## KMS HS Registration 2024-2025

## KERKHOVEN-MURDOCK-SUNBURG

## FIGHINITO 5 SNNTS

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## Registration Process

The registration booklet has been prepared to help you work through the registration process and to enrich your educational career at the high school. All courses offered at KMS High School are listed and described in this registration book. Planning for your high school years, as well as for your next level of education, is an important process with many choices and decisions. Please consider your choices carefully.

## Our Suggestions:

Discuss your plans with your parent/guardian, teachers, school counselor, and/or principal.
$\checkmark$ Use this registration booklet to help you discover classes being offered and to find out more about special programs offered at KMS.
$\checkmark$ Select courses that meet our district graduation requirements, as well as support future educational goals.

## Registration Procedure

Acquire a course registration form either at the school or online at www.kms.k12.mn.us Complete the form indicating the courses you want and rank other options if you are unable to get into that course. Turn in the completed course registration form into the office by Friday, March 1, 2024, with a parent's signature. Students will enter registration in school, on-line, beginning March 1. Instructor approval may be necessary for some courses.

## Class Change Requests

It is our district's goal to accommodate students' educational needs. Class change requests that are made before a semester begins will be considered as long as it can be made without adversely affecting class balance. Once a semester begins, changes will be made during the first two days and only for mistakes in the schedule. After the second day of the semester, courses will only be changed to add a study hall. Students must have a minimum of six classes on their schedule each semester. Students need to meet with the principal or counselor for change requests. High School administration will be available on specified days during the summer to review class change requests.
If you withdraw from a class after the $\mathbf{2 0}^{\text {th }}$ day of the semester, your transcript will reflect a grade of "F." Remember that only one study hall will be allowed each semester.

## Academic Honor Roll

Students at KMS will have the opportunity to earn placement onto one of two academic honor rolls. The honor rolls will be calculated at the end of each quarter. A student with a GPA between $3.33-3.66$ will be placed on the honor roll. A student with a GPA between $3.67-4.00$ will be placed on the distinguished honor roll.

## National Honor Society

National Honor Society (NHS) is an organization for high school students that promotes leadership, service, character, and scholarship. Students in $11^{\text {th }}$ or $12^{\text {th }}$ grade with a cumulative GPA of 3.66 and higher are invited to apply in the fall. Selection is based on the four pillars of NHS. Members are required to complete 20 individual service hours per year. Members are additionally required to attend meetings and complete group service projects. Interested students should see the NHS adviser if they have any questions.

## HIGH SCHOOL PLANNING INFORMATION

## College Representatives

Representatives of colleges, universities, technical colleges, military branches, and private vocational schools schedule visits at our high school. Dates of these visits are given through announcements in the daily bulletin. Students are responsible for signing up with the school counselor.

## College Visits

If a junior or senior wishes to visit a college, technical school, or the military, notice must be given to the office before the date of the appointment. Prior to the visit, pick up a form from the counselor, the completed form must be turned into the office for the absence to be excused. (Please note that "visitation day" is excused if the proper procedure is followed, and the days are counted as excused absences for attendance purposes).

## U. S. Military Academies

If you are interested in applying, plan on meeting with a principal or counselor during your junior year.

## Pre ACT

The pre-ACT exam is given to sophomores. The test also provides students with career information and college readiness benchmarks.

## College Entrance Exam - ACT

Juniors will take the ACT test in March. A student can choose to take the ACT again on later test dates. Please check online for available testing centers. Registration materials will be available in the office or at www.actstudent.org. The school code for KMS is 241-280.

## NCAA Division I or II Athletics

Students who want to participate in NCAA Division I or II athletics should start the certification process by the end of their junior year or early in their senior year. For more information go to www.ncaaclearinghouse.net.

## Financial Aid Applications (FAFSA)/Financial Aid Night

All seniors planning to attend a two-year or four-year college must complete the Free Application for Federal Student Aid (FAFSA). The FAFSA determines eligibility for grants, scholarships, loans, and work study. The FAFSA application form is available in late fall and can be completed online at www.fafsa.gov.

Financial Aid Night is held each year during the fall or winter. A financial aid director from a Minnesota college or university presents information on the FAFSA and the entire financial aid process. Watch this year's Financial Aid Night to be advertised in the daily bulletin.

## College/University Admission Applications

Students who plan to attend a four-year or two-year college or university after high school must complete an admission application to the specific institution they wish to attend. Each institution has its own specific application deadline. It is the responsibility of the student to complete the applications by the deadlines. Applications are available online. Students should start the application process early during their senior year.

## Advanced Placement (AP)

Advanced Placement is a program of college level courses and exams for high school students. The classes are designed for students with high ability and achievement and include an end of the year exam. Colleges and universities may award credit based on scores on the AP Exam. Score requirements vary by college.
MCA MATH AND READING SCORES ARE USED TO DETERMINE ELIGIBILITY.

KMS offers: AP Calculus (12 $\left.{ }^{\text {th }}\right) \&$ AP US History ( $10^{\text {th }}$ )

## Concurrent Enrollment (College Classes)

Concurrent enrollment classes are taught in our high school by KMS teachers in partnership with a college or university. Students can earn high school and college credit upon successful completion of the course at no cost to the student. Students must complete the application and be accepted for concurrent enrollment through the institution and register for the course to earn college credit. The DEADLINE to apply for these courses is the last day of the previous school year. The School Counselor will assist students interested in taking these KMS concurrent courses.
KMS offers: (Not all concurrent college courses are offered every year)

| College Physics | College Chemistry | Introductory College Biology |
| :--- | :--- | :--- |
| College Lit. \& Writing | College Anatomy | Ag Industry Machinery and Maintenance |
| Agronomy Introductory | Animal Science | Advanced College Biology |
| College Child/Human Dev. |  |  |.

## Post-Secondary Enrollment Options Program (PSEO)

The PSEO Program allows high school students to attend a post-secondary school either full or part-time at no cost to the student. PSEO is designed for highly motivated students who are prepared for college-level coursework.

Students in $11^{\text {th }}$ or $12^{\text {th }}$ grade may be eligible to take classes at participating colleges. Students in $10^{\text {th }}$ grade may be eligible to take one career and technical course. Each college or university has its own admission criteria. Students earn both high school and college credit upon successful completion of the course. Interested students should schedule an appointment with the School Counselor by the end of the third quarter. Students must notify KMS of their intent to enroll in PSEO classes by May 1st.

It is the student's responsibility to work with the KMS counselor and the PSEO college of choice to assure that you have the necessary credits and fulfill all the requirements for graduation Four semester college credits are equal to one high school credit.

PSEO Credits are accepted as follows:

- 4 PSEO Credits = 1.0 KMS Credit
- 3 PSEO Credits = 75 KMS Credit
- 2 PSEO Credits $=.50$ KMS Credit
- 1 PSEO Credit = . 25 KMS Credit

PSEO Students must take at least 6 CLASSES each semester.
Examples: If you have
1 PSEO Class
2 PSEO Classes
3 PSEO Classes

Then you need 5 KMS Classes 4 KMS Classes 3 KMS Classes

An On-Campus schedule will be created to limit the time students are coming and going to school. If a student has after school activities, he/she will need to stay in school - not leave and come back.

## On-Line Classes

A list of accredited providers can be found on the MDE website. Parents are responsible to locate, contact and enroll students in a class that meets the requirements for a credit at KMS HS. Students choosing to take an online class during semester 1 must apply by May $\mathbf{2 4}^{\text {th }}$. Those choosing to take an on-line class during semester 2 must apply by November $1^{\text {st }}$. Students may only switch to an on-line class at the beginning of each semester.

Parents and students should keep in mind that classes taken on-line are separate from KMS Classes, and progress is the responsibility of the student. Some on-line providers do not send us progress reports or midterm grades. Grades for on-line classes will be used to determine eligibility in activities. Students must immediately inform KMS HS if they are dropping an on-line class.

## Scholarship Information

State and national scholarship information sent to our school is listed and updated regularly. To view a full list of available scholarships, go to the KMS website, go the high school tab, and click on the tab labeled "Scholarship Applications." Local scholarship applications are available in the office during the winter of a student's senior year. Parents and guardians are also encouraged to pursue scholarships that are available through their employers, fraternal organizations, unions, and other service organizations. Students are encouraged to check with the financial aid department of the college or university they will be attending to pursue specific scholarships the institution has available.

## Fees

Fees may be charged for individual class projects, especially in elective courses.

## Study Hall

Students may register for one study hall each semester. The only exception is for students enrolled in AP courses and college credit courses on the KMS campus - these students may register for 1.5 study halls each semester. A study hall and teacher aide are considered the same.

## Teacher Aide

Juniors and seniors in good academic standing can be a teacher aide with teacher permission and administrator approval. A teacher aide position would replace a study hall. You cannot have a study hall and be a teacher aide in the same semester.

## Independent Study

Juniors and seniors who are in good academic standing may be able to participate in independent study. At most, one independent study may be taken each semester. Administration and teacher approval is required.

## Graduation Requirements

1. All students must pass criterion for College and Career Readiness.
2. The KMS Board of Education requires that a student enroll in 24 credits and successfully complete 21.5 credits in grades nine through twelve in order to graduate and participate in the graduation commencement ceremony. For courses lasting an entire school year, half of the valued credit will be issued each semester. Classes lasting one semester in length will be issued credit at the completion of the course. To ensure that a student has enough credits to graduate, students in grades 9-12 will be required to register for 6 credits each year. Students will not be able to register for more than one study hall.
3. Credits students are required to complete in order to graduate are listed in the curriculum areas below: Science must include at least one credit of a chemistry/physics Lab-based Class

| Graduation Requirements 21.5 credits |  |  |  |
| :--- | :--- | :--- | :--- |
| English | 4 credits | Physical Education | 1 credit |
| Social Studies | 4 credits | Health | $1 / 2$ credit |
| Math | 3 credits | Art/Music | 1 credit |
| Science | 3 credits | Electives | 5 credits |


| Grade 9 |  |  |
| :--- | :--- | :---: |
| English 9 | 1 credit |  |
| Geography | 1 credit |  |
| Physical Sci. | 1 credit |  |
| Math | 1 credit |  |
| PE | .5 credit |  |
| Electives | 1.5 credits |  |

## Grade 10

English 1 credit
US Hist. or AP 1 credit
Bio. Or Coll. Bio 1 credit
Math 1 credit
PE .5 credit
Health 5 credit
Elective $\quad 1$ credit

| Grade 11 |  |
| :--- | :--- |
| English | 1 credit |
| World Hist | 1 credit |
| Science | 1 credit |
| Math | 1 credit |
| Electives | 2 credits |


| Grade 12 |  |  |
| :--- | :--- | :---: |
| English | 1 credit |  |
| Economics | .5 credit |  |
| Bio. Or Coll. Bio | .5 credit |  |
| Electives | 4 credits |  |
|  |  |  |

Required Courses

| Language Arts <br> 4 credits | Mathematics <br> 3 credits | Science <br> 3 credits | Social Studies <br> 4 credits | Phy. Ed. And Health 1.5 credits | Arts/Music <br> 1 credit | Electives <br> 5 credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students are required to complete one credit of Language Arts each year in grades 9-12 | Students are required to complete courses encompassing Algebra, Geometry, and Statistics \& Probability. | Students are required to complete one credit of physical science, one credit of Biology, and one Chemistry based credit of the student's choosing. | Students are <br> Required to complete one credit in: Geography; U.S. History; and World History. $1 / 2$ credit in Civics and $1 / 2$ credit in Economics. | Students are required to complete one credit in Physical Education and $1 / 2$ credit in Health. | Students are required to complete one credit in visual arts, music, Textiles, , or media arts. The following classes will fulfill the arts/music requirement. | Elective credits are spread throughout the course book. |
| Grade 9 <br> -English 9 (Required) | Grade 9 <br> -Algebra 1.5 (Covers the algebra requirement) <br> -Geometry (covers the geometry requirement) | Grade 9 <br> -Physical Science (Required) | Grade 9 <br> -Geography (Required) | Grade 9 <br> Phy. Ed. 9 <br> (1/2 credit <br> required) | -Senior High Band (Year long- $1 / 2$ credit) <br> -Concert Choir (Year long- $1 / 2$ credit) | Students can only take one study hall per semester. |
| Grade 10 <br> -English 10 (Required) | Grade 10 <br> -Geometry (covers the geometry requirement) <br> -Algebra 2 (covers the Alg.2., Stats. \& Prob. requirement) | Grade 10 <br> -Biology <br> -College Biology <br> (10 ${ }^{\text {th }}$ Grade Biology or College Biology is required) | Grade 10 <br> -American History <br> -AP US History <br> (10 ${ }^{\text {th }}$ Grade History or AP US History is required) | Grade 10 <br> -Phy. Ed. 10 <br> (1/2 cr. Require) <br> -Health 10 <br> (1/2 cr. Require) | -Art 1 <br> -Art 2 <br> -Art 3 <br> -3D Art <br> -Textiles <br> -Video Production <br> -Video Graphics |  |
| Grade 11 <br> -World Literature <br> -Am. Literature <br> -College English <br> -Communications | Grade 11 <br> -Algebra 2 (covers the Alg.2, Stats. \& Prob. Requirement) <br> -Pre Calculus <br> -Trig/Stats | Grade 11 <br> -College Chemistry <br> -College Physics <br> -Basic Chemistry <br> -Food Chemistry <br> (1 credit of Above <br> classes in 11 or 12) - <br> -College Biology <br> -College Anatomy | Grade 11 <br> -World History (Required) | Grade 11 <br> -Fitness | -Graphic Design -Web Design <br> -Floral Design <br> -Mech Art <br> -Adv Mech Art |  |
| Grade 12 <br> -World Literature <br> -Am. Literature <br> -College English <br> -Communications | Grade 12 <br> -Algebra 2 (covers the Alg., Stats. \& Prob. Requirement) <br> -Pre-Calculus <br> -Trig/Stats <br> -AP Calculus | Grade 12 <br> -College Chemistry <br> -College Physics <br> -Basic Chemistry <br> -Food Chemistry <br> -College Biology <br> -College Anatomy <br> (1 credit of chem. <br> based class is required in 11 or 12) | Grade 12 <br> -Economics or CEO <br> (Required) <br> -Civics <br> (Required) | Grade 12 <br> -Fitness |  |  |

## AGRICULTURE

KMS Agricultural Education offers coursework in all career clusters of agriculture. Courses are organized by cluster; students may select classes from all cluster areas.

## ALL CAREER CLUSTERS/GENERAL EDUCATION COURSES

## 40 Intro to Agriculture

## gr. 9-12 / 1 Semester

Make ice cream. Learn how to run a meeting. What is Agriculture? How does it affect you? These are some of the topics we will explore in this agriculture course. By utilizing laboratory, classroom, and personal study this course will gain experiences in Agriculture Leadership, Minnesota Agriculture, and Careers in Agriculture. Students will be given the opportunity to sample other agricultural education course offerings through micro units in Animal Science, Plant Science, Companion Animals, Agribusiness, and Agricultural Mechanics.

## 38 Work Based Learning

## gr. 11-12 / 1 Semester to 1 year

Prerequisites: Instructor and Administration Approval
Career investigation is the primary focus of this personal study course. Students will maintain a job for the duration of the course. If they are not employed or following class procedures, they will be dropped from the program. Students will complete career projects and will be required to participate in a job shadow. This class is subject to instructor and administration approval. Students must be making adequate progress towards graduation and maintain excellent school attendance.

## Capstone

## gr. 11 or 12 / 1-2 Semesters

Prerequisite: Instructor Approval - Applications in the Office
The capstone course is for students who have completed multiple classes in this specific CTE area. Students will work with the capstone director to develop an independent project. Students will be required to complete weekly logs ( $20 \%$ of the grade), daily work/assignments ( $20 \%$ of the grade) and an individual project ( $60 \%$ of the grade).

## AG BUSINESS

## 35 Ag Business

gr. 9-12 / 1 Semester
Is agriculture or farming in your future? Do you want to work in agri-business? Or are you just interested in agriculture? Ag Business will deal with the marketing of crops and livestock, as well as principles related to making financial decisions on farms of all sizes. Classroom instruction and projects will comprise the majority of this class.

## ANIMAL SYSTEMS

## 32 Pets and Companion Animals

gr. 9-12 / 1 Semester
Horses, Dogs, Cats, Rabbits, and Alternative Agricultural Animals are the focus of this exploratory animal science course. What does it take to be a responsible pet owner? Students will develop competencies in small animal agriculture and science concepts. Students will be working with animals in hands-on situations. This class utilizes laboratory, classroom, and projects for instructional materials.

## 42/44 Livestock Production A and B

gr. 9-12 / 1-2 semesters
Students will take a deeper look into animal agriculture and what goes into the production of livestock. The course will include topics such as: genetics, nutrition, reproduction, production of beef, dairy, swine, and much more. Livestock Production A main focus will be genetics, reproduction and beef. Livestock Production B's main focus will be nutrition, dairy and swine.

## 181 Vet Science

gr 9-12/1 semester
This course will cover concepts related to veterinary science. Students will conduct labs that simulate practices seen in a veterinary clinic. Other topics covered will be related to large or production animals including cattle, pigs, sheep, goats, poultry, and horses.

## 43 College Introductory Animal Science (Ridgewater)

Prerequisite: 2.5 GPA. Accuplacer and MCA scores can be considered
gr. 11-12 / 1 Semester
This class is offered for concurrent college credit with Ridgewater Community and Technical College. Students must meet eligibility requirements to enroll. Students may have taken High School Animal Science/Livestock Production, but it is not a prerequisite. This course provides an overview of the livestock industry with emphasis on the production and management of meat and dairy producing animals. Other topics covered include reproduction, nutrition, and market classification and grading of livestock.

## FOOD PRODUCTS AND PROCESSING SYSTEMS

## 36 Food Chemistry

gr. 10-12 / 2 Semesters
Prerequisites: $\mathbf{9}^{\text {th }}$ Grade Physical Science
Explore the science behind the production of your food. The class will focus on physical science and chemistry principles behind the production of food, fiber, and fuel. This class is offered as a science credit to fulfill the chemistry requirements for graduation, if you are intending on attending a 4-year college program you should take regular Chemistry. Students will explore food chemistry as they learn how to grow, package, and prepare food. Students are required to complete an agri-science fair project.

## 41 Ag Processing

gr. 9-12/ 1 semester
Jams, Jellies, Meat cuts...how does food make it from the farm to the plate? In this class we will use hands-on experiences to explore food processing. Those experiences include quality and yield meat grading, preservation of food, butchering and processing of carcass,

## ENVIRONMENTAL AND NATURAL RESOURCES

## 47 Exploring Wildlife

gr 9-12/ 1 Semester
White tail deer, bear, ducks and pheasants are some of the animals discussed in Exploring Wildlife. Students will utilize projects and classroom instruction to gain insight into wildlife in Minnesota. Course topics include building wood duck houses and habitat exploration.

## POWER STRUCTURAL AND TECHNICAL SYSTEMS

## 33 Introduction to $\mathbf{A g}$ Mechanics

gr. 9-12/ 1 Semester
This mechanics course will focus on the concepts and mechanics used to build buildings and farm structures. Students will focus on the basics of measuring, electricity, welding, hydraulics, and more. The course will focus on more hands-on activities with real-life applications.

## 182 Advanced Agricultural Mechanics

gr. 10-12/ 1 Semester

## Prerequisites: Intro to Ag Mechanics or Instructor Approval

Students will dive deeper into agricultural mechanics topics including Precision agriculture, Electrical control systems, Diesel components in agriculture equipment, and Hydraulics. Students will focus on the technician side of agricultural mechanics, with an emphasis on giving hands-on experience in those areas. Students will work through the CASE curriculum for Technical Application of Agriculture.

## 194 Mechanical Art

gr. 10-12/ 1 Semester
This course will meet the art requirement for graduation.
Students will work with metal and wood construction. The class will cover wood fabrication, principles of design, pricing, and project work. Students get to make and take creative construction designs home. Students will need to pay for their personal projects.

## 195 Advanced Mechanical Art

gr. 10-12/ 1 Semester
Prerequisites: Mechanical Art or Instructor Approval
This course will meet the art requirement for graduation. Advanced Mechanical Art will expand on skills learned in Mech. Art, introduce lathe work. Course is designed for independent work.

## 183 College Ag Industry Machinery Maintenance (Ridgewater)

Prerequisite: 2.5 GPA. Accuplacer and MCA scores can be considered
gr. 11 - 12/1 Semester
This class is offered for concurrent college credit with Ridgewater Community and Technical College. This course covers the principles of servicing and maintaining agricultural industry equipment with emphasis on power units, fertilizer and chemical equipment, pickups and trucks, including hydraulic, diesel systems, engine repair and electrical systems.

## 108 Welding 1

gr.11-12 (1
semester)
This class is designed for students that want to learn the basics of welding and metal fabrication. Students will learn about the fundamentals of welding, how to weld using MIG, TIG, and ARC, and project development. We will have the opportunity to work with welding professionals from RELCO, West Central Steel and Central Minnesota Fabrication. **Students are expected to pay for all class materials**

## 118 Welding 2

## gr. 11-12 (1 semester)

This class is designed for students to dive deeper into welding and metal fabrication. Students will continue to work on their welding basics and project development. Students will work more on project development and building. We will also have the opportunity to work with welding professionals from RELCO, West Central Steel and Central Minnesota Fabrication. **Students are expected to pay for all class materials**

## PLANT SYSTEMS

## 34 Plant Science

gr. 9-12/1 semester
This course focuses on the anatomy of plants. We will cover a variety of subject areas including the role of plants, plant parts and functions. Each student will be required to create and maintain their own plant science experiment (in the classroom). This course is 60\% laboratory/hands-on experience.

## 184 Field Crop Production

gr. 9-12/1 semester
Prerequisite: Plant Science or Instructor Approval
Corn, soybean, small grains and sugar beets, oh my!!! This course will cover some of the management practices of these crops, specifically focusing on corn and soybean production. We will focus primarily on plant stages, planting, fertilization and harvesting.

## 186 Floral Design

gr. 9-12/ 2 Semesters
This course will meet the art requirement for graduation.
Students will work with fresh and artificial flowers. The class will cover basic floral design construction, flower identification, principles of design, pricing, and project work. Students get to make and take creative and fun fresh flower designs home!

## 45 College Agronomy (Ridgewater)

gr. 11-12 / 1 Semester
Prerequisites: 2.5 GPA. Accuplacer and MCA scores can be considered. Plant Science recommended
This class is offered for concurrent college credit with Ridgewater Community and Technical College. Students must meet eligibility requirements to enroll. Plant growth and development of Monocot and Dicot plants; basic plant anatomy and growth stages; methods of plant reproduction and seed production; plant genetics, basic plant physiology; photosynthesis, respiration, and plants response to weather and other environmental factors.

## ART

100 Art 1
gr. 9-12 / 2 Semesters
Art Foundations students will study and apply the art elements and design principles. Students will work under the direction of their teacher to create two- and three-dimensional projects. Students will be required to create and respond to works of art that express concepts, ideas, and feelings. Students will work with a variety of art media that explore techniques used in professional art. Students are required to do 2 outside class drawings per quarter.

## 101 Art 2

## gr. 10-12 / 2 Semesters

## Prerequisites: Art 1

This course is for the individual interested in an art career and/or pursuing lifetime art interests. Art 2 students will explore art concepts and skills through studies in collage, stenciling, graphite, ink, pastel, and charcoal. Advanced design, composition, and drawing will be the primary focus of instruction for the fall semester. Spring semester will focus on painting in acrylics, watercolor and 3-D. Art history and the history of various media will be included in the curriculum. Students are required to do 2 outside class drawings per quarter.

## 103 Art 3

gr. 11-12 / 2 Semesters

## Prerequisites: Art 2

This is an advanced level course focused around a specialized area of drawing, painting and/or around the exploration of a variety of media and techniques. In addition, students will be directed in developing their own creative voice and experience a range of media. Spring Semester will be papermâché and 3-D. Historical and contemporary topics will be evident in student work and/or through class discussion. Art Journals checked twice quarterly.

## 104 Art 4

gr. 12 / 1 Semester

## Prerequisites: Art 3

Students interested in developing art skills for future use would take Art IV. Also, students interested in an art career need to enroll in a fourth year of art. This is an advanced course that focuses on creative problem solving and visual communication. Students in this course will continue to refine and explore concept development in a personal manner and strive towards artistic excellence in a variety of media. They may work in depth towards the development of a portfolio. The curriculum will include a wide range of media and challenges. Art Journals are checked twice quarterly.

## 106 3D Art Design

gr. 10-12 / 1 Semester

## Prerequisites: Must have passed Art 1

3D Art Design is a studio project orientated class exploring different media areas of 3-Dimentional Art. The emphasis of this course is to expose students to 3D art mediums and to build their creative skills through the elements and principles of design. These projects will be mostly sculptural based for 3D work. Projects may include Air Dry Ceramic projects, Cardboard creation, Paper Mache, Cardboard Bas Relief design, and recycled art.

## 147 Digital Design

gr. 10-12 / 2 Semesters
Digital Design is a class that combines art and technology. In this class students will use design as a creative process in communication. Students will also explore various methods used to create and combine words, symbols, and images to create a visual representation of ideas and messages. They will employ the basic elements and principles of art and utilize Adobe Photoshop, Adobe Illustrator, and Adobe InDesign.

## 148 Digital Photography

gr. 10-12 / 1 Semester
Digital Photography is an introductory photography course designed to instruct students in the fundamental skills of creating digital photo images and processing them using industry standard software such as Adobe Lightroom and Photoshop. Basic and intermediate techniques are taught to enhance or manipulate images for any purpose.

## 146 Video Production

gr. 10-12 / 1 Semester
Stories told with video and film have a tremendous influence on our attitudes and perceptions of the world around us. By writing, editing, and producing digital video, students develop and demonstrate skills in technological literacy, critical thinking and problem solving - skills that will serve them well in the real world.

## Business Professionals of America (BPA)

Any student enrolled in a business education course is eligible to be part of the student organization BUSINESS PROFESSIONALS OF AMERICA. Through BPA members learn how to work effectively with others and take advantage of every opportunity to learn and understand the needs of employers. Members demonstrate occupational and leadership skills in competitive events. Competitive events are offered at the regional, state, and national level. Members prepare for a citizenship role through leadership development, activities, workshops and conferences.

## Independent Business

gr. 9-12 / varies

## Prerequisites: Instructor approval

Students enrolled in this independent course will study in-depth various business themes including entrepreneurship, business climates, ethics, computer programs and current business issues. Students will independently research these topics and prepare reports or simulations relevant to their topic. (Eligible for BPA)

## 92 Intro to Computer Applications 1 9 $^{\text {th }}$ Grade

gr. 9 / 1 Semester

## Prerequisites: None

Technology is continually changing in our society and most careers require knowledge of computer technology. Students in this course will expand their computer knowledge by working with Windows XP, word processing (Word), spreadsheets (Excel), database (Access), and slide presentation software (PowerPoint). An emphasis will also be placed on improving keyboarding skills throughout the semester. The objective of this course is to develop advanced computer skills required for the twenty-first century. Students will have an opportunity to learn advanced word processing features of (Word), spreadsheets (Excel) and database (Access). Students will have an opportunity to put together multimedia presentations using PowerPoint. College credit can be obtained at a two-year college by completing this class and maintaining a B average or better in this course. (Eligible for BPA)

## 144 Computer Applications 1

gr. 10-12 / 1 Semester
Prerequisites: None (strongly recommended 10-12 ${ }^{\text {th }}$ grade)
Technology is continually changing in our society and most careers require knowledge of computer technology. Students in this course will expand their computer knowledge by working with Windows XP, word processing (Word), spreadsheets (Excel), database (Access), and slide presentation software (PowerPoint). An emphasis will also be placed on improving keyboarding skills throughout the semester. The objective of this course is to develop advanced computer skills required for the twenty-first century. Students will have an opportunity to learn advanced word processing features of (Word), spreadsheets (Excel) and database (Access). Students will have an opportunity to put together multi-media presentations using PowerPoint. College credit can be obtained at a two-year college by completing this class and maintaining a B average or better in this course. (Eligible for BPA)

## 145 Computer Applications 2

gr. 10-12 / 1 Semester

## Prerequisites: Computer Applications 1

The objective of this course is to develop advanced computer skills required for the twenty-first century. Students will have an opportunity to learn advanced word processing features of (Word), spreadsheets (Excel) and database (Access). Students will have an opportunity to put together multi-media presentations using PowerPoint. College credit can be obtained at a two-year college by completing this class and maintaining a $B$ average or better in this course. (Eligible for BPA)

## 96 Accounting 1

gr. 9-12 / 2 Semesters
Accounting provides the basic background of accounting principles and financial management where students will prepare for work or education in specific areas of business. Students will prepare basic accounting documents manually as well as on the computer. The students will acquire knowledge of journals, ledgers, financial statements as well as banking, payroll, voucher, and petty cash systems for single owner, partnership and corporation type businesses. College credit can be obtained at a two-year college by completing this class and maintaining a B average or better in this course. It is recommended that Accounting 1 be taken in the junior year so that Accounting 2 can be taken the senior year. (Eligible for BPA)

## 97 Accounting 2

gr. 10-12 / 2 Semesters
Prerequisites: Accounting I
This second year course is a continuation of Accounting I. This class will cover different forms of business ownership by journalizing, posting, and reporting transactions of a business. In addition to recording the daily activities of the business, the student will be introduced to managerial concepts. A computerized simulation will be completed during this course. College credit can be obtained at a two-year college by completing this class and maintaining a B average or better in this course. (Eligible for BPA)

## Capstone-Entrepreneur <br> Prerequsites: $\mathbf{2}$ business classes

gr 11-12

This course is designed for students who want to explore advanced knowledge in entrepreneurship. In this course the student will develop a business plan for a product or service. They will include financial statements and supporting documents. (Eligible for BPA)

## Capstone-Business Administration

gr 11-12

## Prerequisites: Computer Applications 1 and 2

This course is designed for the student who would like advanced knowledge in Microsoft Office Suites. They would integrate Word, Excel, Access, and PowerPoint in various projects. They would have an opportunity to earn an industry standard certificate from Microsoft Office (Eligible for BPA)

## 90 Personal Finance

gr. 9-12 / 1 Semesters
Personal Finance is a course designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics will covered will include income, money management, spending credit, as well as saving and investing. Students will design personal and household budgets; simulate use of checking and savings accounts; demonstrate knowledge of finance; debt and credit management; and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal finance decisions. This course is designed to use the latest technological tools, computer simulations, and equipment to complete coursework for this class. (Eligible for BPA)

## 97 College and Career Prep

gr. 9-12/ 1 Semester
Prepare for your future in the digital age. Students in this course will be exposed to various digital communication tools and computer programs essential for success in college and your future career. This course may include PDAs, tablet PCs as well as the use of note-taking software and voice recognition software. Students will learn to effectively handle communications-related school assignments and to develop communication competencies needed for personal professional activities. Topics for the course include career exploration, internet safety, social media, computer literacy and keyboarding review. (Eligible for BPA)

## 97 Entrepreneurship

gr. 9-12/ 1 Semester
Explore the world of business. The students will learn about the many forms of business. Students will develop a company and prepare a marketing and business plan. They will also learn about business finance, market research, and product development, in the course. (Eligible for BPA)

## Sports Marketing and Entertainment Mangement

gr 9-10 / 1 Semester
This course focuses on marketing in general and you will learn about the different aspects of sports and entertainment marketing, as well as hospitality and tourism marketing. Students will gain an understanding about what marketing is, examine the marketing mix, conduct consumer research and take a look at the different types of careers in these areas of marketing. You will also be going through a simulation to start your own professional sports franchise team. (Eligible for BPA)

## 99 CEO/Advanced Economics:

gr. 11-12 / 2 Semester

## West Central Creating Entrepreneurial Opportunities (WCEO)

## Prerequisite: Application approval

Start your very own business! The goal of the WC-CEO class is for participating students to have a hands-on/real world entrepreneurial opportunity to start their own business. Instead of learning about entrepreneurship in a classroom setting, this class meets at a local business and not at the high school. You will visit twenty to thirty local businesses throughout the year and have numerous guest class speakers. You will have the opportunity to present your business plan to local banking investors and entrepreneurs via private meetings. Finally, you will showcase your business at the annual trade show. YOU will graduate from this class owning your own business! This class will run 7:30-8:30 am. Students from KMS, MACCRAY, CMCS, and RCW school districts make up this year-long class. Eighteen to twenty-two juniors or seniors will be selected through an application process to participate in the year-long class

## FAMILY AND CONSUMER SCIENCE

## 81 Intro to FACS

gr. 9-12 / 1 Semester
Intro to FACS will cover the following areas: Child Growth and Development centers on the growth and care of infants, toddlers and preschool children. Students will work with children in the KMS preschool. Housing and Interior Design discusses the fundamentals of design. These are used in designing and developing a house plan complete with color swatches and furniture samples. An oral presentation is made in class. Other areas of study included will be: Textiles and Clothing includes learning basic construction techniques by creating a tote bag, pillowcase and knit hat. Foods and Nutrition includes cutting techniques, how to bread, shred, toss, simmer, bake fruits and vegetables, scald, poach, fry eggs, scramble eggs, pan-fry, stir-fry, brown, flake, dissolve, knead, make quick and yeast breads, to roll, cream, beat, fold and cut in. Teamwork and time management skills will be practiced along with kitchen safety and sanitation skills.

## 82 Foundations/Fundamentals of Food Preparation

gr. 11-12 / 1 Semester
This course is an opportunity to incorporate preparation techniques, menu planning, shopping skills, and nutrition application with creativity and teamwork skills in the area of food preparation. Students will use kitchen appliances, and safety and sanitation practices extensively. A variety of resources will be used.

## 83 Global Foods

gr. 11-12 / 1 Semester
Students will explore foods and cultures of other ethnic groups and countries. The students will have the opportunity to incorporate preparation techniques, menu planning, nutrition application with creative and teamwork skills. A variety of resources will be used.

## 84 Independent Living

gr. 10-12 / 1 Semester
"Living on your own" continues to be one of life's greatest adventures. Along with the adventure come the responsibilities of making personal decisions. Money management, choosing and furnishing an apartment, purchasing a vehicle, paying for the insurance, relationships, buying and eating good food, finding and keeping a job, caring for children, leisure time use and hobbies, choosing and caring for clothing are choices that need to be made living on your own. Ind. Living provides the opportunity to examine these choices through a variety of projects and speakers.

## 87 College Childcare and Human Development (Ridgewater EDUC 1125)

gr. 11-12 / 1 Semester Prerequisites: 2.5 GPA. Accuplacer and MCA scores can be considered.
Students will develop an understanding of the responsibilities of raising and caring for children. Developmental stages and theories of children will be discussed. Students will observe and work with children of all ages in a variety of settings in the school and community. 3 College Credits will be granted upon successful completion from Ridgewater

## 85 Apparel/Textile Design \& Construction

gr. 10-12 / 1 Semester
Prerequisites: None for classroom. However, teacher approval is needed for an independent study.
This is a semester long class with the opportunity to develop textile construction skills by establishing learning goals and working on self-determined projects. Each project completed will increase textile construction skills. Students must have some knowledge of sewing machine operation and be an independent learner.

## 86 Textile Art

gr. 10-12 / 1 Semesters
Prerequisites: None for classroom. However, teacher approval is needed for an independent study.
This semester long class where we will explore different uses for fabric implementing a variety of hand and machine techniques. At the end of the class students will have a diverse understating of different fabrics and techniques that can be used to showcase their unique style and creative growth.

## LANGUAGE ARTS

## 3 English 9

gr. 9 / 2 Semesters
English 9 is a general survey course which emphasizes reading comprehension (fiction and non-fiction), critical thinking skills, and writing. A short novel and Romeo and Juliet are the larger works which will be read. In writing, the focus is on the five-paragraph essay, expository expression, and the ability to organize cohesive writings of various lengths. Grammar topics include review of parts of speech, sentence parts. Introduce phrases in sentence structure.

## 4 English 10

gr. 10 / 2 Semesters
This class covers a broad range of American Literature. Students will be exposed to various formats of literature from early American history through more contemporary $20^{\text {th }}$ century novels and short stories. Students will be expected to participate in class discussions, complete formalized writing assignments, analyze texts, compare/contrast literary formats, and more. Students who enroll in this course should be prepared to complete assignments by given deadlines to participate in classroom discussions.

## 6 World Literature I

## gr. 11-12 / 2 Semesters

Students taking this course will read fiction, nonfiction, drama, and poetry from a variety of authors around the world and various historical periods. They will develop critical thinking, analysis, and writing skills by studying setting, plot, structure, language and vocabulary as they read. Exercises in vocabulary and grammar will supplement the literature to enhance their skills in their reading and writing.

Through the study of specific writings and literary works-and through extensive student discussion, writing and course projects - the student is expected to gain an understanding of our language; to achieve the ability to project
herself/himself into the worlds of others; and, to learn to deliberately and intelligently participate in the "great conversation" of our civilization. The hope is students will bring a positive attitude, an open mind and a hard work ethic to this course as the material and assessments are rigorous.

## 9 Communications

gr. 11-12 / 2 semesters
This year-long course will focus on communication theory, communication styles, and the role of communication in various settings. Students will read and analyze various speeches and non-fiction writing, evaluate speech presentation/delivery, give presentations, work on various projects to demonstrate understanding of communication styles, etc. Semester 1 will focus more on foundational work. Semester 2 will be more application-based work.

## 16 Literature of War

gr. 11-12 / 2 semesters
Students will read a mix of short stories, novels, non-fiction, poetry, and other literary works whose focus is themes and concepts of war throughout history, including the men an women who fought in the wars and the families they left behind. Semester 1 will look at early historical conflicts and wars. Semester 2 will focus on more contemporary conflicts and wars.

College Now - COMM 110 - Essentials of Speaking and Listening (SMSU)
gr. 11-12 / 1 Semester
*Seniors: 3.0 GPA or above and be in the top half of their graduating class. ACT score of $50^{\text {th }}$ percentile can be considered. Juniors: 3.0 GPA or above and be in the top third of their graduating class. ACT score of $\mathbf{7 0}^{\text {th }}$ percentile can be considered.
Essentials of Speaking and Listening is a college course through SMSU that emphasizes the use of verbal and nonverbal communication along with an emphasis on research skills in order to organize and deliver four effective oral presentations: impromptu, informative, persuasive and a group presentation. Other smaller practice speeches will be included in the course as well as the four major speeches. Additional emphasis is placed on identifying and overcoming listening barriers. This course is worth 3 college credits and is a one-semester course. It will be taken in conjunction with LIT 170 - People and their Environment.

15 College Now - LIT 170 People and the Environment (SMSU)
gr. 11-12 / 1 Semester
*Seniors: 3.0 GPA or above and be in the top half of their graduating class. ACT score of $50^{\text {th }}$ percentile can be considered. Juniors: 3.0 GPA or above and be in the top third of their graduating class. ACT score of $\mathbf{7 0}^{\text {th }}$ percentile can be considered.
People and the Environment is a college class through SMSU that will deepen students' understanding of literature as an art form as well as strengthen students' ability to read and write about short stories, poems, novels, and drama critically. For this course, students will focus on literature that emphasizes the relationship that characters have with their environment. This course covers several literary genres and may include both US and non-US writers and environments. Students will exhibit their ability to read and write about literature critically and analytically through discussions, writing assignments, presentations, tests, and other assignments. Students taking this course for college credit will need to meet SMSU's eligibility requirements. This course is worth 3 college credits and is a one-semester course. It will be taken in conjunction with COMM 110 - Essentials of Speaking and Listening.

## MATHEMATICS

A minimum of 3 credits of math is required for graduation including Algebra II

## KMS Math Flowchart



## MATHEMATICS

## 49 Geometry

## Prerequisites: Alg. 1.5, C-or better in Algebra 1, or teacher permission

A scientific calculator, compass, protractor and ruler are needed for this course. This is a basic course in learning how to think inductively and deductively. Topics cover studies in proofs, ratio and proportion, area and volume formulas, with introductions to trigonometry, analytical geometry, and vectors.

## 52 Algebra 1.5

## gr. 9 / 2 Semesters

A scientific calculator is needed for this course. This course covers linear algebra with one and two variables, multiplication and factoring of polynomials and function notation. It also includes graphing (some with the graphing calculator) and probability and statistics. Students will also learn to think inductively and deductively. Topics cover studies in ratio and proportion, area and volume formulas, with introductions to trigonometry, analytical geometry, and vectors.

## 53 Algebra 2

gr. 10-12 / 2 Semesters

## Prerequisites: Geometry

This course covers advanced algebra, analytical geometry, trigonometry, and statistics. This course is required for graduation. A scientific calculator is needed for this course. A graphing calculator is useful but not required.

## 54 Trigonometry /Statistics

gr. 11-12/2 Semesters
Advanced mathematical topics including trigonometry, probability, and statistics will be covered. This course is designed to aid students going on to post-secondary mathematics courses. A scientific calculator is needed for this course.

## 55 Pre-Calculus

gr. 11-12 / 2 Semesters
Prerequisites: B- or better in Algebra 2, Teacher recommendation
This course consists of the study of more advanced topics from Algebra 2 and Trigonometry and introductory topics for Calculus. A graphing calculator (TI-84 or TI-84 plus) is required.

## 56 AP Calculus

gr. 12 / 2 Semesters
Prerequisites: B- or better in Pre-Calculus and a passing score on the MCA 11 ${ }^{\text {th }}$ grade Math test
This course consists of the study of differential calculus of one variable using elementary functions.
Applications of these concepts and an introduction to integration are also included. A graphing calculator (TI-84 or TI-84 plus) is required.

## MUSIC

77 Senior High Band
Prerequisites: Junior High Band
**Band is a year-long course and students are required to stay in band for both semesters.
Senior High Band is a continuation of the skills learned in Junior High Band. Students must have passed Junior High Band in order to participate in Senior High Band. We offer a wide range of musical style and elements and have a strong emphasis on performance both in the large group band setting and in a small ensemble or solo setting. To create a wellrounded musical education we also offer Senior High Band members: Jazz Ensemble I, Pit Orchestra (every other year), Pep Band (required) and Marching Band (strongly encouraged), Honor band opportunities and Solo/Ensemble contest. Although lessons are no longer required, musicians may request private after school lessons through arrangements with the instructor. Students may also take advantage of the MacPhail Online program with private lesson instruction offered with an option to receive a half credit via independent study. See Mrs. Diem to see if you are eligible for this option with MacPhail. Senior High Band meets every Monday, Wednesday, and $1 / 2$ a period on Friday.

## 75 Senior High Choir

## gr. 9-12 / 2 Semesters

Prerequisites: Completion of Jr. High Choir and/or permission from the Director
**Choir is a year-long course and students are required to stay in choir for both semesters.
Senior High Choir is a performing group that sings a wide variety of music, including 15 Century to the present. Students in a choral music program tend to achieve higher levels in all areas of school. The choir presents several concerts a year, and may include a Fall Concert, Holiday Concert, Spring Concert, and the Pops/Senior Awards Concert. A small group performs on Veteran's Day, and at the Memorial Day Service. The choir must perform at graduation. If you are a member of the KMS Sr. High Choir, you are also eligible to audition for the KMS Pop Group, solo and ensemble contest, and other community events. Those in choir also participate in the MSHSL Large Group Contest (Required) and the MSHSL Solo/Ensemble Contest (Optional)and gives choir members an opportunity to perform solos and/or ensembles at a contest where they are judged by a choral judge. The choir may also attend festivals, sing at functions in area communities and go on trips. Choir members are also encouraged to sing the National Anthem at athletic events, concerts, and other school and community activities. Senior High Choir meets Tuesdays, Thursdays, and $1 / 2$ Fridays. Individual and Group Lessons are required for all choir members, and sectionals are also required for all choir members 1-3 times each quarter. You earn a letter in choir if you are in the KMS Pop Group or participate in the Solo and Ensemble Contest.

## Physical Education and Health

133 Physical Education 9
gr. 9 / 2 Semesters
The department's objective is to provide opportunities for students to experience a variety of activities. The activities taught during the semester are: Golf, soccer, flag football, softball, volleyball, fitness activities, racket sports (pickle ball and badminton), basketball, recreational games, floor hockey. The objective of physical education is to teach muscular strength, endurance, coordination, skill, leadership and an appreciation of lifetime sports. This appreciation is gained through teaching of fundamental skills, playing games and knowledge of rules.

## 134 Physical Education 10

## gr. 10 / 2 Semesters

The department's objective is to provide opportunities for students to experience a variety of activities. The activities taught during the semester are: Golf, soccer, flag football, softball, volleyball, fitness activities, racket sports (pickle ball and badminton), basketball, recreational games, floor hockey. The objective of physical education is to teach muscular strength, endurance, coordination, skill, leadership and an appreciation of lifetime sports. This appreciation is gained through teaching of fundamental skills, playing games and knowledge of rules.

## 135 Health 10

gr. 10 / 2 Semesters
Health involves studying about yourself and how to improve your physical and mental health. We will study STD's and reproduction, self-image, suicide, eating disorders, chemical use and abuse, sexual harassment, CPR training, and physical fitness of how your body works. This class meets every other day (opposite physical education).

## 137 Lifetime Sports/Fitness

## gr. 11-12 / 2 Semesters

First semester we learn how to play a variety of lifetime sports such as golf, disc golf, volleyball, ping pong, badminton, basketball, softball, and more. The objective is to teach the importance of living an active lifestyle. Second semester we transition into the Fitness class. The objectives of this class is to learn the about the different muscle groups and how to strengthen them in a safe and healthy way, as well as learn the importance of cardiovascular endurance and how to improve it.

A minimum of 3 credits of science are required for graduation: Physical Science in $9^{\text {th }}$ grade; Biology in $10^{\text {th }}$ grade; and a Chemistry/Physics Lab-based class in either $11^{\text {th }}$ or $12^{\text {th }}$ grade.

## 22 Physical Science 9

gr. 9 / 2 Semesters
Physical Science includes relevant topics drawn from chemistry and physics. Within the course, students will develop 21st century skills in problem-solving, deductive reasoning and collaborative learning. Topics that are integrated throughout the course include: atomic structure, patterns in the periodic table, writing chemical equations, interaction between forces and motion, energy and its transfer. Offered yearly.

## 19 Honors Physical Science 9

gr. 9/2 Semesters
Advanced physical science is a rigorous course designed for motivated students with advanced math skills who wish to pursue science in the future. It combines chemistry, physics and mathematics, and extends learning to topics not typically taught in 9th grade physical science such as advanced chemistry, advanced physics and indepth science laboratory activities. Students will be expected to complete up to one hour of homework nightly. This course will move at an accelerated pace and will include demanding supplemental problem sets, use of a scientific calculator and maintenance of a laboratory notebook are essential components of this course.

## 23 Biology 10

gr. 10 / 2 Semesters
Prerequisites: Physical Science.
Biology is a year-long required course. In this course, you will study the history and nature of science, cells, genetics, natural selection, ecology and organ systems. It will prepare you to be scientifically literate and for advanced biology classes. During class, you will be actively involved in labs, discussions, note taking, problem solving and cooperative learning activities. Offered yearly.

## 28 Introductory College Biology

## gr. 10-12/ 2 Semesters

Prerequisites: Senior: High school GPA of 2.8 or greater. Junior: High school GPA of $\mathbf{3 . 2}$ or greater. Accuplacer and MCA scores can be considered.
This is a year-long course that meets the high school biology requirements. Eligible students may also receive college credit. The class focuses on basic biological principles with special emphasis on the human species. Topics include scientific problem solving, biodiversity, human and social aspects of biology, ecology, cellular processes and organ function, human reproduction, pre-natal development, and heredity. Students will be engaged in labs, discussions, note taking, problem solving and cooperative learning activities. Class will be offered yearly based on interest.

## 29 Advanced College Biology (M-State)

gr. 11, 12 / 2 Semesters

## Prerequisite: Biology with a B average or better or instructor approval.

Senior: High school GPA of 2.8 or greater. Junior: High school GPA of 3.2 or greater.
This course is an introduction to the structure and function of living systems with an emphasis on cellular and molecular biology. Fundamental concepts include the chemical basis of life, cell structure and function, cell division, metabolism, classical and molecular genetics, and biotechnology. This course includes a laboratory component incorporating experimental design, microscopic work, and cellular and molecular biology techniques. Offered alternate years.

Prerequisites: Completion of Physical Science and Algebra 1 with a C average or better.
This course is an introduction into the basic principles of chemistry including the periodic table, bonding, molecular structure, and the mole. Students will also learn basic principles of chemistry such as solutions, acids and bases, stoichiometry, and reactions.

26 COLLEGE CHEMISTRY (CHEM 160: Preparatory Chemistry SCSU)
gr. 11, 12 / 2 Semester
4 College Credits - St. Cloud State University
Prerequisites: Physical Science and Algebra I or concurrent enrollment with a C average or better.
*Must meet prerequisites for college credit including qualifying scores on the Accuplacer test.
Seniors must meet one of the following: Top half of their class, Specific standardized test score, 3.0 GPA. Juniors must meet one of the following: Top third of their class, Specific standardized test score, 3.5 This course deals with chemical substances, their structures and properties, the changes they undergo, and the laws that govern those changes. This course also covers chemical reactions, mole concept, stoichiometry, gas laws, quantum theory, bonding, oxidation-reduction, as well as acid-base chemistry. Students should be able to demonstrate skills in advanced algebra, graphing, data handling and analysis. This course would be helpful for students interested in majoring in the physical and biological sciences, medicine, dentistry, forestry, pharmacy, physical therapy, veterinary medicine, engineering and other fields related to science and the medical field. Note: Requires extra laboratory experiments and a serious commitment to individual study.

CHEM 231 General Chemistry I /CHEM 231L Gen. Chem. I (SMSU 3 College Credits) gr. 12 / 2 Semester Prerequisite COLLEGE CHEMISTRY (CHEM 160: Preparatory Chemistry SCSU)
First course in chemistry for students majoring in a science. Topics include chemical and physical properties of matter, atomic and molecular structure, bonding, chemical notation, inorganic nomenclature, stoichiometry, and periodic laws. The required preparation for this course is three years of high school mathematics and SCSU Chemistry 160 Preparatory Chemistry.

## 25 COLLEGE PHYSICS (PHYS103 - Concepts in Physics)

## gr. 11, 12 / 2 Semesters

3 College Credits - St. Cloud State University
Prerequisites: Physical Science and Algebra I or concurrent enrollment with a C average or better.
*Must meet prerequisites for college credit including qualifying scores on the Accuplacer test.
Seniors must meet one of the following: Top half of their class, Specific standardized test score, 3.0 GPA. Juniors must meet one of the following: Top third of their class, Specific standardized test score, 3.5 General Physics 1 (4 college credits) (Saint Cloud State University) Vectors; kinematics of uniformly accelerated motion; static equilibrium; work and energy; linear momentum; circular motion; rotational work, energy, and momentum; elasticity; fluid statics and dynamics; heat and temperature; kinetic theory of gases; laws of thermodynamics. A mastery of college algebra and some trigonometry is essential for success in this course. The ability to use computers for creating reports is needed for lab work. This course would be helpful for students interested in majoring in the physical and biological sciences, medicine, dentistry, forestry, pharmacy, physical therapy, veterinary medicine, engineering, chemistry, physics and other fields related to science and the medical field. Lab credit issued. Offered odd/even years.

## Exercise Physiology

gr. 11,12/ 2 semesters
This is a course which will cover the application of exercise physiology to athletic conditioning.
Anatomy/physiology of weight training as well as mechanical principles applied to human movement will be covered. Exercise selection and technique, charting workouts, program design, nutritional considerations, safety and flexibility exercises will be covered.

## SOCIAL STUDIES

## 62 Geography 9

## gr. 9 / 2 Semesters

This course is intended to give the students an understanding of the world's physical geography. Topics and skills covered includes Geospatial skills, places and regions, human systems, and Human Environment Interaction. This class will continue to build on the knowledge and skills that were covered in World geography, with emphasis on geographical impacts and how people are constantly adapting to a constantly changing world.

## 63 American History 10

gr. 10 / 2 Semesters
This course is designed to examine the major events in United States History from reconstruction to the present day. Major emphasis will be placed on historical events and their correlation to present day America. There will also be a focus on citizenship and how community service develops a sense of civic responsibility.

## 67 AP US History

gr. 10 / 2 Semesters
Prerequisites: $9^{\text {th }}$ grade Social Studies class and in good standing /or teacher's prior approval.
This is a college rigor course that will study the major events and individuals throughout the history of the United States from early Native American cultures through the present. The course is designed to prepare students for college level study of United States history by exposing them to a more in depth text, using primary sources and develop writing skills through essay. In the spring, students will have the opportunity to take the AP exam. Students, who choose to take this exam and pass, can receive college credit.

## 64 World History 11

gr. 11 / 2 Semesters
This course covers the early civilizations, the classical civilizations, and the worlds of Christendom, Islam, Africa, Asia and the Americas. The course also attempts to cover the rise of the Western Powers, the World Wars, and the Contemporary World.

## 65 Economics 12

gr. 12 / 1 Semester
After completing this course, students should understand basic economic concepts and be able to reason logically about key economic issues that will affect their lives as producers, consumers, and citizens. The course will emphasize microeconomics-the study of economic decisions made by individuals and businesses. Some attention is given to macroeconomics-the study of the national economy as a whole.

## 66 Civics 12

gr. 12 / 1 Semester
This course is designed to give the students an understanding of their government on the local, state, and national level. Topics covered will include the foundations of modern government, an in-depth look at the branches of government, elections, political parties, and voting. The students will acquire the primary knowledge needed to become an active citizen in the United States and in their locality.

Do you wonder what class you should take in "the shop"? Maybe you ask yourself "Do I like to build with wood or with metal? What about concrete? Is engineering interesting or lame? What about technical drawing or drafting, is this fun or boring, needed or a waste of time?" Well, it just so happens that is class will answer those questions. We will explore each area including Drafting, Measurement, Engineering, Metals and Woods. There will be a variety of small projects and assignments to help you identify what you are interested in and what you don't like. There could even be something you like that you didn't know existed before you took this super cool class. Yes, there will be a fee for your projects. **Students are expected to pay for all class materials**

## 111 Wood Tech

gr. 9-12 / 1 Semester
So, you took Introduction to Technology Education and you really liked the woodworking section of that superb class. This is the spot to increase those skills and take it to the next level. Students will learn the basics of furniture construction while building a sofa table and possibly a second project if time allows. Emphasis will be placed on the proper safety and use of all machines and tools as well as efficient use of the class time in the shop. Students will design a blueprint for each project and learn proper terminology of tools, cuts, joinery, staining, and finishing. The class will also be exploring careers in woodworking and related industrial careers. ${ }^{* * \text { Students are expected to pay for all class }}$ materials**

## 112 CAD/Drafting

gr. 9-12 / 1 Semester
Welcome to the world of drafting and CAD (Computer Aided Drafting). Students will review traditional drafting techniques before using the CAD program, then onto Autodesk INVENTOR, which is used in industry worldwide! The class will focus on design and the fundamentals of Computer Aided Drafting as well as reading and interpreting blueprints. The class will focus on Architectural and Mechanical Drafting. A partnership with RELCO is developing and students will be able to design real world solutions to current manufacturing problems. Students will also be exploring careers in the CAD field.

## 113 CNC Technology

gr. 10-12 /1 Semester
Do you like using cool machines and making cool projects, well CNC Technology might be a fun class for you to take. You see, the future will be controlled by machines and those machines are controlled by numbers, a lot of numbers. CNC Technology will learn about those numbers and how they control the machines. We will be using several different CNC (computer numerically controlled) machines to learn how these technologies work. Some of our CNC machines include a 3-D printer, two lasers, two CNC Routers and one CNC plasma cutter (which cuts steel). Students will learn how each machine works, how to program them, how to maintain them, and how to build projects using each machine. We will also learn how to build and finish several different project types. A project fee will be based on the project chosen and the material used.

## 114 Construction Trades

gr. 11-12 / 1 Semester
Construction comes in a wide variety of different jobs and careers. Construction Trades will examine the interior systems of buildings such as the plumbing, electrical, drywall, tiling, trim, decor and more. Students will be exploring the residential and commercial construction. Each area will have hands on projects that the students will be doing throughout the semester including concrete work, plumbing, electrical, drywall, tiling, architectural drawing, model house building, and potentially a storage shed building. ${ }^{* * S t u d e n t s ~ a r e ~ e x p e c t e d ~ t o ~ p a y ~ f o r ~ a l l ~ c l a s s ~ m a t e r i a l s * * ~}$

## 115 Principles of Engineering

gr. 10-12/2 semesters
Engineering is all around us, from architectural to electrical to mechanical to computers and so much more. In this class students will explore the differences in materials, we will also learn about the wide variety of tools used in different engineering applications. Throughout the class there will be lots of hands-on projects. We will also explore Creative Engineering and design a product that has never been invented before. Students will utilize engineering techniques used at NASA and Apple to complete their builds. This class will be super fun and students will hardly realize they are learning complex engineering. An examination and many different Engineering Careers will be a part of this class as well. ${ }^{* *}$ Students are expected to pay for all class materials **

## 121 Carpentry - Exterior Finishes gr. 10-12 / 1 Semester

This class will explore the different types of construction, looking at framing of traditional stick-built houses to post frame construction, and even alternative construction methods. This class will learn about the shell of houses and industrial buildings, the materials used and why they are important. We will also learn about the different materials used and we will conduct some scientific tests with different materials. Furthermore, we will also learn about careers associated with Carpentry. There will be many hand's on projects as well as presentations and demonstrations throughout the class. A larger project may be constructed such as a Tiny House or end table. ${ }^{* *}$ Students are expected to pay for all class materials**

## 113 CNC Technology

## gr. 10-12 / 2 semesters

Do you like using cool machines and making cool projects, well CNC Technology might be a fun class for you to take. You see, the future will be controlled by machines and those machines are controlled by numbers, a lot of numbers. CNC Technology will learn about those numbers and how they control the machines. We will be using several different CNC (computer numerically controlled) machines to learn how these technologies work. Some of our CNC machines include a 3-D printer, two lasers, two CNC Routers and one CNC plasma cutter (which cuts steel). Students will learn how each machine works, how to program them, how to maintain them, and how to build projects using each machine. We will also learn how to build and finish several different project types. A project fee will be based on the project chosen and the material used.

## 119 CAPSTONE: Advanced Technology Education <br> Prerequisite: Teacher Approval - Advanced Everything

gr. 11-12 / 1 Semester
The Capstone Course is for students who have completed multiple classes in the Technology Education Department. For example, if a student successfully completes Metals Technology / Mild Steel, and they want to learn more about it, practice technical skills, or work on a bigger Mild Steel project then they should sign up for a Capstone Class. This will relate to most Technology Education classes. Students will work with the instructor in their desired area of study and with the Capstone director to develop an independent / advanced project. ${ }^{* *}$ Students are expected to pay for all class $\underline{\text { materials ** }}$

These courses are taught over ITV and require a high level of self-discipline. Therefore, anyone who has had a discipline referral in the past year will not be admitted to the course. In addition, one must have a B in English to register. If you do not meet this standard there is an appeal process. Please see Mrs. Davis or Mr. Brown for information and the appropriate form.

## 12 French 1

## gr. 11-12 / 2 Semesters

Prerequisites: (first semester) B or higher in English
French I introduces the basics of the French language through a four-fold approach: listening, speaking, reading, and writing. Students study and practice through the use of oral exercises, videos, music, and written work. Civilization and cultural aspects of France are covered within each unit.

## 13 French 2

## gr. 11-12 / 2 Semesters

Prerequisites: (first semester) C - or higher in French 1
French II continues the study of the grammar structures of the French language through reading, writing, speaking, and listening. In addition to studying more complex grammar forms and increasing knowledge of vocabulary, there is a continued study of culture, customs and traditions of France and other French speaking countries.

## 10 Spanish 1

gr. 11-12 / 2 Semesters
Prerequisites: (first semester) B or higher in English
This is an ITV class. The topics introduced in this course are naming household/classroom objects, basic foods, describing self and others, expressing likes/dislikes, communicating actions in the present, numbers and time, describing possession or ownership and aspects of Hispanic culture. The academic skills developed will be the ability to speak, write, and read, listen to and interpret Spanish and understand aspects of Hispanic culture.

## 11 Spanish 2

gr. 11-12 / 2 Semesters
Prerequisites: (first semester) C- or higher in Spanish 1
This is an ITV class. The following topics will be introduced in this course: communicate actions in the present, describe objects, feelings, weather, express future/past actions, aspects of Hispanic culture, give dates, make requests, identify articles of clothing, give/receive directions, identify family members. The academic skills developed will the ability to speak, write, read, listen to and interpret Spanish and understand aspects of Hispanic culture. Ten students per section will be accepted with priority given to upperclassmen.

## American Sign Language

## gr. 11-12 / 2 Semesters

## Prerequisites: (first semester) C- or higher in Spanish 1

This is an ITV class. The following topics will be introduced in this course: communicate actions in the present, describe objects, feelings, weather, express future/past actions, aspects of Hispanic culture, give dates, make requests, identify articles of clothing, give/receive directions, identify family members. The academic skills developed will the ability to speak, write, read, listen to and interpret Spanish and understand aspects of Hispanic culture. Ten students per section will be accepted with priority given to upperclassmen.

