High School Registration Guide

2021-2022

Turtle Lake-Mercer High School





**Turtle Lake-Mercer Public School Mission Statement**

The mission of Turtle Lake - Mercer School is to provide students a learning opportunity in a safe environment, to become productive citizens.

**SCHOOL BOARD**

Rick Britton, President

Josh Ruffo, Vice President

Brent Fast

Josh Freeman

Brian O’Shea

Brent Ravnaas

Megan Sparrow

**ADMINISTRATION**

Sheila Schlafmann Superintendent

Dr. Steven Heyd Principal

Susan Davis Business Manager

**TABLE OF CONTENTS**

Logo/Mission Statement………………………………………………………………… 1

Notification of Non-Discrimination Policy…………………………………………….. 4

How to Use this Guide………………………………………………………………….. 4

Class Change Requests…………………………………………………………………. 7

Graduation Requirements………………………………………………………………. 7

ND University System Admission Requirements………………………………………. 8

ND State Scholarship Opportunities……………………………………………………. 8

Schedule Requirements…………………………………………………………………. 10

Grade Point Average……………………………………………………………………. 10

Dual Credit……………………………………………………………………………… 10

College Athletic Eligibility……………………………………………………………… 11

Planning Guide…………………………………………………………………………... 44

**TLM DEPARTMENTS**

Agricultural Education…………………………………………………………………… 13

Business………………………………………………………………………………….. 15

English…………………………………………………………………………………… 16

Foreign Language……………………………………………………………………….. 17

Mathematics…………………………………………………………………………….. 18

Music…………………………………………………………………………………….. 20

Physical Education………………………………………………………………………. 21

Science…………………………………………………………………………………… 22

Social Studies……………………………………………………………………………. 24

**ITV DEPARTMENTS**

English…………………………………………………………………………………… 25

Fine Arts…………………………………………………………………………………. 26

Foreign Language………………………………………………………………………... 27

Health Science…………………………………………………………………………… 28

Mathematics……………………………………………………………………………… 29

Social Studies…………………………………………………………………………….. 30

**ONLINE DEPARTMENTS**

Aviation………………………………………………………………………………….. 31

Family and Consumer Science………………………………………………………...… 32

Graphic Arts……………………………………………………………………………… 35

Heath Science……………………………………………………………………………. 36

Information Technology…………………………………………………………………. 38

Marketing……………………………………………………………………………...… 40

Technology and Engineering…………………………………………..………………… 42

**How to Use this Guide**

This high school registration guide is designed to help you and your parents select your courses for next school year. Registration is a process of selecting courses. We use pre-registration data collected from students to create our master schedule of offerings that most students are interested in. The scheduling process is completed in the spring of the year through individual consultation with the school counselor.

**NOTIFICATION OF NON-DISCRIMINATION POLICY**

YOU ARE HEREBY NOTIFIED Turtle Lake – Mercer Public School does not discriminate on the basis of race, color, religion, national origin, sex, disability or age in its programs or activities and provides equal access to the boy scouts and other designated youth groups.

YOU ARE FURTHER NOTIFIED that inquiries concerning the application of Title IX and its parts may contact the Superintendent. For inquiries concerning the application of 504/Title II you cay contact the School Principal. These people have been designated as the ones responsible for coordinating efforts for Turtle Lake-Mercer School District to comply and carry out its responsibilities under Title IX and Title II, including any investigation of complaints alleging non-compliance. They may be contacted at:. 250 3rd Ave. West or 701-448-2365.

**Class Change Requests**

Once the registration process is completed in the spring of the year, class changes are not allowed. We utilize courses from outside vendors, and we must have our course numbers locked in with them in March or April. Once this lock-in date is past, TLM must pay for the courses. Therefore, we ask that you and your parents think seriously about your abilities, interests, and future career goals to pick the classes that are the best fit for you!

**Graduation Requirements**

In order to graduate from Turtle Lake-Mercer High School students will have to complete the following units of credit:

* 4 units of English language arts including: English 9, English 10, English 11, and an option of English 12 or DC English
* 4 units of math including: Algebra I, Geometry, Algebra II
* 3 units of science, including: Physical Science, Biology, and a 3rd elective science
* 3 units of social studies, including: World History, U.S. History, and Problems of Democracy
* Students must also pass the National Civics Test
* ½ unit Physical Education and ½ unit health
* 3 units of: Foreign languages, Native American language, fine arts, or Career and Technical Education courses
* 5 additional units

**Credits required for graduation from Turtle Lake-Mercer High School: 22**

**North Dakota University System (NDUS) Admission Requirements**

4 credits of English

3 credits of mathematics, Algebra I and above

3 credits of laboratory science

3 credits of social studies

* The NDUS strongly recommends that high school students intending to enroll in four-year universities take Algebra II and two credits of single classical or modern language.
* Many out of state colleges require two or more credits of the same language, a credit of fine arts, or other requirements.
* Check with college websites for specific college requirements.

**North Dakota State Scholarship Opportunities**

The North Dakota state legislature passed legislation establishing two scholarship programs. Any resident student who graduates from high school and meets the criteria is eligible to apply for a ***North Dakota Academic Scholarship*** or a ***North Dakota Career and Technical Education Scholarship*** in the amount of $750 per semester, or $500 per quarter, for a total annual payment of $1,500 based on full-time enrollment in an accredited education institution in North Dakota, both public and private.

The scholarships are renewable provided the student is enrolled full time and maintains a 2.75 GPA based on a 4.0 scale, reviewed each semester. Students may be eligible for up to $6,000 withing six academic school years (do not have to be consecutive) after graduation.

Application deadline will be early June of each year with high school graduates notified of their eligibility for either scholarship by June 30 at which time students must log into the application site and either accept or defer the scholarship. Applications for seniors will be available beginning in January. Apply at <http://www.dpi.state.nd.us/scholarship>.

A student may use either the ***North Dakota Academic Scholarship*** or the ***North Dakota Career and Technical Education Scholarship*** at the following institutions:

**State Universities:**

Dickinson State University

Mayville State University

Minot State University

North Dakota State University

University of North Dakota

Valley City State University

**Private Colleges:**

University of Jamestown

University of Mary

Trinity Bible College

**Two-Year College:**

Bismarck State College

Cankdeska Cikana Community College

Dakota College at Bottineau

Forth Berthold Community College

Lake Region State College

North Dakota State College of Science

Sitting Bull College

Turtle Mountain Community College

Williston State College

United Tribes Technical College

***ND Academic Scholarship Eligibility Requirements***

* Graduate from high school in North Dakota.
* Obtain a grade of at least a C in each course required for the diploma and scholarships and earn a cumulative grade point average of a B (3.0)
* Course requirements:
  + 3 credits of science including Physical science and Biology (no substitutes)
  + 1 credit of Algebra II
  + 1 credit of mathematics for which Algebra II is a prerequisite\*
  + 2 credits of same foreign language, Native American language, sign language or career and technical education from a coordinated plan of study
  + 1 credit of fine arts\*\*, career and technical education\*\*\*, or foreign, Native American, or American Sign Language
  + 1 credit of an AP course and completion of the AP exam that course or either ½ credit or 1 credit in a dual credit course\*\*\*\*
* Receive a composite score of at least a 24 on the ACT. ND Department of Public Instruction must receive test scores by the June deadline. It is recommended that the ACT be completed by the February test date. For more information go to [www.actstudent.org](http://www.actstudent.org)

***North Dakota Career and Technical Education Scholarship***

* Graduate from high school in North Dakota.
* Obtain a grade of at least a C in each course required for the diploma and scholarship and earn a cumulative GPA of B (3.0).
* Course requirements:
  + 3 credits of science including Physical science and Biology (no substitutes)
  + 1 credit of Algebra II
  + 2 credits of a coordinated plan of study recommended by the Department of Career and Technical Education. Coordinated Plans of Study can be found at <https://www.cte.nd.gov/coordinated-plans-study>
  + 1 credit selected from foreign languages, Native American languages, American Sign language, fine arts\*\*, or Career and Technical Education\*\*\*
  + 2 additional credits in the area of Career and Technical Education\*\*\*
* Receive a composite score of at least a 24 on an ACT or a score of at least a 5 on each of the three **WorkKeys assessments (Applied Math, Graphic Literacy, Workplace Documents).** WorkKeys can be taken at any time throughout the year at TLM. Contact the school counselor to set up times to test. Each test takes approximately an hour. The cost for each test is $12 and each can be taken multiple times until you reach the level 5.
* All Juniors will take the ACT during school in the spring at no cost. Students can take the tests multiple times (at own cost). Scores must be received by the June deadline.
* For more information on the ACT go to: [www.act.org](http://www.act.org). For more information on the WorkKeys assessments go to: [www.act.org/workkeys](http://www.act.org/workkeys).
* Students who are eligible for the Career and Technical Education Scholarship due to scores earned on the WorkKeys assessments must also send a copy of their reports to the ND Department of Public Instruction, 600 East Boulevard Avenue, Bismarck, ND 58505-0440.

\*Math for which Algebra II is a prerequisite:

DC College Algebra- 0.5 credit

DC Precalculus- 0.5 credit

DC Probability and Statistics- 0.5 credit

\*\*Fine Arts:

All Art Department courses

All Music Department Courses

\*\*\*Career and Technical Education:

All Agricultural Education Classes

All CRACTC Classes

\*\*\*\*Dual Credit Courses:

College Algebra- 0.5 credit

Precalculua- 0.5 credit

English 110- 0.5 credit

English 120- 0.5 credit

Sociology- 0.5 credit

Speech- 0.5 credit

See School Counselor for other options you may be interested in!

If you have questions, talk to the School Counselor or call the Department of Public Instruction at 328-2775.

**Schedule Requirements**

1. To be classified as a sophomore, students must have earned at least five (5) credits at the end of the freshmen year.
2. To be classified as a junior, students must have earned at least ten (10) credits at the end of the sophomore year.
3. To be classified as a senior, students must have earned at least seventeen credits (17) at the end of the junior year.

**Please note:**

* Students at Turtle Lake-Mercer High School are required to be in attendance for 7 periods of which 5 must be academic classes each year.
* Students may enroll in cooperative work experience their junior and senior years only! These can be taken for 1 or 2 credits. Talk to your school counselor if you are interested in this opportunity!

**Grade Point Average (GPA) Calculation**

Grade Point Average (GPA) will be calculated on a 4.0 scale system of A=4.0, B=3.0, C=2.0, D=1.0, F=0.0 for all high school classes. Class rank shall be determined based on GPA. Valedictorian and Salutatorian will be determined by class rank in PowerSchool based on a 4.0 grading scale using simple cumulative GPA. In the event of a tie, Valedictorian will be awarded to the student who has the highest cumulative weighted percentage as determined by PowerSchool.

**Dual Credit**

According to action by the North Dakota legislature, “Any North Dakota student enrolled in grade ten, eleven, or twelve in a public high school is eligible to receive high school and postsecondary credit for the successful completion of an academic course offered by any postsecondary institution accredited by a regional accrediting organization or a career and technical education course offered by a postsecondary institution in a program accredited by a national or regional accrediting organization by the United States department of education.” Students interested in information about postsecondary enrollment options should meet with their school counselor. *Courses traditionally offered for dual credit include: College Algebra, Precalculus, College Composition I and II, College Speech, Sociology, Psychology*.

**College Athletic Eligibility**

**NAIA**- National Association of Intercollegiate Athletics- NAIA colleges can award full or partial scholarships. To play a sport or receive an athletic scholarship, an athlete must meet two of the following NAIA requirements: 1) an ACT composite of 18, 2) an cumulative 2.0 GPA, 3) graduate in the top half of his or her class. For more information, go to [www.naia.org](http://www.naia.org).

**NJCAA**- National Junior College Athletic Association- NJCAA Divisision I and Division II colleges can offer scholarships. Division III colleges cannot. There are no academic eligibility requirements for athletes entering junior colleges. For more information, go to [www.njcaa.org](http://www.njcaa.org).

**For information and advice on getting an athletic scholarship, athletes should talk to their coach.**

**Divisions I and II Initial-Eligibility Requirements**

**NCAA ELIGIBILITY CENTER QUICK REFERENCE GUIDE**

**16 Core Courses**

* **NCAA Divisions I and II require 16 core courses.** See the chart below.
* **NCAA Division I will require 10 core courses must be complete prior to the seventh semester** (senior year). Seven of the 10 must be a combination of English, math, and natural or physical science that meet the distribution requirements below. These 10 courses become “locked in” at the start of the seventh semester and cannot be retaken for grade improvement.

**Test Scores**

* **Division I** uses a sliding scale to match test scores and core GPA. The sliding scale for those requirements is available at [www.eligibilitycenter.org](http://www.eligibilitycenter.org).
* **Division II** requires a minimum ACT sum score of 68.
* The ACT score sed for NCAA purposes is a **sum** of the following four sections: English, mathematics, reading, and science.
* **When you register for the ACT, use the NCAA Eligibility Center code of 9999 to ensure all ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on transcripts will not be used.**

**Grade-Point Average**

* **Be sure** to look at your high school’s List of NCAA Courses on the NCAA Eligibility Center’s website ([www.eligibilitycenter.org](http://www.eligibilitycenter.org)). Only courses that appear on your school’s list of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
* **Division I** GPA required to receive athletics aid and practice is 2.000-2.999 (corresponding test-score requirements are listed on the Sliding Scale on the eligibility center quick reference guide)
* **Division I** GPA required to be eligible for competition is 2.300 (corresponding test-score requirements are listed on the Sliding Scale on the eligibility center quick reference guide)
* **Division II** core GPA requirement is a minimum of 2.000.
  + **Remember, the NCAA GPA is calculated by using NCAA core courses only!**

DIVISION II

16 Core Courses

3 years of English

2 years of mathematics (Algebra I or higher)

2 years of natural/physical science (1 year of lab if offered by high school)

3 year of additional English, mathematics, or natural/physical science

2 years of social science

4 years of additional courses (from any area above, foreign language or comparative religion/philosophy

DIVISION I

16 Core Courses

4 years of English

3 years of mathematics (Algebra I or higher)

2 years of natural/physical science (1 year of lab if offered by high school)

1 year of additional English, mathematics, or natural/physical science

2 years of social science

4 years of additional courses (from any area above, foreign language or comparative religion/philosophy

**Course Offerings at Turtle Lake-Mercer**

**AGRICULTURAL EDUCATION DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Agriscience Technology I | X |  |  |  |
| Agriscience Technology II |  | X |  |  |
| Agriscience Technology III |  |  | X |  |
| Agriscience Technology IV |  |  |  | X |
| Agricultural Mechanics I |  | X | X | X |
| Agricultural Mechanics II |  | X | X | X |
| Agricultural Power Systems |  | X | X | X |
| Agricultural Processing |  | X | X | X |
| Agricultural Welding and Fabrication |  | X | X | X |
| Botany/Horticultural Science I |  | X | X | X |
| Community Development | X | X |  |  |
| Cooperative Work Experience |  |  | X | X |

*The Agricultural Education Department provides a wide variety of opportunities for students. All students that participate in Ag. classes will also be part of the TLM FFA and have opportunities to compete with this group throughout the year. Some courses may require students to purchase necessary items to complete personal projects.*

**AGRISCIENCE TECHNOLOGY I**

**Grade Placement: 9………1 credit……...Full Year**

Agriscience Technology teaches general biological and technological concepts within the principles of agriculture. Leadership, public speaking, and supervised agricultural experiences will be required components of this class. Courses are designed in sequences to provide logical connections between the subject matter. Units covered will include animal, plant, and soil sciences. Basic oxyacetylene and SMAW welding and woodworking units will also introduce students to the safety, scientific, and mathematical concepts of being in a shop and working with power tools.

**AGRISCIENCE TECHNOLOGY II**

**Grade Placement: 10……...1 credit……...Full Year**

This course builds off of the concepts of Agriscience Technology I. Units will cover advanced concepts in animal, plant, and soil sciences. Leadership, public speaking, and supervised agricultural experiences will be required components of this class. GMAW and advanced SMAW welding and carpentry units will also introduce students to the safety, scientific, and mathematical concepts of being in a shop and working with power tools.

**AGRICULTURE III**

**Grade Placement: 11……...1 credit……...Full Year**

This course develops skills necessary for future employment, entrepreneurship, or further education in agriculture and agricultural occupations. Units may include advanced concepts in: plant science, work in the greenhouse, food science, nutrition, food labels and regulations, animal science, butchering, and meat processing. Leadership development, public speaking, and supervised agricultural experiences will also be emphasized.

**AGRICULTURE IV**

**Grade Placement: 12……...1 credit……...Full Year**

This course develops agricultural skills necessary for employment, entrepreneurship, or further education in agriculture and agricultural occupations. Units may include: engines, power systems, electricity, plumbing, carpentry, woodworking, and welding. Leadership development and supervised agricultural experiences will also be emphasized. This course will be a continuation of the concepts taught in Agriculture III when offered.

**AGRICULTURAL MECHANICS I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

Agricultural Mechanics courses are designed to reinforce and extend students’ understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in fields associated with mechanics. Students will be exposed to concepts in carpentry, MIG welding, electric wiring, small engine repair and maintenance, metal fabrication, and concrete/construction.

**AGRICULTURAL MECHANICS II**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

Agricultural Mechanics courses are designed to reinforce and extend students’ understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in fields associated with mechanics. Students will be exposed to mechanical, fluid, electrical, and thermal power that are associated with the field of agriculture. Course sequence is designed to provide students with applied activities which may include: metal fusion (welding), structures, surveying, electrical wiring principles, agricultural power and equipment, plumbing, electric motors and controls, CNC, robotics, CADD, Lasers, GIS and GPS systems. Leadership development and supervised agricultural experiences are integral to these courses.

**AGRICULTURAL POWER SYSTEMS**

**Grade Placement: 10, 11, 12……...1 credit….…...Full Year**

Agricultural Mechanics courses are designed to reinforce and extend students’ understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in fields associated with mechanics. Students will be exposed to principles of engines and small engines, components and specifications, power transmission, multi-cylinder engines, fuels, lubricants, hydraulics, and power generation.

**AGRICULTURAL PROCESSING**

**Grade Placement: 10, 11, 12……...1 credit….…...Full Year**

This course is designed to introduce students to the processing of agricultural products. The course will include the processing of food, fiber, and material product processing for the global economy will be emphasized. Personal communication skills, human relation skills, leadership development skills, and supervised agricultural experiences will be emphasized.

**AGRICULTURAL WELDING AND FABRICATION**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

This course provides students in agriculture an opportunity to reinforce and extend understanding of applied mechanical applications. Students will be exposed to mechanical, electrical and thermal power that are associated with the field of agricultural welding. Applied activities develop an understanding and skill development in metal joining and fabrication processes. Instruction will prepare students to select, operate, repair, fabricate and maintain a variety of agricultural machinery and equipment. Processes covered may include: Oxyfuel Cutting/Heating/Welding, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Air-carbon Arc Cutting, Plasma Arc Cutting, Safety and Metal Fabrication. In addition, record keeping, communication skills, employability and human relation skills will be covered.

**BOTANY/HORTICULTURAL SCIENCE I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

These courses prepare students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures. Topics to be covered include: soils, plants, plant identification, and plant entomology. Courses examine the importance of plant cell structures, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers, and reproduction of plants. Students may be introduced to the biological, environmental, conservation, and ecological concepts encountered in our environment. Units on floriculture, greenhouse management, and flower arranging will also help students practice design skills that help with beautification of their community.

**COMMUNITY DEVELOPMENT**

**Grade Placement: 9, 10……...1/2-1 credit……...Full Year**

This course provides students in agriculture an opportunity to understand the principles and fundamentals of the community development and gain an appreciation of essential community needs. Community leadership development and service learning are integral to the success of this course. This course is offered 7th period with our A/B Day schedule and can be taken opposite any other 7th period option.

**COOPERATIVE WORK EXPERIENCE**

**Grade Placement: 11, 12……...1-2 credits……...Full Year**

This course provides students with a regularly scheduled, supervised employment opportunity related to agriculture occupations in order to develop and improve work skills. The employment must be after course work had been completed in the area of Ag.. It should also be consistent with the students’ occupational goals, and related to the Agriculture Education program area. There shall be a training agreement among all partners to the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party.

**INDIVIDUAL AGRICULTURAL STUDIES**

**Grade Placement: 11, 12……...1/2-1 credit……...Full Year**

This course provides students in agriculture an opportunity to expand and explore the fields of agriculture, leadership, and personal development on an individual basis. This course is offered 7th period with our A/B Day schedule and can be taken opposite any other 7th period option.

**BUSINESS DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Business Communications |  | X |  |  |
| Business Fundamentals |  | X |  |  |
| Business Management |  |  | X | X |
| Desktop Publishing |  |  | X | X |
| Entrepreneurship |  |  | X | X |
| Web Design |  |  | X | X |

**BUSINESS COMMUNICATIONS**

**Grade Placement: 10……...1/2 credit……...1 Semester**

Students in Business Communications will learn to integrate oral and written communication in a clear, courteous, concise, complete and correct manner on both personal and professional levels. Listening skills, learning styles, and teamwork will be incorporated to provide students with a solid base so they are able to communicate effectively.

**BUSINESS FUNDAMENTALS**

**Grade Placement: 10……...1/2 credit……...1 Semester**

Students in Business Fundamentals will be introduced to the world of business and prepare for the economic roles of consumer, worker, and citizen. The content may include a study of the business environment and strategies for creating, financing, marketing and managing a business. This course will also serve as a background for other business courses you may take in high school and college.

**BUSINESS MANAGEMENT I**

**Grade Placement: 11, 12……...1/2 credit……...1 Semester**

Students in Management I are introduced to the field of management and organizational theory. Topics include: leadership, motivation, planning, teamwork, and goal setting. The course will develop a mastery of theory and research findings about organizations and people within the organizations.

**DESKTOP PUBLISHING**

**Grade Placement: 11, 12……...1/2 credit……...1 Semester**

Students in Desktop Publishing will use desktop publishing software to create publications such as newsletters, banners, catalogs, brochures, letterheads, business cards, and programs. They will learn design techniques using multimedia integration, formatting skills, page layout, and templates. Students will explain the purposes, functions, and common features of desktop publishing software.

**ENTREPRENEURSHIP**

**Grade Placement: 11, 12……...1/2 credit……...1 Semester**

Students in Entrepreneurship will develop skills needed to effectively organize, develop, create, and manage their own business. Topics covered include entrepreneurial concepts, characteristics of business organizations, business opportunities, entrepreneurial career examples, individual career assessment and planning, and entrepreneurial projects and simulations.

**WEB DESIGN**

**Grade Placement: 11, 12……...1/2 credit……...1 Semester**

Students in Web Design will be introduced to a variety of ways to create and maintain web pages. Course topics will focus on overall production processes with an emphasis HTML and CSS coding, design elements involving layout, navigation, and interactivity. Understanding of proper ethics, copyright laws, social networking, and cyber security topics will be integrated. The basic language of web design and software will be taught along with the additional media inputs within a website (e.g. video, animation, sound, scrolling marquees, forms, contacts, and other additional components).

**ENGLISH DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| English 9 | X |  |  |  |
| English 10\* |  | X |  |  |
| English 11\* |  |  | X |  |
| English 12\* |  |  |  | X |

\*=Course has a prerequisite (check course description)

*All students are required to take English for a full year in grades 9, 10, 11, and 12.*

**ENGLISH 9**

**Grade Placement: 9……...1 credit……...Full Year**

English 9 builds upon students’ prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, this course introduces and defines various genres of literature, with writing exercises often linked to reading selections.

**ENGLISH 10**

**Grade Placement: 10……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of one credit of English 9 is recommended.*

English 10 usually offers a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author’s intent and theme and to recognize the techniques used by the author to deliver his or her message.

**ENGLISH 11**

**Grade Placement: 11……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of one credit of English 10 is recommended.*

English 11 continues to develop students’ writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

**ENGLISH 12**

**Grade Placement: 12……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of one credit of English 11 is recommended.*

English 12 blends composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.

**FAMILY AND CONSUMER SCIENCE (FACS) DEPARTMENT**

**New for the 2021-2022 School Year!!!** This is not for sure yet, but we have the possibility of getting a FACS teacher next year and are looking to see what class sizes would look like and if there is interest in this possibility!

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Child Development |  |  |  |  |
| Clothing and Textiles |  |  |  |  |
| Educational Methodology |  |  | X | X |
| FACS I | X | X | X | X |
| Family Living |  |  | X | X |
| Housing and Interior Design |  |  |  |  |
| Independent Living |  |  | X | X |
| Individual Family and Consumer Science Studies |  |  |  |  |
| Introduction to Education |  |  |  |  |
| Parenting |  |  |  |  |

\*=Course has a prerequisite (check course description)

*All students are required to take English for a full year in grades 9, 10, 11, and 12.*

**CHILD DEVELOPMENT**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

To increase students’ knowledge of how children grow and develop, and to foster acquisition of skills that promote healthy development of the individual. Content may include: Children & families, pregnancy & childbirth, birth defects, infancy, toddler years, the preschool years, school-age years, and guiding and caring for children.

**CLOTHING AND TEXTILES**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

This course introduces students to basic consumer skills regarding fabric, design, construction, and maintenance techniques. Instruction includes: Introduction to sewing, hand sewing, getting to know the machine, machine sewing, fashion, and upcycle project.

**EDUCATIONAL METHODOLOGY**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

Educational Methodology (CTE) courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their own teaching objectives, to design lesson plans, and to experience teaching in a controlled environment. Units covered: Teaching objective and rules, planning for instruction and assessment, classroom management and behaviors, classroom observations, lesson planning, leadership and collaboration, practice teaching multiple lessons.

**FACS I**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

This class is designed to develop an understanding of a variety of topics in Family and Consumer Science. Over the semester, topics covered will include: Basic nutrition and food preparation, laundry and mending, basic hand and machine sewing, simple budget, childcare (babysitting), choices and career.

**FAMILY LIVING**

**Grade Placement: 11, 12……...1 credit……...Full Year**

To assist students in preparing for adult roles that support and strengthen family life. The course includes: adulting readiness, marriage readiness, laws and customs for marriage, decision making, emergency preparedness, coping with crisis, family life cycle, housing in the family life cycle, community supports and assistance, current issues related to home and family life cycle, and careers.

**HOUSING AND INTERIOR DESIGN**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

To explore the impacts housing has on families and the variety of ways in which individuals and families meet their needs for shelter. Content may include: housing needs, principles and elements of design, housing styles, floor plans, selecting backgrounds, furniture and accessories, bedroom projects, and kitchens.

**INDEPENDENT LIVING**

**Grade Placement: 11, 12……...1 credit……...Full Year**

To prepare students for responsibilities involved in becoming self-sufficient young adults preparing for life away from the parental home during or immediately following high school. Course content includes: personal development, communication, relationships, career and college planning, moving out on your own, vacation planning.

**INTRODUCTION TO EDUCATION**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

Teaching Professional (CTE) courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. Topics include: Educational Philosophy, professional responsibility and ethics, history of education, learner development, differences, and environments, leadership and human relations skills, classroom observations, intro. to classroom management, instructional strategies and planning, practice of teaching one lesson, career planning and research.

**PARENTING**

**Grade Placement: 9, 10, 11, 12……...1 credit……...Full Year**

To explore the parenting roles that most adults will assume at some time during their lives. Content may include: assessing readiness for parenthood; role clarification (mothers, fathers, and others); the finances of parenting; providing an environment for optimum child growth and development; family communication; stress and crisis in the family; special parenting situations (finding and assessing child care, the handicapped child, foster parenting, blended families, single-parent families, parenting as grandparents); current issues impacting on parents, children, and society; sources of support and assistance for parents and families; related careers; leadership development.

**FOREIGN LANGUAGE DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Spanish I | X | X | X | X |
| Spanish II\* |  | X | X | X |

\*=Course has a prerequisite (check course description)

*The goal of the Foreign Language program is to prepare students to communicate effectively with speakers of a different language. Foreign language study brings many academic and cognitive benefits to students. It has been shown to positively effect standardized test scores, such as ACT and it strengthens critical-thinking and problem-solving skills. Finally, foreign language study enhances students’ respect for and raises awareness of other cultures, as well as providing a competitive edge in career and personal life.*

*It is strongly recommended that students study foreign language. It is recommended studying the same language for consecutive years to become a proficient communicator. Many colleges and universities require at least two consecutive years of study of one language and this could give you a competitive edge in college admissions.*

**SPANISH I**

**Grade Placement: 9, 10, 11, 12……….1 credit……...Full Year**

Designed to introduce students to Spanish language and culture, Spanish I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

**SPANISH II**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

***Prerequisite:*** *Passed Spanish I with a satisfactory grade*

Spanish II builds upon skills developed in Spanish I, extending students’ ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

**SPANISH III**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

***Prerequisite:*** *Passed Spanish I and II with satisfactory grades*

Spanish III focuses on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

**MATHEMATICS DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Algebra I | X |  |  |  |
| Algebra II\* |  |  | X |  |
| DC College Algebra\* |  |  |  | X |
| DC Precalculus\* |  |  |  | X |
| Geometry |  | X |  |  |
| Occupationally Applied Math |  |  |  | X |

\*=Course has a prerequisite (check course description)

*The mathematics curriculum attempts to reflect the rapid changes in our society with its increasing demand for mathematics. Mathematics is an experience that requires student involvement, effort, serious study, and homework. Four credits of mathematics are required for graduation.*

**ALGEBRA I**

**Grade Placement: 9……...1 credit……...Full Year**

Algebra I includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations. This is the first course in the traditional college preparatory sequence. This course will also be beneficial for anyone interested in a technical career.

**ALGEBRA II**

**Grade Placement: 11……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of one credit of Algebra I is recommended.*

This course is the minimum recommendation for students who wish to be prepared for success in credit-bearing college mathematics courses. Algebra II provides a review and expansion of basic terminology, notation, concepts, skills and application of algebra. Algebra II topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

**GEOMETRY**

**Grade Placement:10……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of one credit of Algebra I is recommended for the graduation sequence.*

This is a traditional geometry course recommended for students who intend to pursue a 4-year college degree. Geometry is one of the most interesting, creative, and useful branches of mathematics. The topics covered in this class include a study of deductive reasoning and proof, triangles, quadrilaterals, other polygons, geometric solids, and probability.

**OCCUPATIONALLY APPLIED MATH**

**Grade Placement: 12……...1 credit……...Full Year**

Occupationally Applied Math reinforces general math skills, extend these skills to include some prealgebra and algebra topics, and use these skills primarily in occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations. This math class is intended for students who are going to a 2 year or technical program after high school. This class will review concepts learned in high school and keep them using their math skills so they are better prepared for their college math courses next year.

**MUSIC DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Band\* | X | X | X | X |
| Choir | X | X | X | X |

\*=Course has a prerequisite (check course description)

**BAND**

**Grade Placement: 9, 10, 11, 12……...1/2 credit……...Full Year**

***Prerequisite:*** *Successful completion of elementary and junior high band or successfully completing an audition playing test required for placement.*

This group meets on Mondays, Wednesdays, and every other Friday (A Days) 7th period. Emphasis is on continued training in techniques and musicianship. This band is combined with students in grades 7-12. Performances include concerts, festivals, solo and ensemble festivals as well as special community appearances. Students in this band will be a part of the PEP BAND and have required performances at CMC sporting events. Students in this course are eligible to participate in the music trip, which occurs every 4 years. Students must participate in band for 2 years to be eligible to go on the trip.

**CHOIR**

**Grade Placement: 9, 10, 11, 12……...1/2 credit……...Full Year**

This group meets Tuesdays, Thursdays, and every other Friday (B Days) 7th period. This is a combined choir with students in grades 7-12. Choir provides the opportunity to sing a variety of choral literature styles for men’s and women’s voices and are designed to develop vocal techniques and the ability to sing parts. Performances include concerts, festivals, and solo and ensemble festivals. Students in this course are eligible to participate in the music trip, which occurs every 4 years. Students must participate in band for 2 years to be eligible to go on the trip.

**PHYSICAL EDUCATION DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Health Education | X |  |  |  |
| Physical Education 9 | X |  |  |  |
| Team Sports |  | X | X | X |
| Weight Training |  |  | X | X |

**Health Education**

**Grade Placement: 9………1/2 credit………1 Semester**

Health Education is a course designed to assist the student with the life challenges faced from the teen years and on into adulthood. Course content will include interpersonal relationships, health, chemical dependencies, consumer and environmental health, family life, relationships, nutrition, control of diseases, critical thinking and decision-making skills. Emphasis is on the use of health values in decision-making.

**Physical Education 9**

**Grade Placement: 9………1/2 credit………1 Semester**

This course is designed to provide physical activity for all students. Activities include various team sports that teach various concepts of fitness. It is required that all physical education students wear t-shirts, shorts/sweats, socks, and athletic shoes.

**Team Sports**

**Grade Placement: 10, 11, 12………1/2-1 credit………Full Year**

This course meets 7th period following the A/B Day schedule and can be taken alongside any other 7th period option. This course is meant to get all students moving and teach teamwork skills through various team sports. Activities may include: pickleball, kickball, basketball, wallyball, baseball, badminton, and other various team sports.

**Weight Training**

**Grade Placement: 11, 12………1 credit………Full Year**

In this course, the students will gain a basic knowledge of weightlifting. This will include using proper techniques, us of a spotter and other safety measures. In addition, students will be able to develop their own individualized weightlifting program. They will learn how to monitor, evaluate and modify their program as needed. All students should see significant strength gains. Students will need proper clothing, socks, and athletic shoes. Enrollment in this course will be limited based on weight room capacity.

**SCIENCE DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Biology |  | X |  |  |
| Chemistry |  |  | X | X |
| Forensics |  |  | X | X |
| Human Anatomy |  |  | X | X |
| Physical Science | X |  |  |  |
| Physics |  |  | X | X |

*All students are required to complete three credits of lab science for graduation including Physical Science and Biology. The third course is the student’s choice from four options we offer 11th and 12th grade students.*

**BIOLOGY**

**Grade Placement: 10……...1 credit……...Full Year**

Biology is the scientific study of living organisms. Major topics covered in this course include the cell, cellular reproduction, genetics, microbiology, botany, vertebrates, human biology, and ecological relationships. A variety of lab work are an important part of this course.

**CHEMISTRY**

**Grade Placement: 11, 12……...1 credit……...Full Year (offered every other year)**

Chemistry is the study of atoms and molecules as they bond together to form the building materials of nature. Topics in this course include behaviors of solids, liquids, and gases; acids and bases; chemical formulas and reactions. Chemical principles and theories are presented in the classroom and laboratory.

**FORENSICS**

**Grade Placement: 11, 12………1 credit………Full Year (offered every other year)**

Students will learn the methodology needed to evaluate a crime scene, the proper lab mechanics needed to evaluate evidence, and how to compare between a known and unknown. Topics may include the history of forensic science, collecting of evidence, analyzing results and hands-on application of many laboratory techniques used in solving crimes. Emphasis would be placed on the application of the scientific method to life-long skills and problem solving.

**HUMAN ANATOMY**

**Grade Placement: 11, 12……...1 credit……...Full Year (offered every other year)**

Human Anatomy presents an in-depth study of the human body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems, such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

**PHYSICAL SCIENCE**

**Grade Placement: 9……...1 credit……...Full Year**

Physical Science is an introductory lab science involving the study of matter and energy. The study of matter includes properties of matter, physical and chemical changes, mixtures, elements, compounds, chemical reactions, and families of compounds. The study of energy includes motion, nature of forces, work, power, light, sound, electricity, heat and radioactivity. Students will conduct experiments using standard lab equipment.

**PHYSICS**

**Grade Placement: 11, 12……...1 credit……...Full Year (offered every other year)**

Physics is the science of matter and energy and the interactions between the two. Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

**SOCIAL STUDIES DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Civics | X |  |  |  |
| Problems of Democracy (POD) |  |  |  | X |
| U.S. History |  |  | X |  |
| World History |  | X |  |  |

*All students are required to have 3 credits of social studies to graduate from TLM (World History, U.S. History, and POD). Freshmen take Civics as a required elective.*

**CIVICS**

**Grade Placement: 9……...1 credit……...Full Year**

Civics examines the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. This course is an introduction into the American political system.

**PROBLEMS OF DEMOCRACY**

**Grade Placement: 12……...1 credit……...Full Year**

Problems of Democracy combine a study of the structure of national, state, and local U.S. government with an overview of the principles of market economics. Course content may include contemporary U.S. issues. The purpose of this course is to prepare students to perform effectively as informed citizens. Students must read the Declaration of Independence, the United States Constitution, and the Bill of Rights. Personal Finance concepts will also be covered in this course to help students be prepared consumers once they graduate.

**U.S. HISTORY**

**Grade Placement: 11……...1 credit……...Full Year**

U.S. History provides students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. This course typically includes a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

**WORLD HISTORY**

**Grade Placement: 10………1 credit………Full Year**

World History provides students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History may include geographical studies, but often these components are not as explicitly taught as geography.

**ITV Course Offerings**

Turtle Lake-Mercer is lucky to have a partnership with Great Western Network (GWN) to bring our students elective course options that we might otherwise not be able to offer our students. These courses may not be offered every year. Since these courses require students to be more self-sufficient and great time managers there are requirements that need to be met before you can sign up for these options. **Students must meet two of the following: 1) Good attendance record, 2) Cumulative 3.0 GPA, 3) Teacher and Administrative recommendation.**

**Please refer to your student registration sheet to know exactly which options are available for you this year!** Look over the options and talk to your school counselor to discuss if these can be added into your schedule.

**ENGLISH DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| DC English 110/120\* |  |  |  | X |
| DC Speech |  |  | X | X |

\*=Course has a prerequisite (check course description)

**DUAL CREDIT ENGLISH 110/120**

**Grade Placement: 12……...1 credit……...Full Year**

***Prerequisite:*** *Score of 18 or higher on the English portion of the ACT or successfully complete the ACCUPLACER exam. You must also meet all the admissions requirements and complete the admissions process through the college.*

Dual credit English is a college level, two-semester course focused on composition, primarily reading and writing non-fiction first semester and classical and contemporary American literature second semester. Through the course students earn a high school English credit as well as college credit for College Composition I and II.

**DUAL CREDIT SPEECH**

**Grade Placement: 11, 12……...1/2 credit……...1 Semester**

***Prerequisite:*** *You must also meet all the admissions requirements and complete the admissions process through the college.*

Speech is an introduction to various types of oral communication situations: conversation, group discussion, and problem solving, interpersonal communication, nonverbal communication, and public address. Exploration and application of skills such as: gathering information, speech planning, speech organization, delivery techniques, listening skills, communication theory, and understanding persuasion.

**FINE ARTS DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Art I | X | X | X | X |
| Art II\* |  | X | X | X |
| Art III\* |  |  | X | X |
| Art IV\* |  |  |  | X |

\*=Course has a prerequisite (check course description)

**Art I**

**Grade Placement: 9, 10, 11, 12………1 credit……..Full Year**

Art focuses on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

**ART II**

**Grade Placement: 10, 11, 12………1 credit……..Full Year**

***Prerequisite:*** *Successful completion of Art I is required.*

Art II provides students with the knowledge and opportunity to explore an art form and to create individual works of art. This course may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. Although this course focuses on creation, it may also include the study of major artists, art movements, and styles.

**ART III**

**Grade Placement: 11, 12………1 credit……..Full Year**

***Prerequisite:*** *Successful completion of Art I and II is required.*

Art III focuses on combinations, design elements from line, geometric form construction, and theories of balance, both symmetrical and asymmetrical. Styles of design patterns for various cultures—American Indian, Oriental, other ethnic groups—should be included.

**ART IV**

**Grade Placement: 12………1 credit……..Full Year**

***Prerequisite:*** *Successful completion of Art I, II, and III is required.*

Art IV focuses on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

**FOREIGN LANGUAGES DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| German I | X | X | X | X |
| German II\* |  | X | X | X |

\*=Course has a prerequisite (check course description)

**GERMAN I**

**Grade Placement: 9, 10, 11, 12……..1 credit……..Full Year**

Designed to introduce students to German language and culture, German I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.

**GERMAN II**

**Grade Placement: 10, 11, 12……..1 credit……..Full Year**

***Prerequisite:*** *Passed German I with a satisfactory grade*

German II builds upon skills developed in German I, extending students’ ability to understand and express themselves in German and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s).

**HEALTH SCIENCE DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Introduction to Nursing Assistant |  |  | X | X |
| Medical Careers I |  | X | X | X |
| Prevention and Care of Athletic Injuries |  | X | X | X |

**INTRODUCTION TO NURSING ASSISTNAT**

**Grade Placement: 11, 12……...1/2 credit……...Fall or Spring Semester**

***Prerequisite:*** *Successful completion of**Medical Careers I including First Aid and CPR/AED Certification required*

This Introduction to Nursing Assistant Training program offers classroom instruction and the necessary skills practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care or home health care. This course does not require supervised clinical practice hours but will provide necessary curriculum and supervised skills training to challenge the state CNA board exam provided by the North Dakota Board of Nursing to become a certified CNA. Assistance will be provided for interested students in coordinating with local healthcare facilities for clinical experiences if desired; not required to complete this course.

**MEDICAL CAREERS I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

Students will explore healthcare principles such as the history of medicine, safety, disease transmission and prevention. Students will also be introduced to various health careers and medical terminology. Three hands-on learning experiences are required and may require travel to alternate locations. Students must successfully complete both semesters of this class including First Aid & CPR/AED Certification for Healthcare Providers. This course and the required certifications are the prerequisite to all other Health Science courses and is offered either on-line or via interactive television.

**PREVENTION AND CARE OF ATHLETIC INJURIES**

**Grade Placement: 10, 11, 12……..1 credit……..Full Year**

Provides the student with a background in athletic training and basic health care. The course emphasizes injury prevention, first responder management daily for athletic injuries and skills to fulfill the activities of daily living. Students will be able in one semester to complete the requirements to become a student athletic trainer.

**MATHEMATICS DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| DC College Algebra\* |  |  |  | X |
| DC Precalculus\* |  |  |  | X |

\*=Course has a prerequisite (check course description)

**DUAL CREDIT COLLEGE ALGEBRA**

**Grade Placement: 12……...1/2 credit……...1 Semester**

***Prerequisite:*** *Score of a 21 or higher on the math portion of the ACT or successfully pass the ACCUPLACER exam. You must also meet all the admissions requirements and complete the admissions process through the college.*

In this course, students will build upon their knowledge of solving linear and quadratic equations and inequalities, as well as graphing functions and relations. Other topics include polynomial and rational functions, systems of equations and inequalities, exponential and logarithmic functions.

**DUAL CREDIT PRECALCULUS**

**Grade Placement: 12……...1/2 credit……...1 Semester**

***Prerequisite:*** *Successfully complete College Algebra. You must also meet all the admissions requirements and complete the admissions process through the college.*

Precalculus combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Algebra topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

**SOCIAL STUDIES DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| DC Psychology\* |  |  | X | X |
| DC Sociology\* |  |  | X | X |

\*=Course has a prerequisite (check course description)

**DUAL CREDIT PSYCHOLOGY**

**Grade Placement: 11, 12……...1/2 credit………1 Semester**

***Prerequisite:*** *You must also meet all the admissions requirements and complete the admissions process through the college.*

Psychology introduces students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

**DUAL CREDIT SOCIOLOGY**

**Grade Placement: 11, 12……...1/2 credit………1 Semester**

***Prerequisite:*** *You must also meet all the admissions requirements and complete the admissions process through the college.*

Sociology introduces students to the study of human behavior in society. This course provides an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

**Online Course Offerings**

Turtle Lake-Mercer is lucky to have a partnership with CRACTC to bring our students online elective course options with hands-on learning days at the Bismarck Career Academy. These courses can be added into your schedule for any class period as they are online and can be worked on at any time of the day.Since these courses require students to be more self-sufficient and great time managers there are requirements that need to be met before you can sign up for these options. **Students must meet two of the following: 1) Good attendance record, 2) Cumulative 3.0 GPA, 3) Teacher and Administrative recommendation.** Look over the options and talk to your school counselor to discuss if these can be added into your schedule.

**AVIATION DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Aviation I |  |  | X | X |
| Aviation II\* |  |  |  | X |
| Drones I\* |  |  |  | X |
| Introduction to Drones \* |  |  |  | X |

\*=Course has a prerequisite (check course description)

**AVIATION I**

**Grade Placement: 11, 12……...1 credit……...Full Year**

This is the entry level course to prepare students for employment in the aviation industry. The course covers flight fundamentals, flight operations, aviation weather, performance and navigation. The course also explores careers in air traffic control, flight dispatching and airport management. Units of instruction include safety of flight, airport layout, aeronautical charts, radar, radio procedures, airplane power plant, aerodynamics, weather patterns and hazards. Emphasis on applied academics in math and science are integrated throughout the curriculum along with decision-making principles as it applies to flight-related factors.

**AVIATION II**

**Grade Placement: 12……...1 credit……...Full Year**

***Prerequisite:*** *Successfully completed Aviation I*

This course will cover advanced flight topics as well as expanding topics covered in Aviation I. It will also expand on career exploration based on student aviation interests such as pilot, mechanic, air traffic control, airport management, etc. An Introduction to Unmanned Aircraft Systems (UAS) will also be included. Students will be preparing to pass the Federal Aviation Administration (FAA) private pilot written exam.

**DRONES I**

**Grade Placement: 12……...1/2 credit……...Spring Semester**

***Prerequisite:*** *Successfully completed Aviation I and Intro to Drones*

The Drones I course will more deeply emphasize prior content knowledge learned throughout the Intro to Drones prerequisite course and the Part 107 certification. Students will not only be expected to learn and retain previous content but will be given multiple hands-on learning opportunities to fly drones and apply the content knowledge, uses, and/or limitations of unmanned aircraft.

**INTRO TO DRONES**

**Grade Placement: 12……...1/2 credit……...Fall Semester**

***Prerequisite:*** *Successfully completed Aviation I*

This course is a prerequisite course to the Drones I course, teaching students a basic understanding of recreational and commercial unmanned aircraft (Drones). They will identify the responsibility and authority of the remote PIC, discuss rules of operation, and understand the significance of airspace Classes B, C, D, E, and G as they pertain to UAS drones. Students will additionally be able to identify special-use airspace where UAS usage may be prohibited, understand weather and how it affects flight of UAS, understand general loading and performance data, and airport operations. When students complete this course, they will have a general understanding and knowledge of the operation and uses of UAS as they pertain to the world of Aviation. Intro to Drones will prepare students for the opportunity to take and successfully complete the Part 107 industry testing for basic certification.

**FAMILY AND CONSUMER SCIENCE DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Child Development |  | X | X | X |
| Exploring the Teaching Profession |  | X | X | X |
| Family and Consumer Science I |  | X | X | X |
| Family Living |  | X | X | X |
| Housing and Interior Design |  | X | X | X |
| Independent Living |  | X | X | X |
| Parenting |  | X | X | X |

**CHILD DEVELOPMENT**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

Popular among students who want to learn more about children. This is a great class for anyone who expects to become a parent or plans to work with children. Students will put into practice what child development experts know will help children be happy, stay safe, and reach their full potential. Students will get an opportunity to practice caring for a child by taking home a RealCare baby for a period of 2-4 days.

**EXPLORING THE TEACHING PROFESSION**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

This course will give students who are interested in becoming teachers a running start into the profession. The course will expose students to and provide first-hand experiences in the duties of a teacher including, classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education. \*Schools may be required to purchase applicable course materials (approximately $50 or less per student).

**FAMILY AND CONSUMER SCIENCE I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

This exploratory course is highly recommended for students as an introduction to the other Family and Consumer Science (FACS) courses offered. Students will learn about necessary everyday life skills they can use today and in their future. It includes basic information and discussion on each topic of FACS. Main concepts provided throughout the course will include the basic understanding of the purpose of family and care of children, dating and teen parenting, communication and goals, nutrition and wellness, personal finance, and clothing care and construction. Hands-on projects during the course may include cross-stitching, hand sewing, balancing finances, food prep and nutrition, and caring for a Real Care baby.

**FAMILY LIVING**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

Every one of us is a part of a family and each family is different. Many students will be forming their own new families before too long. This course is about how family’s function and they have changed over time. The value of healthy families, not only to the individual family members but to society, is the primary focus of this class. Learn what contributes to a stable and meaningful family.

**HOUSING AND INTERIOR DESIGN**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

This course will give students who are interested in becoming teachers a running start into the profession. The course will expose students to and provide first-hand experiences in the duties of a teacher including, classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education. \*Schools may be required to purchase applicable course materials (approximately $50 or less per student).

**INDEPENDENT LIVING**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall or Spring Semester**

For a student who is looking forward to being on his/ her own, taking this course will help you avoid some common problems. Finding and keeping a job you enjoy, handling your money wisely, securing housing, choosing a roommate, making healthy food decisions, and maintaining your personal possessions are topics covered in this class.

**PARENTING**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

Designed for both males and females, this course will prepare you for what is probably the most important job you will ever have, that of being a parent. This course will help you develop positive attitudes, realistic expectations and effective skills for parenting. Pregnancy, parenting roles of fathers and mothers, financial impact of a child and other parenting concerns are emphasized in this class. You will get to practice being a parent by taking home a “RealCare” baby for a period of 2-4 days.

**GRAPHIC ARTS DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Graphic Design and Photography I |  | X | X | X |
| Graphic Design and Photography II\* |  |  | X | X |

\*=Course has a prerequisite (check course description)

**GRAPHIC DESIGN AND PHOTOGRPHY I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

This course will introduce students to the skills needed in graphic design. Students will be exposed to photography, scanning, the elements and principles of design, effective thumb-nailing and typography. This course will address how artwork and photographic images can be used in commercial design. Students will create a digital portfolio for their artwork, and they will be introduced to the following Adobe Creative Cloud Software: InDesign, Photoshop and Illustrator. Units will be based on the Print Ed competencies and the ND Graphic Communications Education Content Standards for introduction to Graphic Communications and Advertising Design.

**GRAPHIC DESIGN AND PHOTOGRAPHY II**

**Grade Placement: 11, 12……...1 credit……...Full Year**

***Prerequisite:*** *Successfully completed Graphic Design and Photography I*

This course will build on the skills needed in graphic design and introduce students to potential careers, college and training opportunities for graphic designers. They will receive more advanced training in the following Adobe Creative Cloud Software: InDesign, Photoshop and Illustrator. They will continue to refine and develop their digital portfolio. The students will create artwork and photographic images that can be used as logos, artwork for t-shirts and other promotional materials. Units will be based on the Print Ed competencies and the ND Graphic Communications Education Content Standards for introduction to Graphic Communications and Advertising Design.

**HEALTH SCIENCE DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Introduction to Emergency Medical Responders\* |  |  | X | X |
| Introduction to Nursing Assistant\* |  |  | X | X |
| Medical Careers I |  | X | X | X |
| Advanced Medical Careers\* |  |  | X | X |
| Medical Terminology |  | X | X | X |

\*=Course has a prerequisite (check course description)

**INTRODUCTION TO EMERGENCY MEDICAL RESPONDERS**

**Grade Placement: 11, 12……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of Medical Careers I including First Aid and CPR/AED Certification required*

This introductory course prepares students to respond to a wide range of emergencies such as heart attacks, auto accidents and diabetic problems. The units of instruction include, EMS systems, workforce safety, medical, legal and ethical issues, communications and documentation, the human body, airway management, patient assessment, medical emergencies, trauma, special patient populations and EMS operations. On completion of the EMR course students will be better prepared to work with local EMT’s to complete requirements for state EMR testing. Students will not be completing clinical ride-along’s in ambulances with EMT squads as a requirement in this course. Students who are 16yrs old or older, and interested in taking the EMR state exam, will need to coordinate with local EMT squads in your community or region to complete the required clinical hours to meet the requirements to take that exam.

**INTRODUCTION TO NURSING ASSISTNAT**

**Grade Placement: 11, 12……...1/2 credit……...Fall or Spring Semester**

***Prerequisite:*** *Successful completion of**Medical Careers I including First Aid and CPR/AED Certification required*

This Introduction to Nursing Assistant Training program offers classroom instruction and the necessary skills practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care or home health care. This course does not require supervised clinical practice hours but will provide necessary curriculum and supervised skills training to challenge the state CNA board exam provided by the North Dakota Board of Nursing to become a certified CNA. Assistance will be provided for interested students in coordinating with local healthcare facilities for clinical experiences if desired; not required to complete this course.

**MEDICAL CAREERS I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

Students will explore healthcare principles such as the history of medicine, safety, disease transmission and prevention. Students will also be introduced to various health careers and medical terminology. Three hands-on learning experiences are required and may require travel to alternate locations. Students must successfully complete both semesters of this class including First Aid & CPR/AED Certification for Healthcare Providers. This course and the required certifications are the prerequisite to all other Health Science courses and is offered either on-line or via interactive television.

**ADVANCED MEDICAL CAREERS**

**Grade Placement: 11, 12……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of**Medical Careers I including First Aid and CPR/AED Certification required*

This course will expand on the knowledge gained in Medical Careers I. Students will have the opportunity to explore various medical careers through research, professional guest speakers, college tours and job shadows. The curriculum is designed to enhance student employability skills and professional medical career readiness. Up to date vaccinations, including influenza and TB test are required per facility policies. Students 18 years or older must have a background check. The student is responsible for necessary vaccinations and transportation to clinical sites. \*Student/school is responsible for additional course fees including: $15 background check for job shadow (applies to all enrolled students); $18 fee for job shadow at CHI St. Alexius Medical Center (optional).

**MEDICAL TERMINOLOGY**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall or Spring Semester**

Dual Credit is available through Bismarck State College*.* In this course, students will develop skills necessary for decoding of commonly used medical terms including the meaning of medical suffixes, prefixes and word roots. Students will learn terminology associated with body systems, diseases and disorders of those systems. Students will be also be expected to use correct spelling and pronunciation of medical terms they have learned and will learn commonly used medical abbreviations.

\*Course is provided through BSC Blackboard LMS

**INFORMATION TECHNOLOGY DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Coding with Python |  | X | X | X |
| Coding with JAVA |  | X | X | X |
| Cybersecurity\* |  | X | X | X |
| Introduction to Information Technology |  | X | X | X |
| Introduction to Cybersecurity |  | X | X | X |
| Introduction to Networking |  | X | X | X |
| IT Essentials- PC Hardware and Operating Systems\* |  | X | X | X |
| Network Fundamentals I |  | X | X | X |
| Video Game Design\* |  | X | X | X |

\*=Course has a prerequisite (check course description)

**CODING WITH PYTHON**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

Dual credit is available through BSC. This course is an on-line hands-on course in computer programming using visual basic. The students will develop good problem solving and programming skills while performing several hands-on labs and assignments including gaming. Topics covered include; procedures, mathematical and business functions, arrays and structures, color, sound, and graphics, creating classes, using files, sorting and searching.

**CODING WITH JAVA**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

This course will provide students with a solid base for understanding the main concepts of programming languages. Students will be introduced to the JAVA programming language and complete projects utilizing programming concepts, variables, constants, decision structures and looping structures.

**CYBERSECURITY**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

***Prerequisite:*** *Successful completion of Introduction to Cybersecurity*

Dual credit is available through BSC – for grades 10-12. Cybersecurity is becoming a major concern for any business that uses the Internet for any part of their business. This course will introduce students to best practices businesses use to protect their information as well as techniques individuals can use to protect themselves using social media. Identification of cybercrime, security principles, technologies and security principles to defend networks will be covered and build skills and knowledge for students to pursue careers in cybersecurity.

**INTRODUCTION TO INFORMATION TECHNOLOGY**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

This exploratory level course provides an exposure to careers and issues in Information Technology. Units prepare students for the industry recognized “Internet and Computing Core Certification” (IC3). This globally recognized certification provides students with the foundation of knowledge needed to excel in fields that involve computers and the Internet. The IC3 Global Standard 3 reflects the most relevant skills for school and business today including: Computing Fundamentals, Key Applications, and Living Online.

**INTRODUCTION TO CYBERSECURITY**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that companies and individuals take precautions to protect themselves from the growing threat of cyber-attacks. This course prepares students with beginning knowledge and crucial skills to be responsible citizens in a digital future. Within this course, students will learn foundational cybersecurity topics including digital citizenship and cyber-hygiene, the basics of writing and solving codes, software security, networking fundamentals, and basic system administration. Although this is not a coding-intensive course, students will learn basic SQL, and will utilize basic HTML and JavaScript within specific contexts and will be provided supports within those contexts. Students will complete projects at the end of each module, with a culminating course project where they will complete a simulated cybersecurity hacking experience.

**INTRODUCTION TO NETWORKING**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall or Spring Semester**

This course teaches the basics of networking. It covers how network devices work together, network addressing and services, how to build a home network and design basic security, the basics of configuring Cisco devices, as well as testing and troubleshooting network problems.

**IT ESSENTIATLS-PC HARDWARE AND OPERATING SYSTEMS**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

***Prerequisite:*** *Successful completion of**Introduction to Information Technology*

Dual Credit is available through BSC.This course presents an in-depth exposure to computer hardware and operating systems. Students learn how hardware and software components work as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to physically take apart, assemble, and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, an introduction to networking is included. This course prepares students for Comp TIA’s “A+” certification and/or Comp TIA’s “IT Fundamentals” certification exams.

**NETWORK FUNDAMENTALS I**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

Dual Credit is available through Bismarck State College.Network Fundamentals I covers networking architecture, structure, and functions. The course introduces the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation toward a career in networking. Students will be able to design an IP addressing structure to provide network connectivity for a small to medium-sized business network, form initial settings on a network device, and implement basic network connectivity between devices.

**VIDEO GAME DESIGN**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

***Prerequisite:*** *Successful completion of Coding with Python and/or JAVA is strongly recommended*

The course teaches the foundations of creating video games in JavaScript. The course utilizes a blended classroom approach. The content is fully web-based, with student’s writing and running code on-line with teachers utilizing other tools and resources such as on-line videoconferencing to give focused 1-on-1 attention to students. Each unit of the course is broken down into lessons consisting of various resources, example programs to explore, and written programming exercises, adding up to over 100 hours of hands-on video game programming practice in total!

**MARKETING DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Marketing |  | X | X | X |
| Principles of Finance |  | X | X | X |
| Principles of Entrepreneurship |  | X | X | X |
| Social Media Marketing |  | X | X | X |
| Sports and Entertainment Marketing |  | X | X | X |

**MARKETING**

**Grade Placement: 10, 11, 12……...1 credit……...Full Year**

This course develops student understanding and skills in such areas as channel management, marketing- information management, market planning, pricing, product/service management, promotion, and selling. Focus will be on the marketing mix, including products, promotion, pricing, and distribution. Through the use of projects and on-line simulations, students acquire an understanding and appreciation of marketing activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills.

**PRINCIPLES OF FINANCE**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

Principles of Finance expands student understanding of finance. Students develop their knowledge and skills in such areas as business law, communication skills, compliance, customer relations, economics, financial analysis, financial-information management, human resources management, marketing, professional development, and selling. Emphasis is placed on the analysis and purchase of securities and investments, as well as the need for effective customer relationship management and information management in finance. Principles of Finance is an entry level course in The Business Administration Program of Study for Marketing Education.

**PRINCIPLES OF ENTREPRENURSHIP**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

Have you ever thought of owning your own business? This is a marketing course that introduces students to a wide array of entrepreneurial concepts and skills. Students will develop an appreciation for marketing’s role in the development and success of a new business. Students conduct thorough market planning for their ventures: selecting target markets; conducting market, SWOT, and competitive analyses; forecasting sales; setting marketing goals and objectives; selecting marketing metrics; and setting a marketing budget. The capstone activity in the course is the development of detailed marketing plans for students’ start-up businesses.

**SOCIAL MEDIA MARKETING**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

Social Media Marketing presents the use of on-line social networking as a business strategy designed to increase customer loyalty and inquiry conversion. Students will study major social media channels and marketing campaign techniques and evaluate contemporary and emerging tools in the digital marketplace including social bookmarking and techniques to drive social media traffic. Analyses of social media effectiveness will also be explored. Social Media Marketing is an entry level course in The Business Administration Program of Study for Marketing Education.

**SPORTS AND ENTERTAINMENT MARKETING**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

This course introduces students to marketing occupations in the area of sports and entertainment. Take a look at the exciting and dynamic field of sports and entertainment marketing. One of the largest industries in the world, sport marketing provides a unique way of looking at the business world. This course will focus on the two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment, and 2) The marketing of non-sports products and services through sports. You will discover why companies pay to be associated with a team or entertainer; how to develop ticket plans to fill the seats in the arena; why targeting your marketing efforts is so important; and more.

**TECHNOLOGY AND ENGINEERING DEPARTMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Title of Course** | **9th** | **10th** | **11th** | **12th** |
| Foundations of Engineering and Technology I\* |  | X | X | X |
| Foundations of Engineering and Technology II\* |  | X | X | X |
| STEM Seminar I |  | X | X | X |
| STEM Seminar II |  | X | X | X |

\*=Course has a prerequisite (check course description)

*All the Technology and Engineering classes can be taken for credit in Math, Science, or Career and Tech. Ed. (CTE). However, these courses can only count towards the state scholarship if they are taken as CTE credits!*

**FOUNDATIONS OF ENGINEERING AND TECHNOLOGY I**

**Grade Placement: 11, 12……...1/2 credit……...Fall Semester**

***Prerequisite:*** *Successful completion of STEM Seminar I or II*

Would you prefer to learn by doing? Do you like to build things? In this class, students will complete design challenges while researching better solutions, designing 3D models and actual models, testing and evaluating products. Some possible hand’s-on projects include developing and designing a wind turbine, solar car, CO2 dragster, a mousetrap car, and a glider. This course consists of two separate learning units, each nine weeks in length: Energy and Power Technologies and Transportation Technologies. STEM careers and safety will also be explored. \*\*Additional course material and supplies include items such as saws, drills, etc. may be needed to complete projects.

**FOUNDATIONS OF ENGINEERING AND TECHNOLOGY II**

**Grade Placement: 11, 12……...1/2 credit……...Spring Semester**

***Prerequisite:*** *Successful completion of Foundations of Engineering I*

In this class, students will complete design challenges while researching better solutions, designing 3D models and actual models, testing and evaluating products. Some possible hand’s-on projects include developing and designing a bridge, a survival shelter, a prosthetic arm, a robot and a rocket. This course consists of two separate learning units, each nine weeks in length: Manufacturing Technologies and Construction Technologies. STEM careers and safety will also be explored. \*\*Additional course material and supplies include items such as saws, drills, etc.. may be needed to complete projects.

**STEM SEMINAR I**

**Grade Placement: 10, 11, 12……...1/2 credit……...Fall Semester**

This is a project-based course in which students use Science, Technology, Engineering and Math to solve real world problems. Students will design projects such as bridges, assistive-reach devices, simple motors, parachutes, etc. Students will use common, everyday materials to design prototypes of products that help people in the real world. STEM focuses on the basics of the Engineering Design Process. There are no textbooks, quizzes, or tests. All grading will be based on the effort in the creation of a product, participation in discussion, and use of the engineering design process. STEM careers will also be explored.

**STEM SEMINAR II**

**Grade Placement: 10, 11, 12……...1/2 credit……...Spring Semester**

Students will explore concepts such as energy and power, agricultural engineering, computer programming, and medical technology. There are no textbooks, no quizzes, and no tests. All grading will be based on the effort in the creation of a product, participation in discussion, and use of the engineering design process. STEM careers will also be explored.

**Planning Guide**

**22 Credits**

Use the following planning guide to plot your courses for grades 9-12. This sheet can help both students and parents make decisions that are in the student’s best interest during the critical years ahead.

|  |  |
| --- | --- |
| **9th Grade**  **Class Credit**  English 9 1  Algebra I 1  Physical Science 1  Physical Education 9 ½  Health ½  Civics 1  Electives (Make sure you have back-up options):  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  9th Grade Credits: \_\_\_\_\_\_\_  Total Credits: \_\_\_\_\_\_\_ | **10th Grade**  **Class Credit**  English 10 1  Geometry 1  Biology 1  World History 1  Electives (Make sure you have back-up options):  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  10th Grade Credits: \_\_\_\_\_\_\_  Total Credits: \_\_\_\_\_\_\_ |
| **11th Grade**  **Class Credit**  English 11 1  Algebra II 1  Science: 1  U.S. History 1  Electives (Make sure you have back-up options):  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  11th Grade Credits: \_\_\_\_\_\_\_  Total Credits: \_\_\_\_\_\_\_ | **12th Grade**  **Class Credit**  English: 1  Math: 1  POD 1  Science: 1  Electives (Make sure you have back-up options):  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  12th Grade Credits: \_\_\_\_\_\_\_  Total Credits: \_\_\_\_\_\_\_ |

\*3 elective credits must be in Foreign Languages, fine arts, or career and technical education courses.