, social and economic aspect of our life. The purpose of the class is to increase the students' awareness of the forces and institutions that affect their life.

The content of the course will include: National, State and Local Government Studies; Urban Problems; Criminal Justice and Law; Individual Rights; Foreign and Domestic Affairs; Economics; and Career Studies.

The students will be required to read assignments from the textbook and handout materials, take notes, work in small group settings, carry out simulation activities, listen to AV materials, hand in written assignments and worksheets, and discuss current events. The students will write one major research paper during the class.

U.S. HISTORY

GRADE 10

2 CREDITS

This is a course in American History specifically designed to cover United States History from Reconstruction to the present time. The purpose of the course is to increase each student's basic knowledge of our country's history and to develop a pride in our country's past.

The study of U.S. History helps students understand the democratic traditions of the United States and how these traditions were established and how they continue in the present. U.S. History also helps students understand that the United States is a nation built on ordinary and extraordinary individuals united in an on-going quest for liberty, freedom, justice, and opportunity. It helps students understand how much courage and sacrifice it has taken to win and keep liberty and justice.

The following skills will be developed by making assignments which will include student reports, completing worksheets, listening to lectures, listening to guest speakers, doing independent study, using the media and note taking: research skills, concentrations skills, note taking, memorization skills, reasoning skills, and writing skills.

WORLD GEOGRAPHY 11

GRADE 11

1 CREDIT

World Geography 11 is an 11th grade Social Studies course designed to cover world geography. Students will learn about seven regions of the world. In each regional unit, students will learn about the region's geography, history, traditions, economics, daily life, literature, and arts. In addition, the role the region plays in the world today will be examined and discussed.

WORLD HISTORY 11

GRADE 11

1 CREDIT

World History 11 is the second part of the 11th grade Social Studies course. This class emphasizes the history of Western Civilization. In the units of study, students will learn about: The Beginnings of Civilization, Growth of Civilizations, World in Transition, Age of Exploration and Expansion, World from Absolutism to Revolution, Industrialization and Nationalism, World Wars in the Twentieth Century, and the World Since 1945.

PSYCHOLOGY
GRADES 11-12

1 CREDIT

Psychology will be a study of what psychologists of the 20th century have discovered pertaining to human development, mental processes, behavior and social interaction. Some of the topics to be studied include: Psychology as a science, The Brain and Behavior, Perception, Learning Theories, Sleep and Dreams, Motivation and Emotion, Personality Theories, Assessment of Personality, Delinquent Behavior, Attitudes and Social Interaction.

CONTEMPORARY AFFAIRS
GRADES 11-12

1 CREDIT

Contemporary Issues is a course designed for eleventh and twelfth grade high school students. The course is concerned with the issues of our time. The purpose of the course is to provide students with an opportunity to study and become aware of various social problem areas. The major units to be considered are: The Economy, Poverty, Physical and Mental Health, Chemical Dependency, Nuclear Armament, and Crime. Other units to be considered if time permits include Prejudice, Discrimination, Family Stress, and Aging.

SOCIOLOGY
GRADES 11-12

1 CREDIT

Sociology is a basic course dealing with human relationships. Students in this course will have an opportunity to study units such as: What Is Sociology? The Nature of Culture, Conformity and Deviance, Roles, Relationships, and Groups, Social Stratification, The Family, Religion and Education, Government and Economic Systems, and the Socialization Process.

Skills to be taught are: students will learn to examine the ways people interact with one another, students will develop an appreciation for other cultures and an understanding of behavior unlike their own, students will be able to determine essential needs of society and how those needs are fulfilled by society, students will determine their own goals and make plans involving their future.

ECONOMICS
GRADE 12

1 CREDIT

Economics course is designed to help our students make informed decisions for themselves and assess the decisions made by others.

The content of the course will help students understand key economic principles including but not limited to: (microeconomics)-how markets work, business and labor, money, banking, finance. (Macroeconomics)-measuring economic performance, government and the economy, and the global economy.

The students will be required to read assignments from the textbook and handout materials, take notes, work in small group settings, carry out simulation activities, listen to AV materials, hand in written assignments and worksheets, discuss current events in relation to economics.

WORLD LANGUAGE

SPANISH I

GRADES 9-10-11-12

2 CREDITS

In Spanish I students learn basic Spanish grammar such as verb conjugation and adjective agreement and practice the basic skills of speaking, listening, reading and writing in the present tense with an emphasis upon correct oral and written expression and aural comprehension. Students are also introduced to various aspects of Hispanic culture in Latin American countries and in Spain as illustrated in the text and through videos and presentations, which may include historical, social and cultural topics.

SPANISH II

GRADES 10-11-12

2 CREDITS

Prerequisite - A "C" average or better in Spanish I.

Spanish 2 builds on the grammar and skills acquired in Spanish I. It involves more complex grammatical forms such as object pronouns; and practices the basic skills of speaking, listening, reading and writing with an emphasis upon correct oral and written expression and aural comprehension, particularly in the past tense. Students also examine aspects of Hispanic culture in Latin American countries and in Spain as illustrated in the text and through videos and presentations, which may include historical, social and cultural topics.

SPANISH III

GRADES 11-12

2 CREDITS

Prerequisite - A "C" average or better in Spanish I & II.

The skills to comprehension, speaking, reading and writing are reinforced and expanded. The students' abilities to function independently within the language are strengthened. A greater understanding of cultural diversity and of our own culture will be highlighted.