2019-2020

Course Description Book

Program of Studies

“To Provide Opportunities for All Students to Develop Their Maximum Potential”
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<td>Science</td>
<td>Physical Science A/B&lt;br&gt;Biology A/B&lt;br&gt;One (1) Other Science Course A/B</td>
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<td>Social Studies</td>
<td>Global Education A/B&lt;br&gt;U.S. History A/B&lt;br&gt;Government/Economics</td>
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<td>Physical Education</td>
<td>Foundations of Fitness&lt;br&gt;Two (2) Other Physical Education Courses</td>
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<td>Health</td>
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<td>Economics</td>
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**Recommended Credits:** 7  
**Required Credits:** 6
Post-Secondary Admission Criteria

Post-Secondary Admissions
Students planning to attend either a technical college or university must pay very careful attention to admission requirements prior to selecting their high school courses. In most cases, college requirements exceed the minimum requirements needed to graduate from high school. Admission requirements vary considerably depending upon the college or university that the student plans to attend and the major field of study that he/she plans to pursue. It is essential that students and parent(s)/guardian(s) check specific college entrance requirements with the college of interest.

College Entrance Tests
Most colleges/universities require either the American College Test (ACT) or the Scholastic Achievement Test (SAT) as a college entrance exam. Most colleges in the Midwest prefer the ACT. However, all North Dakota two- and four-year colleges require the ACT. It is recommended that students take the ACT and/or the SAT in the spring of their junior year. This gives them the opportunity to retake the test(s) as needed for admission, scholarships, and early decision programs. Additionally, the NCAA requires ACT or SAT scores to participate in freshman athletics at Division I/II colleges and some selective colleges also require SAT II (subject tests) and/or the ACT writing test. Questions concerning which test to take could be addressed by a school counselor or career counselor or by checking the college catalogue of interest.

Programs and Course Offerings

Advanced Placement Program
The College Board’s Advanced Placement (AP) Program is an opportunity for students to pursue college-level studies while still in secondary school and to receive advanced placement credit. By challenging and stimulating students, the AP Program provides access to high quality education by accelerating learning, rewarding achievement and enhancing both high school and college programs.

Benefits of Advanced Placement Classes
The AP Program benefits students in many different ways. Here are a few examples:

- Students may receive college credit or placement for satisfactory test scores.
- Students learn now to manage their time while dealing with college level work.
- Students improve their chances of being accepted by the college of their choice.
- AP courses encourage critical and creative thought and fine tunes analytical skills.
- Students may be granted sophomore standing in college.
- Students study material in greater depth and develop independent study skills.

Advanced Placement Courses in the Grand Forks Public Schools

<table>
<thead>
<tr>
<th>AP Biology</th>
<th>AP Calculus</th>
<th>AP Economics</th>
<th>AP Chemistry</th>
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<td>AP United States History</td>
<td>AP Psychology</td>
<td>AP Government</td>
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<td>AP Literature &amp; Composition</td>
<td>AP Language &amp; Composition</td>
<td>AP History</td>
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Articulation Program
The Articulation Program coordinates the linking of two or more educational systems within a community to help students make a smooth transition from one level to another without experiencing delays, duplication of courses, loss of credit, or the need to prove competency through a post-secondary testing requirement.

The Grand Forks Public Schools provides the opportunity for students to receive credit for courses taken in high school in order that competency mastery need not be repeated at certain post-secondary schools. Articulated courses are identified in the course summary of each curriculum area.

College Level Examination Program
The College Level Examination Program (CLEP) is offered by the College Entrance Examination Board, which also provides the Preliminary Scholastic Aptitude Test (PSAT), Scholastic Achievement Test (SAT), and the Advanced Placement Program.

The College Board designed the CLEP services to serve a variety of purposes. The purpose most important to Grand Forks students is that scores on these tests are used in admission, placement, and guidance of students. Each college or university makes its own decision about how it will use and interpret test scores. College catalogs often describe their particular use of the tests.

These exams are available to anyone who wants to take them for a fee at test centers throughout the United States. The University of North Dakota is the nearest center for Grand Forks students.
Dual Credit Program

Students interested in participating in the Dual Credit Program should see their assigned counselors for more information.

The dual credit program allows sophomores, juniors and seniors in North Dakota’s public schools to take courses offered by an approved post-secondary institution for both high school and post-secondary credit. The program provides students with a greater variety of class offerings and the opportunity to pursue more challenging course work.

Eligible Students

Any North Dakota student enrolled in grade nine, ten, eleven or twelve in public high school who has received permission from his or her school principal and who has been accepted by a post secondary institution is eligible.

How to Participate

Permission to Enroll

The student must obtain written permission from his or her school principal before enrolling in a course for dual credit. The student then contacts the office of the campus academic dean or vice-president for campus-specific enrollment procedures.

Credits

The school principal determines the number of credits for which the student is eligible and includes that number on a permission document. (Note: a three-semester hour course offered by a post-secondary institution is equivalent to a ½ high school credit.) The law does not specify the number of credits a student may earn.

Cost

The student and the student’s parent(s) or legal guardian(s) are responsible for all costs related to receiving post-secondary credit. Costs include tuition, fees, textbooks, materials, equipment, and other necessary charges related to receiving post-secondary credit, such as transportation.

Extracurricular Activities

Enrollment in dual credit courses does not reduce a student’s eligibility to participate in high school extracurricular activities.

Transferring Post-Secondary Credits

Transferring post-secondary credits to another institution will depend on the new institution; however, credit earned at regionally accredited institutions will generally transfer.

Withdrawal or Failure

The student who withdraws from a course must inform the post-secondary institution and the high school right away. Students must follow established post-secondary college procedures when withdrawing from or failing a course.

Grading

Common Grading

A common grading system is used to provide more consistency between teachers and departments. The grading scale is:

A = 100-92%
B = 91-84%
C = 83-74%
D = 73-64%

Grades will be rounded up to the next percent at .5 and above.

Weighted Grades

Students graduating from the Grand Forks Public School’s high schools will have both a regular GPA and weighted GPA on their academic transcripts.

“Weighting” a grade adds to the grade point value earned in certain courses. The grades earned in weighted classes will earn an extra grade point. Therefore, an “A” in a weighted class will yield 5 grade points (4 points for the “A” and 1 more point as a weighted “bonus”, a “B” will yield 4 grade points, and a “C” will yield 3 grade points, etc.)

GPA is a student’s “Grade Point Average.” A GPA is a number calculated using two factors: credits earned and “grade points,” which are awarded to letter grades. Grade points are assigned to letter grades as follows: A = 4, B = 3, C = 2, D = 1, F = 0. Credits are generally based upon hours of classroom instruction. Most yearlong courses earn 1.000 credit. Most semester courses earn .500 credit. GPA is calculated by dividing the total number of grade points by the credits earned.
Advanced Placement (AP) courses and enriched courses will be weighted. Also, dual credit courses, which are transferable to 4-year colleges or universities and are either taught at the high school or university and are part of a sequence which is not available/attainable within the home high school, will be weighted. For students moving into the school district, grades from AP, International Baccalaureate (IB) and dual credit classes will be considered for weighting based on the previous schools weighting policy.

Example of Weighted Grading
Below is a sample report card for a senior. This student is taking a rigorous course load. Three courses qualify for “weighted grades” (Enriched Algebra II, AP U. S. History, and AP Biology).

Report Card with Regular GPA

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Grade Points</th>
<th>Credits</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>B</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>German II</td>
<td>A</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Physical Ed.</td>
<td>B</td>
<td>3</td>
<td>.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Enriched Alg II</td>
<td>A</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>AP History A/B</td>
<td>B</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>AP Biology A/B</td>
<td>B</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Concert Band</td>
<td>A</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>6.5</td>
<td></td>
<td>22.5</td>
</tr>
</tbody>
</table>

Regular GPA
22.5 divided by 6.5 = 3.46

Report Card with Weighted GPA

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Grade Points</th>
<th>Credits</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>B</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>German II</td>
<td>A</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Physical Ed.</td>
<td>B</td>
<td>3</td>
<td>.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Enriched Alg II</td>
<td>A</td>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>AP History A/B</td>
<td>B</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>AP Biology A/B</td>
<td>B</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Concert Band</td>
<td>A</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>6.5</td>
<td></td>
<td>22.5</td>
</tr>
</tbody>
</table>

Regular GPA
22.5 divided by 6.5 = 3.46

Please contact your high school counselor if you have questions or want additional information.
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 higher education institution in North Dakota, both public and private.

The scholarships are renewable provided the student is enrolled full time (12 credits the first two terms and 15 credits each term thereafter) and maintains a 2.75 GPA based on a 4.0 scale, reviewed each semester. The total value of the scholarship is $6,000. Students not attending college or university in the fall may defer payment until the time of attendance. The payment will be available during the six years following high school graduation. Students may use the funds within the 6-year period for graduate school in North Dakota.

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

**Two-Year Colleges:**
- Bismarck State College
- Cankdeska Cikana Community College
- Dakota College at Bottineau
- Fort 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

**Private Colleges:**
- Jamestown College
- Med Center One College of Nursing
- Rasmussen College
- Trinity Bible College
- University of Mary

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 scholarship.
- Earn a cumulative grade point average of B (3.0).
- Course requirements:
  - 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, or sign language or 2 credits of CTE 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 in that course or either ½ credit or 1 credit in a dual credit course
- Receive a composite score of at least a 24 on an ACT. Any ACT official test results taken later than the February testing date, must be sent to DPI by the student. For more information go to [www.actstudent.org](http://www.actstudent.org)
North Dakota Career and Technical Education 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 scholarship.
• Earn a cumulative grade point average of B (3.0).
• Course requirements:
  o 1 credit of Algebra II
  o 4 credits of CTE in which two credits must be in a coordinated plan of study
    ▪ Grand Forks Public Schools’ Coordinated Plans of Study can be viewed on the GFPS Website under the Career & Technical Education department page (example provided below)
    ▪ 1 credit selected from foreign languages, Native American languages, American Sign language, fine arts, or 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 (Locating Information, Reading for Information, Applied Mathematics). Please visit with your counselor on available WorkKeys testing locations, testing dates, and cost.

• For more information on the WorkKeys assessments go to: 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.

*School counselors strive to assist students in their pursuit of academic success. However, ultimately it is the responsibility of students and their families to ensure completion of the requirements necessary to earn the North Dakota Academic and / or the North Dakota Career and Technical Education scholarships. Specific questions should be directed to the ND Department of Public Instruction at 701-328-2260.*

### CTE Coordinated Plans of Study – Example

<table>
<thead>
<tr>
<th>Hospitality &amp; Tourism Career Cluster</th>
<th>Arts, A/V Technology &amp; Communications Career Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurants &amp; Food/Beverage Services Pathway</td>
<td>Visual Arts Pathway</td>
</tr>
<tr>
<td>Course #</td>
<td>Course Title</td>
</tr>
<tr>
<td>16701</td>
<td>Life Skills I</td>
</tr>
<tr>
<td>16704</td>
<td>Independent Living</td>
</tr>
<tr>
<td>16705</td>
<td>Food for Today</td>
</tr>
<tr>
<td>16705</td>
<td>Specialty Foods</td>
</tr>
</tbody>
</table>

**To View All Coordinated Plans of Study**

Go to the GFPS Website -> Departments -> Career & Technical Education
Divisions I and II Initial-Eligibility Requirements

Core Courses

- **NCAA Division I requires 16 core courses. NCAA Division II currently requires 14 core courses.** Division II will require 16 core courses for students enrolling on or after August 1, 2013. See the charts below.
- **NCAA Division I will require 10 core courses to be completed prior to the seventh semester** (seven of the 10 must be a combination of English, math or natural or physical science that meet the distribution requirements below). These 10 courses become "locked in" at the seventh semester and cannot be retaken for grade improvement.
  - Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement, but would not be able to compete.

Test Scores

- **Division I** uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- **Division II** requires a minimum SAT score of 820 or an ACT sum score of 68.
- The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a sum of the following four sections: English, mathematics, reading and science.
- When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and 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). 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** students enrolling full time before August 1, 2016, should use Sliding Scale A to determine eligibility to receive athletics aid, practice and competition during the first year.
- **Division I** GPA required to receive athletics aid and practice on or after August 1, 2016, is 2.000 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **Division I** GPA required to be eligible for competition on or after August 1, 2016, is 2.300 (corresponding test-score requirements are listed on Sliding Scale B on Page No. 2 of this sheet).
- **The Division II** core GPA requirement is a minimum of 2.000.
- Remember, the NCAA GPA is calculated using NCAA core courses only.

<table>
<thead>
<tr>
<th>DIVISION I</th>
<th>DIVISION II</th>
<th>DIVISION II</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Core Courses</td>
<td>14 Core Courses</td>
<td>Core Courses (2013 and After)</td>
</tr>
<tr>
<td>4 years of English.</td>
<td>3 years of English.</td>
<td>3 years of English.</td>
</tr>
<tr>
<td>3 years of mathematics (Algebra I or higher).</td>
<td>2 years of mathematics (Algebra I or higher).</td>
<td>2 years of mathematics (Algebra I or higher).</td>
</tr>
<tr>
<td>2 years of natural/physical science (1 year of lab if offered by high school).</td>
<td>2 years of natural/physical science (1 year of lab if offered by high school).</td>
<td>2 years of natural/physical science (1 year of lab if offered by high school).</td>
</tr>
<tr>
<td>1 year of additional English, mathematics or natural/physical science.</td>
<td>2 years of additional English, mathematics or natural/physical science.</td>
<td>3 years of additional English, mathematics or natural/physical science.</td>
</tr>
<tr>
<td>2 years of social science.</td>
<td>2 years of social science.</td>
<td>2 years of social science.</td>
</tr>
<tr>
<td>4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).</td>
<td>3 years of additional courses (from any area above, foreign language or comparative religion/philosophy).</td>
<td>4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).</td>
</tr>
</tbody>
</table>
The English program of study is designed to offer students an opportunity to develop their language potential through a curriculum that invites active engagement in the critical applications of language. A four-year sequence of English courses emphasizes the acquisition and development of reading, writing, and speaking skills. Freshman and sophomore courses focus on fundamental competencies of language arts development. The junior and senior courses refine and reinforce skills previously introduced, as well as lead students to more advanced language applications. The English program of study facilitates growth in written and spoken self-expression and in critical responsiveness to important works of literature, providing students with a solid base for successful pursuit of higher education and careers.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>½</td>
<td>11101A</td>
<td>English I A</td>
<td>None</td>
<td>9</td>
</tr>
<tr>
<td>½</td>
<td>11101B</td>
<td>English I B</td>
<td>English I A</td>
<td>9</td>
</tr>
<tr>
<td>½</td>
<td>11201A</td>
<td>English II A</td>
<td>English I A, English I B</td>
<td>10</td>
</tr>
<tr>
<td>½</td>
<td>11201B</td>
<td>English II B</td>
<td>English I A, English I B, English II A</td>
<td>10</td>
</tr>
<tr>
<td>½</td>
<td>11301A</td>
<td>English III A</td>
<td>English I A, English I B, English II A, English II B</td>
<td>11</td>
</tr>
<tr>
<td>½</td>
<td>11301B</td>
<td>English III B</td>
<td>English I A, English I B, English II A, English II B</td>
<td>11</td>
</tr>
<tr>
<td>½</td>
<td>11401</td>
<td>English IV Composition I</td>
<td>English I, II, &amp; III</td>
<td>12</td>
</tr>
<tr>
<td>½</td>
<td>11401DC</td>
<td>Dual Credit English IV Composition I</td>
<td>English 3.0 GPA, English III</td>
<td>12</td>
</tr>
<tr>
<td>½</td>
<td>11411DC</td>
<td>Dual Credit English IV Composition II</td>
<td>English 3.0 GPA, English I, II, III and Dual Credit English IV Composition I</td>
<td>12</td>
</tr>
<tr>
<td>½</td>
<td>11402</td>
<td>English IV Literature</td>
<td>English I, II, &amp; III</td>
<td>12</td>
</tr>
<tr>
<td>½</td>
<td>11501</td>
<td>Speech Communications</td>
<td>None</td>
<td>11-12</td>
</tr>
<tr>
<td>½</td>
<td>11501DC</td>
<td>Dual Credit Speech</td>
<td>Overall 3.0 GPA</td>
<td>11-12</td>
</tr>
<tr>
<td>½</td>
<td>11601</td>
<td>Film Study</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>11602</td>
<td>Reading</td>
<td>Teacher or counselor recommendation</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>11603</td>
<td>Creative Writing</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>11605</td>
<td>Innovations I</td>
<td>None (Does not fulfill required English credit)</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>11606</td>
<td>Innovations II</td>
<td>Innovations I (Does not fulfill required English credit)</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>11610A</td>
<td>Journalism I A</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>11610B</td>
<td>Journalism I B</td>
<td>Journalism IA</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>11611A</td>
<td>Journalism IIA</td>
<td>Journalism IA, Journalism IB</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>11611B</td>
<td>Journalism IIB</td>
<td>Journalism IA, Journalism IB</td>
<td></td>
</tr>
<tr>
<td>½</td>
<td>11612</td>
<td>Journalism III</td>
<td>Journ. I or rec. by counselor/ teacher</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>11701A</td>
<td>Adv. Placement Language &amp; Composition A</td>
<td>English I A/B, English II A/B</td>
<td>11</td>
</tr>
<tr>
<td>½</td>
<td>11901</td>
<td>English Assistant</td>
<td>Principal Approval</td>
<td>-</td>
</tr>
</tbody>
</table>

**11101A – ENGLISH I A**

Required Grade 9

 Semester, ½ credit

English I A integrates literature, composition, and speech communication, providing students with an introduction to an effective pattern for examining ideas, and a solid basis for successful pursuit of higher education and careers. The first semester focuses on narrative reading and writing, as well as informational reading and writing. Literary selections include short stories, nonfiction, poetry, drama, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate a speaker’s claim, rhetoric, and strategy, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.
11101B – ENGLISH I B
Required Grade 9
Semester, ½ credit
Prerequisite: English I A

English I B builds on the foundations of literature, composition, and speech communication established in English A. The second semester focuses on argumentative reading and writing, as well as researched-based writing. Literary selections again include short stories, nonfiction, poetry, drama, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate a speaker’s claim, rhetoric, and strategy, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.

11201A – ENGLISH II A
Required Grade 10
Semester, ½ credit
Prerequisite: English I A, English I B

English II A integrates literature, composition, and speech composition to provide students with a continuation in the study of an effective pattern for examining ideas and a solid basis for successful pursuit of higher education and careers. The first semester focuses on narrative reading and writing, as well as informational reading and writing. Literary selections again include short stories, nonfiction, poetry, drama, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate a speaker’s claim, rhetoric, and strategy, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.

11201B – ENGLISH II B
Required Grade 10
Semester, ½ credit
Prerequisite: English I A, English I B, English II A

English II B builds on the foundations of literature, composition, and speech communication established in English A. The second semester focuses on argumentative reading and writing, as well as researched-based writing. Literary selections again include short stories, nonfiction, poetry, drama, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate a speaker’s claim, rhetoric, and strategy, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.

11301A – ENGLISH III A
Required Grade 11
Semester, ½ credit
Prerequisite: English I A, English I B, English II A, English II B

English III A emphasizes the critical reading of American literature as it reflects the American identity and culture. Analysis of American literary genres and themes from the nation’s history will enhance self-awareness and depict the student’s heritage. The first semester focuses on narrative reading and writing, as well as informational reading and writing. Literary selections include short stories, nonfiction, poetry, drama, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate a speaker’s claim, rhetoric, and strategy, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.

11301B – ENGLISH III B
Required Grade 11
Semester, ½ credit
Prerequisite: English I A, English I B, English II A, English II B, English III A

English III B builds upon the foundations established in English A, as students continue an analysis of American literary genres and themes from the nation’s history that will enhance self-awareness and depict the student’s heritage. The second semester focuses on argumentative reading and writing, as well as researched-based writing. Literary selections include short stories, nonfiction, poetry, drama, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate a speaker’s claim, rhetoric, and strategy, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.

11401 – ENGLISH IV COMPOSITION I
Required Grade 12
Semester, ½ credit
Prerequisite: English IA, IB, IIA, IIB, & IIIA, III B

English IV Composition integrates the extensive practice and refinement of the principles of writing and rhetoric through emphasis of the writing process. The curriculum focuses on the patterns of organization, development, and style expected in the modes of discourse to assist students in achieving the competence and performance levels required in college courses, business presentations, and technical reports. Class sessions consist of the review and strategic use
of the conventions of written language, the analysis and critique of student works and professional models, and workshops requiring writing. Accrued skills culminate in a district required persuasive/argumentative composition.

11401DC — DUAL CREDIT ENGLISH IV COMPOSITION I
Required Grade 12 Semester, ½ credit
Prerequisite: English IA, IB, IIA, IIB, & IIIA, IIIB, Overall English GPA of 3.0; 18 or higher on ACT English subtest. Fulfills English IV Comp requirement

3 credits at Lake Region State College (COMP 110)

Guided practice in college-level reading, writing, and critical thinking. Dual Credit Composition is an English class that emphasizes written communication. Students study and practice the principles of composition in order to learn how to express themselves effectively in writing. While the course is writing intensive, we also integrate examples of good writing to serve as catalysts for creative expression and to model good writing. In Dual Credit Composition, the emphasis is on writing descriptive and narrative prose with self-reflection.

11411DC — DUAL CREDIT ENGLISH IV COMPOSITION II
Grade 12 Semester, ½ credit
Prerequisite: English IA, IB, IIA, IIB, & IIIA, IIIB DC English IV Composition I, Overall English GPA 3.0; 18 or higher on ACT English subtest

3 credits at Lake Region State College (COMP 120)

Dual Credit Composition II (120) is an English class that emphasizes written communication. In this course, the student applies the skills and principles learned in Dual Credit Composition I (COMP 110), along with an introduction to expository writing, the development of research papers, argument, and literary criticism. Composition II will serve as an English elective for seniors who desire a head start on their college course work.

11402 — ENGLISH IV LITERATURE
Grade 12 Semester, ½ credit
Prerequisite English IA, IB, IIA, IIB, & IIIA, IIIB

English IV Literature fosters understanding of novels, dramas, short stories, poems, and nonfiction of Western civilization. Students examine and apply philosophy, political theory, history, psychology and mythology as tools to analyze the nature of personality, human motivation, responses to conflicts and crisis, problem solving, and search for identity. The course requires extensive, in-depth reading of literature and theory, as well as analytical papers on the literature.

11501 — SPEECH COMMUNICATIONS
Required in Grade 11 or 12 Semester, ½ credit

Speech Communications is designed to develop students’ confidence, poise, and analytical ability. Included in this performance/participation class are formal and informal speeches, group presentation, and studies in interpersonal communication. Speech communication enhances students’ ability to express themselves orally.

11501DC — DUAL CREDIT SPEECH
Grade 11 or 12 Semester, ½ credit
Prerequisite: Content Area GPA of 3.0, Fulfills Speech Communications requirement

The theory and practice of public speaking with emphasis on content, organization, language, delivery and critical evaluation of messages. Basic principles of speech from the viewpoint of composition and delivery. Emphasis on student performance stressing original thinking, effective organization and direct communication of ideas.

11601 — FILM STUDY
Grades 10-12 Semester, ½ credit
(Does not fulfill required English credit)
Literature and film are analogous in many ways (theme, plot, symbols, etc.). This course is designed to analyze modern film for its content, value, and significance. Technical aspects of filmmaking are also discussed.

**11602 – READING**  
*Grades 9*  
*Semester, ½ credit*  
*Recommendation: Teacher and Counselor recommendation*

Students will learn how to use a variety of reading techniques and skill building methods to benefit and improve their individual reading abilities. Emphasis will also be placed on how to read materials from a variety of different subject areas. This course may be repeated for credit and for as long as the teacher and the student agree it is necessary. Admittance to the course is on a limited basis, and all students will be recommended, as well as screened for admittance.

**11603 – CREATIVE WRITING**  
*Grades 9-12*  
*Semester, ½ credit*  
*(Does not fulfill required English credit)*

Students will develop and refine their creative skills in a writing workshop classroom. Various types of writing, including poetry and short stories as well as a number of writing techniques, will be studied.

**11605 – INNOVATIONS I**  
*Grades 10-12*  
*Semester, ½ credit*  
*(Does not fulfill required English credit)*

Innovations is a course where students will never ask, "When will we use this in real life?" Instead it offers real-life opportunities to apply school knowledge to the world around them in the form of writing, public speaking, creating and carrying out projects in the community/world. Students take the lead in this class, designing and learning from their project as they develop it.

**11606 – INNOVATIONS II**  
*Grades 10-12*  
*Semester, ½ credit*  
*(Does not fulfill required English credit) Prerequisite: Innovations I*

Innovations II takes the foundations built in Innovations I and offers real-life opportunities to apply school knowledge to the world, build on those skills in areas of your choosing, and learn from mentors outside of the classroom. Above all this class will be a place for students to participate in a collaborative and creative space in order to find interesting problems in the world and seek innovative ways to solve them.

**11610A – JOURNALISM I A**  
*Grades 9-12*  
*Semester, ½ credit*  
*(Does not fulfill required English credit)*

This course introduces the student to journalistic writing. Students will experience writing news stories, features, sports, reviews, editorials, and columns. Students will also gain instruction in journalistic writing, editing, and design layout.

**11610B – JOURNALISM I B**  
*Grades 9-12*  
*Semester, ½ credit*  
*Prerequisite: Journalism I A*  
*(Does not fulfill required English credit)*

This course introduces the student to journalistic writing. Students will experience writing news stories, features, sports, reviews, editorials, and columns. Students will also gain instruction in journalistic writing, editing, and design layout.

**11611A – JOURNALISM II A (Newspaper)**  
*Grades 10-12*  
*Semester, ½ credit*  
*Prerequisite: Journalism I A, Journalism I B*  
*(Does not fill English credit required)*

This course produces the school newspaper. In addition to writing, you will learn about layout and design.
This course produces the school newspaper. In addition to writing, you will learn about layout and design.

Students will be responsible for all aspects of yearbook publication. Students will study and write articles, summaries, reports, profiles, commentaries, letters, and editorials for publication. Students will also design layout pages using current technologies to include desktop publishing software. Digital photography will be introduced, as students will take pictures at various events during the year.

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writers purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing.

As this class is an alternative to English III (American Literature), so a focus of the writings will be on American authors and various genres they used to convey the American experience.

This college-level course is designed to develop advanced composition skills, to emphasize critical reading in a variety of literary genres, to analyze and apply techniques of literary criticism, and to develop individual writing styles appropriate for college-level writing. Students may elect to take an advanced placement test to gain college credit.
11801B – ADVANCED PLACEMENT LITERATURE & COMPOSITION B
Grade 12
Semester, ½ credit
Prerequisite: English I A/B, English II A/B, English III A/B,
or Advanced Placement Lang & Comp A/B,
Adv Placement Lit & Comp A
(Fulfills senior English requirement for literature and composition)

This college-level course is designed to develop advanced composition skills, to emphasize critical reading in a variety of literary genres, to analyze and apply techniques of literary criticism, and to develop individual writing styles appropriate for college-level writing. Students may elect to take an advanced placement test to gain college credit.

11901 – ENGLISH ASSISTANT
Semester, ½ Credit (S/U Grading)
Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
The Grand Forks School District requires that a student have three credits of mathematics. One of those credits must be in Algebra and the second one in Geometry or Informal Geometry. The Applied Mathematics course cannot be taken unless the student is a senior.

Any student enrolling in an enriched level course should realize that these courses are difficult and require a commitment on their behalf. They are meant to be challenging and will offer the best preparation for careers requiring a strong mathematics background. Students in these classes should have a scientific calculator and if possible a graphing calculator. The school will make available a classroom set of graphing calculators but it is most helpful if the students have their own for use at home.

All students enrolled in mathematics classes should have a scientific calculator in order to get the most out of their mathematics experience (at the Algebra II level and above, a graphing calculator is desirable). The Informal Geometry class is not ample preparation to ensure success in an Algebra II class. Students enrolling in a course at the Geometry level and above must be committed to working on a daily basis or they will experience difficulty in completing these courses satisfactorily.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
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<tr>
<td>½</td>
<td>12500A</td>
<td>Algebra I Enhancement A</td>
<td>Instructor Approval</td>
<td>9-12</td>
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<tr>
<td>½</td>
<td>12500B</td>
<td>Algebra I Enhancement B</td>
<td>Instructor Approval &amp; Algebra Enhancement A</td>
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<tr>
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<td>12501A</td>
<td>Introduction to Algebra I A</td>
<td>8th grade Math</td>
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<td>Introduction to Algebra I B</td>
<td>Introduction to Algebra I A</td>
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<tr>
<td>½</td>
<td>12502A</td>
<td>Conclusion to Algebra I A</td>
<td>Intro to Algebra I A &amp; B</td>
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<td>Conclusion to Algebra I B</td>
<td>Intro to Algebra I A &amp; B</td>
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<td>Algebra I A</td>
<td>8th grade Math, Algebra I A</td>
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<td>Algebra I B</td>
<td>8th grade Math, Algebra I A</td>
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<td>12508DC</td>
<td>DC College Algebra</td>
<td>Algebra 1, Geometry, Algebra 2, an overall GPA of 3.00 and a score of 22 or higher on the ACT mathematics subtest</td>
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<td>½</td>
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<td>Informal Geometry A</td>
<td>Algebra I A &amp; B or Conclusion A &amp; B</td>
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<td>Informal Geometry B</td>
<td>Algebra I A &amp; B or Conclusion A &amp; B, Informal Geometry A</td>
<td>10-12</td>
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<td>½</td>
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<td>Geometry A</td>
<td>Algebra I A &amp; B or Conclusion A &amp; B</td>
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<tr>
<td>½</td>
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<td>Geometry B</td>
<td>Algebra I A &amp; B or Conclusion A &amp; B, Geometry A</td>
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<tr>
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<td>Enriched Geometry A</td>
<td>Algebra I</td>
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<td>Enriched Geometry B</td>
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<td>Mathematical Modeling A</td>
<td>Algebra I A &amp; B, Geometry A &amp; B or Informal Geometry A &amp; B</td>
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<td>Algebra II A</td>
<td>Algebra I A &amp; B and Geometry A &amp; B or Informal Geometry A &amp; B and consent of instructor</td>
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<td>Algebra I A &amp; B, Geometry A &amp; B or Informal Geometry A &amp; B and consent of instructor, Algebra II A</td>
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<td>Algebra I, Enriched Geometry or Regular Geometry and consent of instructor, Enriched Algebra II A</td>
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<td>Applied Mathematics A</td>
<td>Senior, or junior with consent of instructor</td>
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<td>Applied Mathematics B</td>
<td>Senior, or junior with consent of instructor</td>
<td>11-12</td>
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<td>Regular Pre-Calculus A</td>
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<td>Regular Pre-Calculus B</td>
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<tr>
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<td>Enriched Pre-Calculus B</td>
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<td>AP Calculus A</td>
<td>Algebra I, Enriched Geometry A &amp; B, Enriched Algebra II A &amp; B, &amp; Enriched Pre-Calculus A &amp; B or Regular Pre Calculus A &amp; B with consent of instructor</td>
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<td>AP Calculus B</td>
<td>Algebra I, Enriched Geometry A &amp; B, Enriched Algebra II A &amp; B, &amp; Enriched Pre-Calculus A &amp; B or Regular Pre Calculus A &amp; B with consent of instructor, and AP Calculus A</td>
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<td>12901</td>
<td>Mathematics Assistant</td>
<td>Principal Approval</td>
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</table>

**12500A – ALGEBRA I ENHANCEMENT A**

Grades 9-12  
Semester, ½ credit (elective credit)

Prerequisite: Instructor Approval

This is an elective course targeting those students who have either failed or experienced significant difficulty with 8th grade mathematics. It is designed as a complement and support to the Algebra I course in which the student is concurrently enrolled. Enrollment requires consent of the instructor and is contingent upon test scores and academic records. This course reinforces and applies concepts from the Algebra I course through hands-on activities, problem solving, technology, pre- and re-teaching of skills, and homework support. (Does not count as one of the 3 required math credits needed for graduation).

**12500B – ALGEBRA I ENHANCEMENT B**

Grades 9-12  
Semester, ½ credit (elective credit)

Prerequisite: Instructor Approval, Algebra I Enhancement

This is the second semester of Algebra I Enhancement. It is designed as a complement and support to the Algebra I course in which the student is concurrently enrolled. This course reinforces and applies concepts from the Algebra I course through hands-on activities, problem solving, technology, pre- and re-teaching of skills, and homework support. (Does not count as one of the 3 required math credits needed for graduation).

**12501A – INTRODUCTION TO ALGEBRA I A**

Grades 9-12  
Semester, ½ elective credit

Prerequisite: Had difficulty with 8th grade Math or consent of instructor  
(Does not fulfill required Math credit)

This course is the first part of a two-year algebra course. It is a course designed for those students who have failed math in grade 8 or who are experiencing sufficient difficulty and need to be taught Algebra at a slower pace. This course does NOT meet the requirements of the high school math credits required by the district. Consent of the 8th grade mathematics instructor is required for enrollment in this course. Semester A of the course includes understanding and
applying foundational algebraic concepts, solving multi step equations, writing and solving proportions, unit conversions, and analysis of inequalities and their graphs. This course is a prerequisite for Introduction to Algebra 1 B.

**12501B – INTRODUCTION TO ALGEBRA I B**

Grades 9-12  
Semester, ½ elective credit

**Prerequisite:**  
Had difficulty with 8th grade Math or consent of instructor, Introduction to Algebra I A

(Does not fulfill required Math credit)

This course is the first part of a two-year algebra course. It is a course designed for those students who have failed math in grade 8 or who are experiencing sufficient difficulty and need to be taught Algebra at a slower pace. This course does NOT meet the requirements of the high school math credits required by the district. Consent of the 8th grade mathematics instructor is required for enrollment in this course. Semester B of the course includes writing and graphing functions, analysis of linear functions and their graphs, and data analysis/probability. Successful completion of this course will prepare a student for either Conclusion to Algebra I A or the regular Algebra I A course.

**12502A – CONCLUSION to ALGEBRA I A**

Grades 9-12  
Semester, ½ credit

**Prerequisite:** Introduction to Algebra I A & B

This course is the second part of the two-year algebra program and is to be taken by those students who have successfully completed Introduction to Algebra I B or who have failed the regular Algebra I course. Conclusion to Algebra I A is an algebra course which includes the following topics: algebraic properties, solving equations and inequalities, graphing and writing equations of lines, linear systems, and exponents. Successful completion of Conclusion to Algebra I A & B meets the requirements of the high school math credits required by the district.

**12502B – CONCLUSION TO ALGEBRA I B**

Grades 9-12  
Semester, ½ credit

**Prerequisite:** Introduction to Algebra I A & B

This course is the second semester of Conclusion to Algebra I and is to be taken by those students who have completed Conclusion to Algebra A. Introduction to Algebra I Conclusion B is an algebra course which includes the following topics: quadratics, radicals, polynomials, and statistics. Successful completion of Conclusion to Algebra I A & B meets the requirements of the high school math credits required by the district.

**12503A – ALGEBRA I A**

Grades 9-12  
Semester, ½ credit

**Prerequisite:** Completion of 8th grade Math

The study of algebra establishes the formal background of algebraic concepts and skills necessary for success in future mathematics classes and for application to real-world problem solving situations. Semester A topics include the use of patterns, order of operations, algebraic expressions, proportions, solving linear equations and inequalities, absolute value equations, an introduction to functions and function notation, a complete study of linear functions, and systems of linear equations.

**12503B – ALGEBRA I B**

Grades 9-12  
Semester, ½ credit

**Prerequisite:** Algebra I A

Semester B topics include systems of linear inequalities, exponents and exponential functions, operating on polynomials, factoring, solving, and graphing quadratics, simplifying square roots, and data analysis.

**12508DC – COLLEGE ALGEBRA**

Grades 11-12  
Semester, ½ credit

**Prerequisite:** Algebra I, Geometry, Algebra 2, an overall GPA of 3.0 and score of 22 or high on ACT math subtest.

College algebra includes relations and functions, equations and inequalities, complex numbers; polynomial, rational, exponential and logarithmic functions and systems of equations.

3 credits at Lake Region State College (Math 103)
12510A – INFORMAL GEOMETRY A
Grades 10-12  
Semester, ½ credit
Prerequisite: Algebra I A & B or Conclusion to Algebra I A & B and teacher recommendation

Informal Geometry is designed for those students who would probably have difficulty with the regular course in Geometry. Any student earning a grade of a “D” in Algebra I should take Informal Geometry. This course emphasizes intuitive development of proof rather than formal development. This class does not meet the requirements necessary for enrollment in Algebra II class. Semester A includes studying universal vocabulary of geometry, properties of segments and angles, analysis of parallel and perpendicular lines, triangle relationships, congruent triangles, and quadrilaterals.

12510B – INFORMAL GEOMETRY B
Grades 10-12  
Semester, ½ credit
Prerequisite: Algebra I A & B or Conclusion to Algebra I A & B and teacher recommendation and Informal Geometry A.

Semester B includes studying similar polygons (primarily triangles), perimeter and area of triangles and quadrilaterals, circumference and area of circles, interior and exterior angle measures of polygons, surface area and volume of solids, trigonometry, segments, lines, angles and arcs related to a circle, equations of circles, and probability.

12511A – GEOMETRY A
Grades 9-12  
Semester, ½ credit
Prerequisite: Algebra I A & B or Conclusion to Algebra I A & B  
Recommendation: At least a “C” average in Algebra I B or at least a “B” in Conclusion to Algebra I B

Geometry is the study of visual patterns, measurement, and the applications of properties of various two and three-dimensional shapes to the real world. Semester A of the course investigates, analyzes, applies, and justifies the relationships found in basic geometric figures, parallel and perpendicular lines, triangles, transformations, congruence, and similarity. A good understanding of concepts from Algebra I is required for Regular Geometry. This class is a prerequisite for Geometry B.

12511B – GEOMETRY B
Grades 9-12  
Semester, ½ credit
Prerequisite: Geometry A  
Recommendation: At least a “C” average in Geometry A

Geometry is the study of visual patterns, measurement, and the applications of properties of various two and three-dimensional shapes to the real world. Semester B of the course investigates, analyzes, applies, and justifies the relationships found in quadrilaterals and circles; right triangle trigonometry; perimeter, circumference, area, surface area, and volume; logic and probability. A thorough understanding of concepts from Geometry A is required for Geometry B. This class is a prerequisite for Algebra II.

12512A – ENRICHED GEOMETRY A
Grades 9-11  
Semester, ½ credit
Prerequisite: Algebra I

Enriched Geometry is an elective class for recommended students who have completed and had good success in Algebra I. This is an accelerated class designed for students with high math ability recommended for this class by their Algebra I teacher. Enriched Geometry is the study of two or three-dimensional figures. Logical reasoning patterns are developed by exploring the relationships between these figures. Topics in semester A include the fundamentals of geometry (basic definitions and properties), reasoning skills and formal proof introduction, relationships involving parallel and perpendicular lines, extensive study of triangles including congruence and inequalities, special parts of triangles, and quadrilaterals. A review of algebraic skills is intermingled to help prepare students for enriched algebra II.
12512B – ENRICHED GEOMETRY B  
Grades 9-11  
Semester, ½ credit  
Prerequisite: Algebra I and Enriched Geometry A

The 2nd semester of enriched geometry is a continuation of semester A. Thorough and successful completion of Enriched Geometry A is required. Topics include proportionality and similarity of figures, right triangle relationships and trigonometry, transformation and symmetry, circles and relationships of chords, secants, and tangents, area and volume, and probability. Algebraic skills continue to be emphasized throughout the semester.

12515A – INTERMEDIATE ALGEBRA A  
Grades 11-12  
Semester, ½ credit  
Prerequisite: Algebra I A and B, Informal Geometry A & B  
or Geometry A and B with consent of instructor

This course is designed to be a bridge between geometry and algebra II. This class is designed to rebuild and strengthen the students basic algebra base after completing Algebra I (or Introduction to Algebra I and Conclusion to Algebra I) and informal geometry. The course is designed to fill in gaps in algebra I skills to prepare students to be successful in algebra II. Topics covered in semester A include orders of operations, fractions, linear equations and systems of equations.

12515B – INTERMEDIATE ALGEBRA B  
Grades 11-12  
Semester, ½ credit  
Prerequisite: Algebra I A and B, Informal Geometry A and B  
(or Geometry A and B with consent of instructor),  
Mathematical Modeling A

Second semester of math modeling focuses on introducing students to concepts taught in the algebra II curriculum. Students will explore applications of linear relationships, graphing and solving quadratics by multiple methods, polynomials, exponential functions and rules, logarithms, and trigonometry. Upon successful completion of Math Modeling B students should enroll in Algebra II.

12504A – ALGEBRA II A  
Grades 10-12  
Semester, ½ credit  
Prerequisite: Algebra I A and B and Geometry A and B  
(or Informal Geometry A and B with consent of instructor)

Algebra II is the next step after Algebra I and Geometry, and before a higher-level math. Algebra II A begins with a review of the concepts of Algebra I and then moves into new concepts, which are reinforced throughout the year. Semester one puts an emphasis on algebraic expressions, linear systems, inequalities, quadratic transformations, and polynomial functions. To be successful, students need a firm foundation in Algebra I and excellent work habits in order to be successful in this course. This course is recommended for all college bound-students.

12504B – ALGEBRA II B  
Grades 10-12  
Semester, ½ credit  
Prerequisite: Algebra I A and B, Geometry A and B  
(or Informal Geometry A and B with consent of instructor, and Algebra II A)

Algebra II B continues with reinforcing the idea of transformations and expands to include statistics, trigonometry, exponentials, logarithms, and rational functions. Students need a firm foundation in Algebra II part A and excellent work habits in order to be successful in this course. This course is recommended for all college-bound students.

12505A - ENRICHED ALGEBRA IIA  
Grades 9-11  
Semester, ½ credit  
Prerequisite: Algebra I and Enriched Geometry A & B  
or Regular Geometry A & B and consent of instructor
This course is designed for students with an excellent background in Algebra and Geometry who wish to expand their math knowledge by solving equations, inequalities and graphing functions. Other topics explored in this first semester include matrices, linear functions including linear programming, quadratic functions and relations, polynomials, polynomial functions and advanced graphing techniques through the use of the TI-84 graphing calculator.

12505B - ENRICHED ALEGEBRA II B
Grades 9-11
Prerequisite: Algebra I, Enriched Geometry A & B or Regular Geometry A & B and consent of instructor, and Enriched Algebra II A

This course is the second semester of Enriched Algebra II and is designed for students with an excellent background in Algebra and Geometry who wish to expand their math knowledge. Topics covered in this semester include inverses, radicals, exponentials, logarithms, rational expressions, conic sections, probability & statistics, triangle and circular trigonometry, and advanced graphing techniques through the use of the TI-84 graphing calculator. This class will cover those topics necessary for students to continue in the enriched sequence of math courses following this course, Enriched Pre-Calculus and Advanced Placement Calculus.

12520A – APPLIED MATHEMATICS A
Grade 11-12
Prerequisite: Any Senior, or a junior with consent of instructor.

Applied Mathematics can serve, along with Algebra 1, as one of the three mathematics credits required by the school district. Students who experienced difficulty in Algebra I and Geometry can also take Applied Mathematics for a third mathematics credit. However, this course will not fulfill the math admissions requirement for most four-year colleges.

Restricted to seniors, this class will focus on basic math survival skills and essential consumer topics such as personal finance, buying food, shopping for clothes, managing a household, buying and maintaining a car, and working with food. Students will be placed in this course on the basis of interest, prior mathematics grades, and counselor and teacher recommendation.

12520B – APPLIED MATHEMATICS B
Grade 11-12
Prerequisite: Any Senior, or a junior with consent of instructor.

Students will be placed in this course on the basis of interest, prior mathematics grades, and counselor and teacher recommendation. Topics include home improvement, traveling, budgeting your money, banking and investing, paying taxes, and preparing for careers.

12601A – REGULAR PRE-CALCULUS A
Grades 11-12
Prerequisite: Algebra I A & B, Geometry A & B, and Enriched or Regular Algebra II A & B

Pre-Calculus is a course designed to strengthen concepts of the relationship between Geometry and Algebra II. It will also acquaint students with more advanced topics on analysis of functions and their graphs, polynomial and rational functions (including solving higher-order equations), exponential and logarithmic functions, and an introduction to trigonometry. Texas Instruments graphing calculators will be employed throughout this course to explore the above topics in greater detail; therefore, students are strongly encouraged to purchase their own graphing calculator. The course is designed and intended for students who want to broaden their understanding of Algebra and other Pre-Calculus math concepts, before entering college mathematics or calculus.

12601B – REGULAR PRE-CALCULUS B
Grades 11-12
Prerequisite: Algebra I A & B, Geometry A & B, Enriched or Regular Algebra II A & B, and Regular Pre-Calculus A

Pre-Calculus is a course designed to strengthen concepts of the relationship between Geometry and Algebra II. It will also acquaint students with more advanced topics in trigonometry, vectors, matrices, sequences and series, conic sections, polar coordinates, and introduce the limit concepts of calculus. Texas Instruments graphing calculators will be employed throughout this course to explore the above topics in greater detail; therefore, students are strongly
encouraged to purchase their own graphing calculator. The course is designed and intended for students who want to broaden their understanding of Algebra and other Pre-Calculus math concepts, with emphasis on trigonometry, before entering college mathematics or calculus.

12602A – ENRICHED PRE-CALCULUS A
Grades 11-12 Semester, ½ credit
Prerequisite: Algebra I, Enriched Geometry A & B or Regular Geometry A & B and Enriched Algebra II A & B or Regular Algebra II A & B with consent of instructor

The first semester of Enriched Pre-Calculus is designed to begin to prepare college-bound students for a first course in calculus. The topics presented are prerequisites for calculus. The presentation of these topics develops an intuitive base and some of the working tools for the study of more advanced mathematics. The format and development provide a transition between high school and college texts. Advanced topics such as limits, polynomial functions, exponential functions, logarithmic functions, right-triangle trigonometry, unit-circle trigonometry, inverse trigonometric functions, and graphing techniques will be covered. The TI-84 graphing calculator will be employed throughout this course to explore the above topics in greater detail.

12602B – ENRICHED PRE-CALCULUS B
Grades 11-12 Semester, ½ credit
Prerequisite: Algebra I, Enriched Geometry A & B or Regular Geometry A & B and Enriched Algebra II A & B or Regular Algebra II A & B with consent of instructor, and Enriched Pre-Calculus A

The second semester of Enriched Pre-Calculus is designed to finalize the preparation of college-bound students for a first course in calculus. Topics included in this second semester include conic sections, vectors, sequence and series, and calculus topics, such as rate of change and integrals. The TI-84 graphing calculator will be employed throughout this course to explore the above topics in greater detail. The course is intended for students wanting the best mathematics background possible in order to pursue post-secondary fields of study requiring a strong mathematics background.

12605A – CALCULUS A Grades 11-12, Semester, ½ credit
Grades 11-12 Semester, ½ credit
Prerequisite: Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus or Regular Pre-Calculus A & B

Regular Calculus is designed to develop the students’ understanding of the major concepts of calculus (limits, derivatives, indefinite integrals and definite integrals). It is intended to be challenging and demanding and will fulfill the content of the College Board AB Calculus syllabus. Students enrolling in this class should have a thorough knowledge of pre-calculus mathematics, including algebra, analytic geometry, trigonometry, and elementary functions (linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise defined). Technology is an integral part of this course, and students are encouraged to have a graphing calculator available for their use throughout the semester. First semester topics include limits, differentiation, applications of differentiation

12605B – CALCULUS B Grades 11-12, Semester, ½ credit
Grades 11-12 Semester, ½ credit
Prerequisite: Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus or Regular Pre-Calculus A & B and Regular Calculus A

The second semester of Regular Calculus includes the discussion and study of integral calculus. Both basic and advanced techniques for integration are investigated in order to prepare students for the national Advanced Placement Calculus exam in May, for which students can earn college credit. Technology is an integral part of Regular Calculus B, and students are encouraged to have a graphing calculator available for their use throughout the semester.

12610 – DISCRETE MATHEMATICS
Grades 11-12 Semester, ½ credit
Prerequisite: Algebra I A & B, Geometry A & B, & Algebra II A & B
This course focuses on the most current topics in mathematics. Less theoretical and more practical in its approach, this course offers insight into the math at work in a digital world. In Discrete Mathematics, students play with problems in business management, computer science, social science, and other fields. The course is intended for seniors and juniors wanting to take more mathematics before college and will help prepare them for careers in business, computer science, education, law, science, engineering, the social sciences, and mathematics. Topics include graph theory (networks and circuits), scheduling, voting, fair division, codes, and game theory. This course may be taken at the same time as pre-calculus or calculus.

12611 – PROBABILITY & STATISTICS
Grades 11-12
Semester, ½ credit
Prerequisite: Algebra I A & B, Geometry A & B, & Algebra II A & B

This course is designed to meet the needs of college-bound students who are interested in careers in psychology, sociology, computer science, biology, nursing, business, linguistics, economics, political science, education, pre-medicine, pre-law, criminal justice, or mathematics. Even those students who will not specifically take a post secondary statistics course would benefit from such a course, as citizens today are constantly bombarded with statistical information. Topics will include collection and organization of data, measures of central tendency and variation, elementary probability theory, the binomial distribution, normal distributions, sampling distributions and the central limit theorem, confidence intervals, hypothesis testing, regression and correlation, chi-square, and F distributions. Students can expect to use computers and graphing calculators with statistical capabilities on a regular basis. It is strongly recommended that students have their own TI-83 or TI-84 graphing calculator. This course may be taken at the same time as a pre-calculus or calculus course.

12615A – ADVANCED PLACEMENT STATISTICS A
Grades 10-12
Semester, ½ credit
Prerequisite: Algebra I A & B, Geometry A & B, & Algebra II A & B

This course is designed to offer a continued study of quantitative thinking in the areas of statistics and probability. It covers the topics needed for the American College Board AP Statistics exam. The purpose of AP statistics is to introduce students to the major concepts and tools of collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: (1) exploring data: describing patterns and departures from patterns, (2) sampling and experimentation: planning and conducting a study, (3) anticipating patterns: exploring random phenomena using probability and simulation, and (4) statistical inference: estimating population parameters and testing hypotheses. Technology is an integral part of this course, and students are encouraged to have a graphing calculator available for their use throughout the semester. This course reflects the content of a typical introductory college level statistics course.

12615B – ADVANCED PLACEMENT STATISTICS B
Grades 10-12
Semester, ½ credit
Prerequisite: Algebra I A & B, Geometry A & B, & Algebra II A & B, Advanced Placement Statistics A

This semester continues to expose students to the four broad conceptual themes: (1) exploring data: describing patterns and departures from patterns, (2) sampling and experimentation: planning and conducting a study, (3) anticipating patterns: exploring random phenomena using probability and simulation, and (4) statistical inference: estimating population parameters and testing hypotheses. Technology is an integral part of this course, and students are encouraged to have a graphing calculator available for their use throughout the semester. Students who successfully complete the course and AP exam may receive credit, advanced placement or both for a one-semester introductory college statistics course.

12801A – ADVANCED PLACEMENT CALCULUS A
Grades 11-12,
Semester, ½ credit,
Prerequisite: Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus or Regular Pre-Calculus A & B with consent of instructor

Calculus is one of the stellar human accomplishments of all time. As such, it represents a coherent body of knowledge that enables real-life physical situations to be modeled using the tools of calculus. Advanced Placement Calculus A consists of a semester of work in calculus comparable to courses in college and universities. It is expected that students
who take this AP course will seek credit or placement, or both, from institutions of higher learning. This course is
designed to develop the students’ understanding of the major concepts of calculus (limits, derivatives, indefinite integrals
and definite integrals). It is intended to be challenging and demanding and will fulfill the content of the College Board AB
Calculus syllabus. This course emphasizes instruction of calculus with the “Rule of Four”: concepts, results and
problems are expressed geometrically, numerically, analytically, and verbally. Students enrolling in this class should
have a thorough knowledge of pre-calculus mathematics, including algebra, analytic geometry, trigonometry, and
elementary functions (linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and
piecewise defined). Technology is an integral part of this course, and students are encouraged to have a graphing
calculator available for their use throughout the semester. First semester topics include limits, differentiation, and an
introduction to integration.

12801B – ADVANCED PLACEMENT CALCULUS B
Grades 11-12.                        Semester, ½ credit
Prerequisite: Algebra I, Enriched Geometry A/B, Enriched
            Algebra II A & B, Enriched Pre-Calculus or
            Regular Pre-Calculus A/B with consent of instructor,
            and Advanced Placement Calculus A

The second semester of AP Calculus continues the discussion and study of integral calculus. Both basic and advanced
techniques for integration are investigated in depth in order to prepare students for the national Advanced Placement
Calculus exam in May, for which students can earn college credit. Technology is an integral part of Advanced Placement
Calculus B, and students are encouraged to have a graphing calculator available for their use throughout the semester.

12901 – MATHEMATICS ASSISTANT
            Semester, ½ Credit (S/U Grading)
Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
The courses offered in science are intended to meet the needs of all types of students at all ability levels and at a variety of grade levels. One credit must be earned in physical science and one credit in a biology course. All science courses at Grand Forks Public Schools are lab sciences.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
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<tbody>
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<td>½</td>
<td>13101A</td>
<td>Physical Science A</td>
<td>None</td>
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<tr>
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<td>13101B</td>
<td>Physical Science B</td>
<td>Physical Science A</td>
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<td>½</td>
<td>13201A</td>
<td>Basic Biology A</td>
<td>Physical Science A/B; Recommend Teacher/Counselor approval</td>
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<td>½</td>
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<td>Basic Biology B</td>
<td>Physical Science A/B; Basic Biology A; Recommend Teacher/Counselor approval</td>
<td>10-11</td>
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<tr>
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<td>13202A</td>
<td>Biology A</td>
<td>Physical Science A/B</td>
<td>10-11</td>
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<tr>
<td>½</td>
<td>13202B</td>
<td>Biology B</td>
<td>Physical Science A/B; Biology A</td>
<td>10-11</td>
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<td>Advanced Placement Chemistry A</td>
<td>Algebra I, Earth Science</td>
<td>9-12</td>
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<td>½</td>
<td>13600B</td>
<td>Advanced Placement Chemistry B</td>
<td>Prerequisite: Algebra I, Earth Science, AP Environmental Science A</td>
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<td>Physical Science A/B, Biology A/B&amp; Algebra I, Geometry, Recommend: Algebra II or enrolled</td>
<td>11-12</td>
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<td>½</td>
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<td>Chemistry B</td>
<td>Physical Science A/B, Biology A/B&amp; Algebra I, Geometry, Chemistry A, Recommend: Algebra II or enrolled</td>
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<tr>
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<td>Enriched Chemistry A</td>
<td>Physical Science A/B, Geometry &amp; Algebra I Recommend: Algebra II</td>
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<tr>
<td>½</td>
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<td>Enriched Chemistry B</td>
<td>Physical Science A/B, Geometry &amp; Algebra I Recommend: Algebra II</td>
<td>9-12</td>
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<td>Physical Science A/B, Biology A/B or Basic Biology A/B</td>
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<td>11-12</td>
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<td>Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B; Algebra II Recommend Geometry or Advanced Math course</td>
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<td>Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B; Algebra II; Physics A Recommend Geometry or Advanced Math course</td>
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<td>Physical Science A/B, Biology A/B or Basic Biology A/B</td>
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<td>Physical Science A/B, Biology A/B or Basic Biology A/B, Field Biology A</td>
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<td>Applied Biology/Chemistry A</td>
<td>Physical Science A/B, Basic Biology A/B and/or Biology A/B, with recommendation by teacher/counselor</td>
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<td>Applied Biology/Chemistry B</td>
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<td>Dual Credit Biology A</td>
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<tr>
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<td>Dual Credit Biology B</td>
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<td>Grade</td>
<td>Credits</td>
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<td>Algebra I, Earth Science</td>
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<td>1305B</td>
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<td>13901A</td>
<td>Science Lab Technician A</td>
<td>Chemistry A/B or Biology A/B; teacher approval</td>
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<td>13901B</td>
<td>Science Lab Technician B</td>
<td>Chemistry A/B or Biology A/B; Science Lab Technician A; teacher approval</td>
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<td>Field Biology Technician B</td>
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13101A – PHYSICAL SCIENCE A  
Grade 9  
Semester, ½ credit  
Prerequisite: None

Physical Science A provides an exploration of the basic concepts and principles of physics. Students will study matter, energy, motion, and the laws of physics in the course. The course includes activities such as manipulating equipment, observing, measuring, classifying, and interpreting data leading the student toward the achievement of scientific knowledge. Physical Science A enables students to realize that many technological advances are applications of basic scientific principles.

13101B – PHYSICAL SCIENCE B  
Grade 9  
Semester, ½ credit  
Prerequisite: Physical Science A

Physical Science B provides an exploration of the basic concepts and principles of chemistry. Students will learn about the atom, its structure, periodic table, bonding and chemical reactions. The course includes activities such as manipulating equipment, observing, measuring, classifying, and interpreting data leading the student toward the achievement of scientific knowledge. Physical Science B enables students to realize that many technological advances are applications of basic scientific principles.

13201A – BASIC BIOLOGY A  
Grades 10-11  
Semester, ½ credit  
Prerequisite: Physical Science A/B; Recommend: Teacher/Counselor Approval

Basic Biology A is a general course, concerned mainly with giving the student an understanding of the basic concepts of Biology. In this subject, we will review and enhance all of the concepts introduced in life science. The emphasis in this class is on being able to apply biological concepts to future life experiences. The student will get an overview of cells structures, genetics, and the chemistry of life. Students enrolled in this class may have experienced difficulty in previous science classes.

13201B – BASIC BIOLOGY B  
Grades 10-11  
Semester, ½ credit  
Prerequisite: Physical Science A/B, Basic Biology A, Recommend: Teacher/Counselor Approval

Basic Biology B is a general course, concerned mainly with giving the student an understanding of the basic concepts of Biology. In this subject, we will review and enhance all of the concepts introduced in life science. The emphasis in this class is on being able to apply biological concepts to future life experiences. The student will get an overview of human anatomy/physiology, zoology, botany and ecology. Students enrolled in this class may have experienced difficulty in previous science classes.

13202A – Biology A  
Grade 10-11  
Semester, ½ credit  
Prerequisite: Physical Science A/B

Biology A is the branch of science devoted to life. In this course the student will study the relationships between organisms and their environments and the molecular and cellular nature of life. Some areas of study may include:
cell structure, cell dynamics, genetics, and general science skills. Laboratory activity is an integral part of this course.

13202B – Biology B  
Grade 10-11  
Prerequisite: Physical Science A/B; Biology A  
Semester, ½ credit  
Biology B is the branch of science devoted to life. Some areas of study may include: ecology, evolution, biotechnology, human biology, vertebrates and invertebrates, and plants. Laboratory activity is an integral part of this course.

13600A – Advanced Placement Chemistry A  
Grades 11-12  
Prerequisite: Chemistry I  
Semester, ½ credit  
The Advanced Placement Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Created by the AP Chemistry Development Committee, the course curriculum is compatible with many Chemistry courses in colleges and universities.

Students who take AP Chemistry will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. First semester subjects will include Stoichiometry, Types of Chemical Reactions, Thermochemistry, Bonding, and Properties of Solutions.

13600B – Advanced Placement Chemistry B  
Grades 11-12  
Prerequisite: Chemistry I, Advanced Placement Chemistry A  
Semester, ½ credit  
The AP Chemistry course is designed to be taken only after the successful completion AP Second semester subjects will include Chemical Kinetics, Equilibrium, Acids & Bases, Electrochemistry, Organic Chemistry and Amino Acids.

13601A – Chemistry A  
Grades 11-12  
Prerequisite: Physical Science A/B, Biology A/B & Alg. I  
Geometry, Recommend: Algebra II or enrolled  
Semester, ½ credit  
Chemistry A is designed to help students better understand and appreciate the importance of chemistry and how it affects their everyday lives while giving them a preparation for college science courses. It is a systematic approach to problem solving that involves both thinking and doing. As much time as possible is spent on laboratory investigations in order to help the student appreciate and understand the laboratory and the experimental nature of science. Topics included: Properties of Matter, Atomic Structure, The Periodic Table, Chemical Bonding, and Chemical Reactions.

13601B – Chemistry B  
Grades 11-12  
Prerequisite: Physical Science A/B, Biology A/B & Alg. I  
Geometry, Chemistry A, Recommend: Algebra II or enrolled  
Semester, ½ credit  
Chemistry B is designed to help students better understand and appreciate the importance of chemistry and how it affects their everyday lives while giving them a preparation for college science courses. It is a systematic approach to problem solving that involves both thinking and doing. As much time as possible is spent on laboratory investigations in order to help the student appreciate and understand the laboratory and the experimental nature of science. Topics included: The Mole Concept, Mathematical Analysis of Matter, States of Matter, Acids & Bases, Hydrocarbons, and Nuclear Chemistry.

13602A – Enriched Chemistry A  
Grades 9-12  
Prerequisite: Physical Science A/B, Geometry, Algebra I  
Recommend Algebra II (or presently enrolled),  
Semester, ½ credit
This course is a math intensive, fast-paced, rigorous course designed to help students better understand and appreciate the importance of chemistry and how it affects their everyday lives while giving them a preparation for college science courses. Enriched chemistry is more in-depth than General Chemistry and also includes more topics. It is a systematic approach to problem solving that involves both thinking and doing. As much time as possible is spent on laboratory investigations in order to help the student appreciate and understand the laboratory and the experimental nature of science. Topics included: Properties of Matter, Atomic Structure, The Periodic Table, Chemical Bonding, Chemical Reactions and Chemical Quantities. This class is a prerequisite for AP Biology.

13602B-- ENRICHED CHEMISTRY B
Grades 9-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Geometry, Algebra I
Enriched Chemistry A, Recommend: Algebra II
(or presently enrolled),

This course is a math intensive, fast-paced, rigorous course designed to help students better understand and appreciate the importance of chemistry and how it affects their everyday lives while giving them a preparation for college science courses. Enriched chemistry is more in-depth than General Chemistry and also includes more topics. It is a systematic approach to problem solving that involves both thinking and doing. As much time as possible is spent on laboratory investigations in order to help the student appreciate and understand the laboratory and the experimental nature of science. Topics included: Stoichiometry, States of Matter, Gas Laws, Thermochemistry, Acids & Bases, Organic Chemistry, and Nuclear Chemistry. This class is a prerequisite for AP Biology.

13603A – GEOLOGY A
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Biology A/B
or Basic Biology A/B

In Geology A, the formation and identification of rocks and minerals are studied. Plate tectonics is covered along with earthquakes, volcanoes, mass wasting and mountain building processes. Weathering processes and soil formation are also taught during this semester.

13603B– GEOLOGY B
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Biology A/B or
or Basic Biology A/B, Geology A

In Geology B, topics related to water and its’ effect on earth are studied including; ground water, river systems, glaciers, and meteorology. Fossils and their place in geologic time are also taught in this semester.

13604A – PHYSIOLOGY/ANATOMY A
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Biology A/B, Chemistry A/B,

Physiology/Anatomy A is designed for the student who is interested in further study of the human body. The course will assist in preparation for college-level courses in the medically related fields and will aid the students in better understanding of functions of the human body. Topics covered include: Medical Terminology, Introduction to Anatomy, Cells, Biochemistry, Integument, Skeletal System/Joints & The Muscular System.

13604B– PHYSIOLOGY/ANATOMY B
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Biology A/B, Chemistry A/B, Physiology/Anatomy A

Physiology/Anatomy B is designed for the student who is interested in further study of the human body. The course will assist in preparation for college-level courses in the medically related fields and will aid the students in better understanding of functions of the human body. Topics covered include: Neurology, Special Senses, Digestive System, Cardiovascular System, Lymphatic System, Respiratory System, Urinary System & Endocrine System.
13605A – PHYSICS A
Grades 11-12
Prerequisite: Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B, Algebra II, Recommendations: Geometry, concurrently enrolled in an advanced math

Physics A deals with matter, energy, and the conservation of energy. Specific topics include the study of motion, forces, work & energy, collisions, and fluid dynamics. Physics is intended not only for the college-bound students planning to enter science, mathematics, engineering, or medicine, but also for students who wish to better understand nature’s physical laws and thus be better able to cope with our increasingly technical society.

13605B– PHYSICS B
Grades 11-12
Prerequisite: Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B Algebra II, Physics A; Recommendations: Geometry, concurrently enrolled in an advanced math

Physics B deals with matter, energy, and the conservation of energy. Specific topics include the study of thermodynamics, waves, sound, light, electricity, magnetism, atomic physics and astronomy. Physics is intended not only for the college-bound students planning to enter science, mathematics, engineering, or medicine, but also for students who wish to better understand nature’s physical laws and thus be better able to cope with our increasingly technical society.

13606A – FIELD BIOLOGY A
Grades 11-12
Prerequisite: Physical Science A/B, Basic Biology A/B or Biology A/B

Field Biology A is for students with a serious interest in plants, wildlife, and the natural environment. The course is career orientated for wildlife management, game warden, environmental engineering, and horticultural degrees. Fieldwork concentrates on plants, birds, and mammals. Classroom work will concentrate on background information, plant, bird and mammal identification and ecological principles.

13606B – FIELD BIOLOGY B
Grades 11-12
Prerequisite: Physical Science A/B, Basic Biology A/B or Biology A/B, Field Biology A

Field Biology B is for students with a serious interest in plants, wildlife, and the natural environment. The course is career orientated for wildlife management, game warden, environmental engineering, and horticultural degrees. Fieldwork concentrates on weather, clouds, and stars. Classroom work will concentrate on background information, meteorology, astronomy, fish, landscaping, and taxidermy work.

13607A – APPLIED BIOLOGY/CHEMISTRY A
Grades 11-12
Prerequisite: Physical Science A/B, Basic Biology A/B or Biology A/B and/or recommended by counselor and teacher

Applied Biology/Chemistry A is a general course, concerned with providing the student an understanding of chemistry and biology. The units provide foundations for real world applications through inquiry and hands on activities assisting in the development of personal skills. Some areas of study include solutions, human systems, bridge building, organic compounds, forensics, microbes, horticulture, and science and society.
13607B– APPLIED BIOLOGY/CHEMISTRY B
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Basic Biology A/B
or Biology A/B, Applied Biology/Chemistry A
and/or recommended by counselor and teacher

Applied Biology/Chemistry B is a general course, concerned with providing the student an understanding of chemistry and biology. The units provide foundations for real world applications through inquiry and hands on activities assisting in the development of personal skills. Some areas of study include solutions, human systems, bridge building, organic compounds, forensics, microbes, horticulture, and science and society.

13801A – ADVANCED PLACEMENT BIOLOGY A
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Enriched Chemistry A/B

Advanced Placement Biology A is designed to be the equivalent to a college introductory course in terms of textbook used, range and depth of topics covered, the kind of laboratory work done, and the time and effort required of students. Areas of study include: biochemistry, cellular biology, photosynthesis and cellular respiration, cell reproduction and heredity. Students may elect to take an advanced placement exam to gain college credit.

13801B – ADVANCED PLACEMENT BIOLOGY B
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Enriched Chemistry A/B

Advanced Placement Biology B is designed to be the equivalent to a college introductory course in terms of textbook used, range and depth of topics covered, the kind of laboratory work done, and the time and effort required of students. Areas of study include: genetics, evolution, phylogenetic classification of organisms, ecology, and human biology. Students may elect to take an advanced placement exam to gain college credit.

13801DCA – DUAL CREDIT BIOLOGY A
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Enriched Chemistry A/B, 3.0 cumulative GPA

General Biology (BIOL 150) 4 credits at Lake Region State College

Basic concepts in biology, general chemistry, biochemistry, cellular biology, membrane transport, phylogenetic systems of plants and animal classification, photosynthesis and cellular respiration, enzymes, energy, and cell reproduction. The course is broadly designed to satisfy the requirements for lecture/laboratory curricula in biological pre-professional careers. Three hours per week laboratory included.

13801DCB – DUAL CREDIT BIOLOGY B
Grades 11-12 Semester, ½ credit
Prerequisite: Physical Science A/B, Enriched Chemistry A/B, 3.0 cumulative GPA and Dual Credit, Biology A

General Biology (BIOL 151) 4 credits at Lake Region State College

Study of cell reproduction, genetics, botany, and zoology. The basic laws of genetics, techniques, and applications are studied and applied to all organisms. Botany involves study of photosynthesis, phylogenetic classification of plants, structure, function, and ecology of higher plants. Zoology encompasses the classification of all invertebrates and vertebrates with detailed examination of their structures, functions, and ecology. Three hours per week laboratory included.

13805A - Advanced Placement Environmental Science A
Grades 10-12 Semester, ½ credit
Prerequisite: Algebra I, Earth Science
The Advanced Placement Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the risks associated with these problems, and examine alternative solutions for resolving or preventing them.

Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Topics covered will include Earth Systems and Resources, The Living World, Population, Land and Water Use, Energy Resources and Consumption, Pollution, and Global Change.

13805B - Advanced Placement Environmental Science B
Grades 10-12                      Semester, ½ credit
Prerequisite:  Algebra I, Earth Science, AP Environmental Science A

The Advanced Placement Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the risks associated with these problems, and examine alternative solutions for resolving or preventing them.

Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Topics covered will include Earth Systems and Resources, The Living World, Population, Land and Water Use, Energy Resources and Consumption, Pollution, and Global Change.

13901A – SCIENCE LAB TECHNICIAN A
Grades 11-12                      Semester, ½ credit
Prerequisite:  Chemistry A/B (for chemistry tech), Biology A/B (for biology tech) and teacher approval .

In this course, the student will assist the science teacher in the preparation and disposal of materials for laboratory exercises. The student must be able to prepare solutions as described by the instructor. The lab tech will also assist the teacher in the lab and check lab reports.

13901B – SCIENCE LAB TECHNICIAN B
Grades 11-12                      Semester, ½ credit
Prerequisite:  Chemistry A/B (for chemistry tech), Biology A/B (for biology tech) ; Science Lab Technician A, teacher approval .

In this course, the student will assist the science teacher in the preparation and disposal of materials for laboratory exercises. The student must be able to prepare solutions as described by the instructor. The lab tech will also assist the teacher in the lab and check lab reports.

13902A – FIELD BIOLOGY TECHNICIAN A
Grades 11-12                      Semester, ½ credit
Prerequisite:  Field Biology A/B & approval of the Field Biology instructor

The student will assist the classroom teacher in laboratory and field trip exercises. The student must take the same-cored curriculum as the first year student, however, with a higher level of understanding and comprehension.

13902B – FIELD BIOLOGY TECHNICIAN B
Grades 11-12                      Semester, ½ credit
Prerequisite:  Field Biology A/B & approval of the Field Biology instructor; Field Biology Technician A

The student will assist the classroom teacher in laboratory and field trip exercises. The student must take the same-cored curriculum as the first year student, however, with a higher level of understanding and comprehension.
SOCIAL STUDIES

Three social studies credits are needed for graduation. The usual sequence is to take the required courses as follows:

◊ Global Education A & B (1 credit) as a freshman or sophomore.
◊ United States History A & B, AP United States A & B History or Dual Credit United States History A & B (1 credit) as a junior.
◊ Government, AP Government or Dual Credit Government (1/2 credit) and Economics or AP Economics (1/2 credit) as a senior.

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14101A – GLOBAL EDUCATION A
Grades 9

In order to understand today’s world, students must learn about the geographical and historical backgrounds of major world regions, as well as the ever-increasing inter-dependence of people and the accelerating globalization of culture. Global Education combines the historical background, geographical setting, economic and political background, traditions, values, and beliefs of the major regions of the world into one course of study. Regions of study are: Asia, the Middle East and North Africa, Russia, and Europe. Considerable attention is also given to current world problems. This course satisfies the World History requirement for graduation.
14101B – GLOBAL EDUCATION B
Grades 9
Semester, ½ credit

In order to understand today’s world, students must learn about the geographical and historical backgrounds of major world regions, as well as the ever-increasing inter-dependence of people and the accelerating globalization of culture. Global Education combines the historical background, geographical setting, economic and political background, traditions, values, and beliefs of the major regions of the world into one course of study. Regions of study are: Asia, the Middle East and North Africa, Russia, and Europe. Considerable attention is also given to current world problems. This course satisfies the World History requirement for graduation.

14301B – GLOBAL EDUCATION B
Grade 11
Prerequisite: Global Education A/B

This course provides students with a short review of events leading up to and including the Civil War. The course then develops a detailed chronological approach beginning with Reconstruction, and ending in the late 20th Century. A variety of topics will be covered using a wide variety of instructional methods. An emphasis will be made to correlate what is being taught to what is happening today, bringing relevancy to the course.

14301A– UNITED STATES HISTORY A
Grade 11
Semester, ½ credit
Prerequisite: Global Education A/B

This course provides students with a short review of events leading up to and including the Civil War. The course then develops a detailed chronological approach beginning with Reconstruction, and ending in the late 20th Century. A variety of topics will be covered using a wide variety of instructional methods. An emphasis will be made to correlate what is being taught to what is happening today, bringing relevancy to the course.

14301B – UNITED STATES HISTORY B
Grade 11
Semester, ½ credit
Prerequisite: Global Education A/B

This course provides students with a short review of events leading up to and including the Civil War. The course then develops a detailed chronological approach beginning with Reconstruction, and ending in the late 20th Century. A variety of topics will be covered using a wide variety of instructional methods. An emphasis will be made to correlate what is being taught to what is happening today, bringing relevancy to the course.

14801A– ADVANCED PLACEMENT UNITED STATES HISTORY A
Grade 11
Semester, ½ credit
Prerequisite: Global Education A/B

The advanced placement program in American History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in American History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those of full year introductory college courses. First semester covers U. S History to the Civil War. Second semester covers Civil War to the present day.

14801B– ADVANCED PLACEMENT UNITED STATES HISTORY B
Grade 11
Semester, ½ credit
Prerequisite: Global Education A/B

The advanced placement program in American History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in American History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those of full year introductory college courses.

14801DCA – DUAL CREDIT UNITED STATES HISTORY A
Grade 11
Semester, 1/2 credit
Prerequisite: Global Education A/B, GPA will be considered

3 credits HIST 103, HIST 104 Lake Region State College

This course will be a combination of two college classes, HIST 103 (US to 1877) and HIST 104 (US since 1877) from Lake Region State College. In the first semester, students will study early colonial America, The Revolution era, growth of the United States, sectionalism leading to the Civil War, and ending with Reconstruction. During the second semester, students will look at the major economic, political, intellectual, and social developments that took place in the United States since the end of Reconstruction. Emphasis will be placed on the study of the 20th and 21st Centuries,
especially World War I, the Roaring Twenties, the Great Depression, World War II, the Cold War, Reagan Era, and ending with the current world issues and conflicts.

14801DCB – DUAL CREDIT UNITED STATES HISTORY B
Grade 11
Prerequisite: Global Education A/B, GPA will be considered

3 credits, HIST 104 Lake Region State College

This course will be HIST 103 (US to 1877) and HIST 104 (US since 1877) from Lake Region State College. In the 2nd semester, students will look at the major economic, political, intellectual, and social developments that took place in the United States since the end of Reconstruction. Emphasis will be placed on the study of the 20th and 21st Centuries, especially World War I, the Roaring Twenties, the Great Depression, World War II, the Cold War, Reagan Era, and ending with the current world issues and conflicts.

14401 – AMERICAN GOVERNMENT
Grade 12
Prerequisite: Global Education A/B, US History A/B

American Government studies the politics and structure of government in the United States. The study will focus on the Constitution, political campaigns, voting behavior, and the organization of the national and state governments. Current issues will also be emphasized as they relate to and illustrate the political process.

14802 – ADVANCED PLACEMENT GOVERNMENT
Grade 12
Prerequisite: Global Education A/B, US History A/B

This advanced placement course is designed to be the equivalent of a college course and prepares the student for the AP exam and potential college credit. The course will cover the topics typical of a college course including a study of the Constitution, political beliefs and behavior, political parties, interest groups, the mass media in politics, civil rights and liberties, public policy, and the institutions of government. This course will provide students with a more complete and in depth study of the values of our free society and its institutions.

14401DC – DUAL CREDIT AMERICAN GOVERNMENT
Grade 12
Prerequisite: Global Education A/B, US History A/B, GPA will be considered

3 Credits POLS 115 Lake Region State College

This course will discover the purpose, value, and operation of government as practiced in the United States. The era of globalization and interdependence of citizens and nations across the world is a modern reality that affects our government and nation. We will probe the relationship between individual freedoms and personal security in the United States. The relationship between individual freedom and social equality as reflected in government policies will be examined. The students will have an understanding of the three branches of our federal government and their responsibilities to the people they govern.

14402 – ECONOMICS
Grade 12
Prerequisite: Global Education A/B, US History A/B

Economics is the study of how individuals and societies utilize scarce resources in an attempt to best meet its wants and needs. The course will cover topics such as supply and demand, competition and business structure, the financial markets, government spending and taxation, stabilization policies, and the role of the United States in the world markets and global economy. Current events will be incorporated when appropriate.

14803 – ADVANCED PLACEMENT ECONOMICS
Grade 12
Prerequisite: Global Education A/B, US History A/B

Semester, ½ credit
The purpose of an advanced placement course in macroeconomics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price determination, and also develops student's familiarity with economic performance measures, economic growth, and international economics. This course offers students an opportunity to earn college credit in high school and will fulfill the high school economics requirement.

14601 – GLOBAL EDUCATION II
Grades 10-12 Semester, ½ credit
Prerequisite: Global Education A/B

This course allows students to apply the principles of global worldview developed in the first Global Education course. Global Education II follows an issues oriented format based on the world events and trends. Issues could include human rights, the global economy, the Pacific Rim, terrorism, hunger, and poverty. Topics will be added or deleted as events occur.

14602 – NORTH DAKOTA STUDIES
Grades 9-12 Semester, ½ credit

It is the aim of this course to help students develop an understanding and appreciation for North Dakota. The geography and history of North Dakota will be reviewed, with the emphasis focused on the study of government, economics and a historical analysis from statehood to present. Related topics will include renewable and nonrenewable resources, water, tourism, population, hunting and conservation, agriculture, current issues and North Dakota’s important role in the global economy.

14603 – THE GREAT WARS
Grades 10-12 Semester, ½ credit
Prerequisite: Global Education A/B

This course is a comprehensive study of the two largest conflicts of the 20th Century. Using a variety of instructional methods, the course covers the causes and effects of WWI and WWII. The first part of the course focuses on the causes of the “Great War” rooted in European colonialism and made worse through the trench warfare, culminating in the Treaty of Versailles. The second part of the class concentrates on locations and events from both the Eastern and Western fronts of WWII concluding with the surrender of Japan.

14611 – PSYCHOLOGY I
Grades 10-12 Semester, ½ credit

Psychology I is an introductory course in the science of human behavior. It is a study of the psychological and environmental factors, which influence the behavior of the individual. Specific areas of study include the history of Psychology, personality, learning, development, abnormal behavior, and treatment of psychological disorders. Due to the nature of this course, Psychology is useful to most students regardless of future plans.

14621 – SOCIOLOGY
Grades 11-12 Semester, ½ credit

Sociology is the study of human and social relationships, which exist within, and impact upon a society. This course will provide students with an understanding of the various social problems and how they impact upon the social system. Specific topics of study include culture, social structure, stratification within society, deviance, criminology, social problems, the family and its role within society, and collective behavior. Due to the nature of this course, Sociology is beneficial for most students regardless of future plans.

14804A – ADVANCED PLACEMENT PSYCHOLOGY A
Grades 10-12 Semester, ½ credit
Prerequisite: Sophomores with approval

The Advanced Placement Psychology course will introduce students to the scientific study of the behavior and mental processes of human beings and animals. The course will cover the following subject areas: history of psychology, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, development, personality, abnormal behavior, treatment of psychological disorders, and social behavior. This
is a course that will require students to meet the same demands as an introductory course at the college level. The computer will be used for research and experimental simulations.

**14804B – ADVANCED PLACEMENT PSYCHOLOGY B**
Grades 10-12  
Semester, ½ credit

**Prerequisite: AP Psychology A**

The Advanced Placement Psychology course will introduce students to the scientific study of the behavior and mental processes of human beings and animals. The course will cover the following subject areas: history of psychology, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, development, personality, abnormal behavior, treatment of psychological disorders, and social behavior. This is a course that will require students to meet the same demands as an introductory course at the college level. The computer will be used for research and experimental simulations.

**14631 – JAPANESE STUDIES**
Grades 9-12  
Semester, ½ credit

Offered at Red River High School Only

This course is designed to meet the needs of students interested in the study of Japanese culture. Students will have the opportunity to explore Japanese culture and customs that will enhance their knowledge of multi-cultural disciplines. Topics will include a study of cultural, economic, political, historical and social aspects of Japanese culture. This course will make students aware of the variety of global connections in both the business and cultural world between major world powers. This course will employ a variety of instructional methods such as: presentations, research, Internet activities, test assessments and other methods.

**14805A – Advanced Placement World History A**
Grades 9-12  
Semester, ½ credit

**Prerequisite: Permission required for freshman**

**This course satisfies the freshman Global Education requirement and can be used as an elective credit for students that have completed Global Education as a freshman.**

The AP World History course focuses on developing students’ understanding of the world history from approximately 8000 BCE to the present. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interaction of cultures; state building, expansions, and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania.

**14805B – Advanced Placement World History B**
Grades 9-12  
Semester, ½ credit

**Prerequisite: Permission required for freshman, A/P World History A**

**This course satisfies the freshman Global Education requirement and can be used as an elective credit for students that have completed Global Education as a freshman.**

The AP World History course focuses on developing students’ understanding of the world history from approximately 8000 BCE to the present. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interaction of cultures; state building, expansions, and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania.

**14901 – SOCIAL STUDIES ASSISTANT**

Semester, ½ Credit (S/U Grading)
The objective of health and physical education curriculum is to promote an understanding and appreciation of the importance of physical activity and the concepts of personal health in the development of the whole person. Key components are an emphasis on efficiency of movement, body control, and consistency within an exercise program so as to learn and enjoy lifetime skills and activities.

1 ½ credits of Physical Education and ½ credit in Health are required for graduation. The usual sequence is to take the required courses as follows:

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<th>Course</th>
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<td>Grade 9</td>
<td>Foundations for Fitness - #15105</td>
<td>½ credit</td>
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<tr>
<td>Grade 10</td>
<td>Health - #15202 One course #15601 through #15635</td>
<td>½ credit</td>
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<td></td>
<td>One course #15601 through #15635</td>
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15001 – ADAPTIVE PHYSICAL EDUCATION
Grades 10-12
Semester, ½ credit
Prerequisite: Foundations of Fitness

Class is designed for students with special needs who qualify and are on an IEP.

15105 – FOUNDATIONS OF FITNESS
Grade 9
Semester, ½ credit
The Foundations of Fitness course is a comprehensive concept based program. It is designed to help students take responsibility for their own activity, fitness, and health and to prepare them to be physically active and healthy throughout their adult lives. Students will work in activity and classroom settings. Assessment of personal fitness, the development of a personal activity plan, aquatics, individual, dual and team activities are major components of the course.

15202 – HEALTH
Grade 10-12
Semester, ½ credit

Health provides practical information for students to use as a base for their health decisions. The course objective is to assist students in understanding the six components of health. Within the curriculum are opportunities for students to learn information, assess own behaviors and apply the healthiest solutions. Some of the units covered are: the importance of health, mental health issues, depression, nutrition, stress management, suicide prevention, medicines, alcohol, drug use/abuse, relationships, human sexuality, CPR & AED training and sexually transmitted infections/diseases.

15601 – PERSONAL WELLNESS
Grades 10-12
Semester, ½ credit
Prerequisite: Foundations of Fitness

This course is an introduction to basic strength training, aerobics, yoga, walking/jogging, and water aerobics. Students will work independently, set personal goals, and revise their personal activity plan.

15602 – STRENGTH AND CONDITIONING
Grades 10-12
Semester, ½ credit
Prerequisite: Foundations of Fitness

This course is designed to teach strength training, stretching, cardio-respiratory activities and agility exercises. Students will learn proper lifting techniques, improve strength, increase flexibility, agility, and improve conditioning. Activities include functional strength exercises, using equipment such as the selectorized machines, dumbbells, and free weights. Cardio-respiratory and flexibility training will be used to enhance strength development.

15606 – TEAM SPORTS
Grades 10-12
Semester, ½ credit
Prerequisite: Foundations of Fitness

Students will participate in activities designed using the Sports Education Model. This class will include floor hockey, football, basketball, and combative games. Additional activities may include lacrosse, team handball, baseball, and aquatic games. Students will work cooperatively to develop individual skill, in addition to offensive and defensive strategies.

15612 – ADVANCED STRENGTH AND CONDITIONING
Grades 10-12
Semester, 1/2 credit
Prerequisite: Foundations of Fitness, Strength and Conditioning and/or Instructor Approval

This course is more advanced than Strength and Conditioning. Exercises will include functional strength exercises, selectorized machines, dumbbells, and free weights. Students will also learn Olympic lifts and basic plyometric training principles to increase fitness. Cardio-respiratory conditioning and flexibility training will be used to enhance strength development.

15622 – ADVANCED AQUATICS
Grades 10-12
Semester, ½ credit
Prerequisite: Foundations of Fitness and Instructor Approval. Offered at Red River High School Only

Students will have the opportunity to receive Red Cross Lifesaving and Water Safety certification. Activities will include advanced swimming strokes and basic water safety and rescue skills.
15623 – AEROBICS/GROUP EXERCISE
Grades 10-12 Semester, ½ credit
Prerequisite: Foundations of Fitness

This course is more advanced than Personal Wellness. Activities with increased intensity such as kickboxing, Pilates, floor aerobics, stability ball, Tae Bo, step aerobics, and Bosu training will be learned. Students will work independently and as a group to improve fitness, set personal and class goals, and revise their personal activity plan.

15624 – SPORTS AND GAMES
Grades 10-12 Semester, ½ credit
Prerequisite: Foundations of Fitness

Students will participate in activities designed using the Sports Education Model. This class will include volleyball, badminton, softball, basketball and soccer. Additional activities may include team handball, aquatic games, broomball, pickle ball, and eclipse ball. Students will work cooperatively to develop individual skill, in addition to offensive and defensive strategies.

15625 – DANCE
Grades 10-12 Semester, ½ credit
Prerequisite: Foundations of Fitness

This course aims to develop the student's ability to create, perform, and appreciate dance. Students will learn a variety of styles and genres. Special emphasis will be to challenge and develop movement techniques, rhythm, and coordination.

15626 – BREATHE & STRETCH AND CARDIO TRAINING
Grades 10-12 Semester, ½ credit
Prerequisite: Foundations of Fitness

This course is designed to improve the student’s muscular strength, endurance, flexibility, and cardio-respiratory health. Activities will include walking, jogging, yoga, and the use of cardio equipment.

15627 – ADVANCED PHYSICAL TRAINING
Grades 10-12 Semester, ½ credit
Prerequisite: Foundations of Fitness

Activities will be advanced in nature and is designed for athletes, military bound students or those who want a physical challenge. Activities will include strength training, plyometrics, balance training, circuit training, and cardio-respiratory training.

15635 – GENERAL PHYSICAL EDUCATION
Grades 10-12 Semester, ½ credit
Prerequisite: Foundations of Fitness

Students will learn concepts that promote physical fitness. Activities may include team, dual, and individual sports and aquatics. Students will develop social skills as they interact with other classmates in cooperative and competitive activities.

15635 – UNIFIED PHYSICAL EDUCATION
Grades 10-12 Semester, ½ credit
Prerequisite:
Peer Partner: Foundations of Fitness, Application, Recommend former PE teacher & approval from Unified PE teacher
Student w/Disability: Consult or direct service minutes for adapted PE (IEP), Approval from Unified PE teacher
Unified Physical Education brings together students with and without disabilities in an inclusive setting where all students are challenged to improve their skills and physical fitness level. Curriculum would consist of a variety of lifetime activities and sports skills. In this class, peer partners will participate in class and assist the teacher through modeling, teaching, and coaching functioning as both teammates and partners. This course fulfills a portion of the required 1.5 PE credits for graduation.

15901 – PHYSICAL EDUCATION ASSISTANT  
Semester, ½ credit (S/U Grading)

Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
BUSINESS EDUCATION

Courses in the Business Education Department are designed to educate students for and about business. Education for business focuses on the development of occupational knowledge, attitudes, and skills essential for a business career. Education about business assists all students in understanding business skills related to business occupations and in personal planning and decision-making.

Business education courses appeal to students with a variety of career interests, abilities, and educational goals. Students who enroll in business education courses find them to be extremely practical, with emphasis on computer technology and education for employment. Explore the many opportunities available and set your sights on a more productive and successful future.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>½</td>
<td>16603</td>
<td>Keyboarding</td>
<td>Counselor and Teacher Approval</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16605</td>
<td>Microsoft Office Essentials</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16610</td>
<td>Personal Finance</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>1</td>
<td>16611</td>
<td>Accounting I</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>1</td>
<td>16612</td>
<td>Accounting II</td>
<td>Accounting I</td>
<td>11-12</td>
</tr>
<tr>
<td>½</td>
<td>16615</td>
<td>Personal &amp; Business Law</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>1</td>
<td>16618</td>
<td>Video Production I</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>1</td>
<td>16619</td>
<td>Video Production II</td>
<td>Video Production I</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16620</td>
<td>+Microsoft Word</td>
<td>Microsoft Office Essentials recommended</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16621</td>
<td>Web Design</td>
<td>Microsoft Office Essentials recommended</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16622</td>
<td>+Microsoft Excel</td>
<td>MS Word or Microsoft Office Essentials</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16623</td>
<td>+Microsoft PowerPoint &amp; Publisher</td>
<td>MS Word or Microsoft Office Essentials</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16625</td>
<td>Multimedia</td>
<td>Microsoft Office Essentials recommended</td>
<td>9-12</td>
</tr>
<tr>
<td>1/2</td>
<td>16901</td>
<td>Business Education Assistant</td>
<td>Principal Approval</td>
<td>-</td>
</tr>
</tbody>
</table>

+ Certification available.

16603 – KEYBOARDING
Grades 9-12
Semester, ½ credit
Prerequisite: Counselor and Teacher Approval

Keyboarding is designed as an introductory course to help students improve their alphabetic, numeric, and symbolic touch-typing skills, while enhancing their accuracy and speed development. Students will learn basic features of the word processing software to give them a greater comfort level with computers. Course content includes the keying of basic applications such as letters, memorandums, outlines, reports and tables.

16605– MICROSOFT OFFICE ESSENTIALS
Grades 9-12
Semester, ½ credit

Microsoft Office Essentials is a course which allows students to develop advanced practices, and enhance their skills in word processing, spreadsheets, presentation, and database software using Microsoft Office (WORD, EXCEL, and POWERPOINT). Designed for students who want an introductory, yet solid foundation in this integrated software package, this course is good for both college preparation and personal use. It will include development of formatting skills for basic business documents.

16610 – PERSONAL FINANCE
Grades 9-12
Semester, ½ credit

Personal Finance is a learning experience that involves business activities such as banking, accounting, money management, and other economic concepts. Students will explore issues of ethics, integrity, and confidentiality as they
relate to the business environment. Real-life situations would include: payroll, taxes, checking accounts, savings and investments plans, automobile/housing, insurance, budgeting, and proper credit use. Problems will be solved through the use of calculators and computer related software.

16611 – ACCOUNTING I
Grades 10-12
Full year, 1 credit

Accounting I is a preparatory class designed to provide students with a thorough background in basic accounting procedures. This class prepares students to understand the basic concepts necessary to manage the finances, sales, and expenses of a business. Accounting I students will learn about journals, general ledgers, automated accounting systems, balance sheets, income statements, and payroll systems for both a proprietorship and a corporation. This course is recommended for students wanting an introductory foundation in bookkeeping for a business and is good for both college preparation and personal use.

16612 – ACCOUNTING II
Grades 11-12
Full year, 1 credit
Prerequisite: Accounting I

Accounting II is designed as a continuation of the study of accounting principles for those interested in businesses and retail college degrees. Students will develop and demonstrate skills on the computer. Also, advanced accounting principles will be presented including depreciation, inventory, accruals, deferrals, notes, and tax related forms.

16615 – PERSONAL & BUSINESS LAW
Grades 10-12
Semester, ½ credit

Personal & Business Law I is designed to provide students with the opportunity to study the requirements of the laws which are enforced upon individuals and businesses. Topics covered include court systems, contract requirements, felonies and misdemeanors, torts and crimes, and types of business organization. Speakers and field trips are incorporated into the class.

16618 – VIDEO PRODUCTION I
Grades 9-12
Full year, 1 credit

This is a first-level course designed to introduce students to good video knowledge base and operation of video production equipment. Emphasis is placed on proper use and application of communication technology to achieve specific objectives. Students are actively involved in both field and studio productions with a variety of purposes. The student will learn how to operate TV cameras, audio equipment, video-switching and processing & editing equipment, and recorders.

16619 – VIDEO PRODUCTION II
Grades 10-12
Full year, 1 credit
Prerequisite: Video Production I

This course provides students with the opportunity to build on the skills learned in Video Production I. Emphasis is placed on direction and production using program proposals, scripts, and story boards to produce refined professional productions.

MICROSOFT OFFICE SPECIALIST PROGRAM

This program provides the opportunity for students to take one, two, or three classes designed to prepare students to take the Microsoft Office Specialist (MOS) exams.

<table>
<thead>
<tr>
<th>Course</th>
<th>MOS Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Word</td>
<td>Word</td>
</tr>
<tr>
<td>Microsoft Excel</td>
<td>Excel</td>
</tr>
<tr>
<td>Microsoft PowerPoint &amp; Publisher</td>
<td>PowerPoint</td>
</tr>
</tbody>
</table>

Upon passing the exam, students are then certified as a Microsoft Office Specialist for that particular area. Being a Microsoft Office Specialist provides a valuable industry credential that proves the student has the application skills required by employers.

16620 – MICROSOFT WORD
Grades 9-12
Semester, ½ credit
Prerequisite: Microsoft Office Essentials recommended
This course continues instruction and practice in document composition, formatting, proofreading, and editing skills, which will improve efficiency and productivity. This course also will teach the advanced components and applications of the program to provide an expert level in this program. Students enrolled in this course may obtain the Microsoft Certified Application Specialist in Word to certify their skills for industry and to obtain advanced career placement opportunities.

16621 – WEB DESIGN
Grades 9-12 Semester, ½ credit
Prerequisite: Microsoft Office Essentials recommended

Introduces students to a variety of ways to create and maintain web pages. The students will focus on the overall production processes with particular emphasis on design elements involving layout, navigation, and interactivity. The basics of web design programming languages and web design 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). Careers in web design are explored and students are provided with opportunities to increase their communication, teamwork, and critical thinking skills to be able to design, inform and be effective.

16622 – MICROSOFT EXCEL
Grades 9-12 Semester, ½ credit
Prerequisite: MS Word or Microsoft Office Essentials recommended

Students will use the operating system and spreadsheet software to analyze business trends and solve problems for business and personal use. This course will develop skills in designing worksheets, writing formulas, analyzing data, charting data, collaborating, managing data, pivot charts/tables, macros and web pages. Students enrolled in this course may obtain the Microsoft Certified Application Specialist in Excel to certify their skills for industry and to obtain advanced career placement opportunities. Outlook is the personal/business organizer, which performs e-mail, calendar, collaborations and many other related communication needs.

16623 – MICROSOFT POWERPOINT AND PUBLISHER
Grades 9-12 Semester, ½ credit
Prerequisite: MS Word/ Microsoft Office Essentials recommended

Students will use the presentation software, PowerPoint, to create colorful and effective business presentations. Students will earn advanced features (e.g. video, web pages, hyperlinks, action buttons, customization features, etc) of the presentation software and how to present materials correctly to diversified audiences. Students enrolled in this course may obtain the Microsoft Certified Application Specialist in PowerPoint to certify their skills for industry and to obtain advanced career placement opportunities.

Microsoft Publisher teaches students the process of creating a document that looks professionally designed and printed by using desktop publishing software. This includes sizing and inserting photos, graphics and line drawings to the text copy. Some of the documents students will produce include newsletters, business cards, advertisements, brochures, flyers, menus, catalogs, and other materials that utilize different types of print.

16625 – MULTIMEDIA
Grades 9-12 Semester, ½ credit
Prerequisite: Microsoft Office Essentials recommended

This course will provide students the opportunity to use their digital images and videos to create meaningful documentation and production. This course examines the use of software to create images, logos, backgrounds, and control buttons for digital display in multimedia and Internet applications. Students will learn image-editing, animations, file compression, digital audio/video editing, and planning for multimedia applications.

16901 – BUSINESS EDUCATION ASSISTANT
Grades 9-12 Semester, ½ Credit (S/U Grading)
Prerequisite: Principal Approval
Develop the technical and interpersonal skills and knowledge pre-arranged by instructor and student. Provide assistance to the instructor as needed. Perform office tasks and additional operations where needed. Students would create memos, lessons, databases, filing, and other basic office procedures. The student needs principal approval before registering for this class.

**MARKETING EDUCATION**

The Marketing Education program provides students with instruction in retailing, marketing, management and entrepreneurship. This along with the supervised work experience, working in the school store, computer simulations, and DECA activities makes this program one that might be just for you.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>½</td>
<td>16602</td>
<td>Introduction to Marketing</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>1</td>
<td>16630</td>
<td>Marketing I</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>1</td>
<td>16631</td>
<td>Marketing II</td>
<td>Marketing I or instructor approval</td>
<td>11-12</td>
</tr>
<tr>
<td>½ or 1</td>
<td>16632</td>
<td>Model School Store</td>
<td>Enrolled or completion of Marketing II</td>
<td>11-12</td>
</tr>
<tr>
<td>½/1</td>
<td>16902</td>
<td>Marketing Education Assistant</td>
<td>Principal Approval</td>
<td>-</td>
</tr>
</tbody>
</table>

**16602 – INTRODUCTION TO MARKETING**

Grade 9-12  

Introduction to Marketing & Business is designed as an introductory class on the basic concepts of business and marketing as it relates to our society and us. Students will learn about the fundamental business activities and factors affecting business, basic marketing strategies, develop verbal and written communication skills, understand job-seeking strategies and career planning. DECA is the student organization affiliated with this class.

**16630 – MARKETING I**

Grades 10-12  

Marketing I deals with the fundamentals of a broad range of topics including: advertising, pricing, promotion, human relations, communications, retailing, market research, technical sales and leadership skills. Through the use of computer simulations and class projects students will develop a better understanding of the marketing activities. Throughout the course, students are presented problem-solving situations in which they must use academic and critical-thinking skills. Marketing I also benefits those students planning on attending college by giving them a solid business background. DECA is the student organization affiliated with this course.

**16631 – MARKETING II**

Grades 11-12  

Prerequisite: Enrolled in or completion of Marketing I or Instructor approval

Marketing II furthers students understanding and skills in various marketing functions. This course will emphasize business management and entrepreneurship and all students will complete a start-up business plan. DECA Chapter and School Store activities are an integral part of this course, along with computerized business simulations.

**16632 – MODEL SCHOOL STORE**

Grades 11-12  

Prerequisite: Enrolled in or completion of Marketing II or instructor approval

Students gain practical experience by performing all necessary duties associated with the school store.

**16902 – MARKETING EDUCATION ASSISTANT**

Semester, ½ Credit (S/U Grading)

Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
INFORMATION TECHNOLOGY

The nature of work and life has changed with rapid technological growth. Labor reports point to the fact that over 90% of high growth jobs will require technology fluency. This means students need to have technology competencies beyond word processing.

Students need to prepare themselves to be network savvy, have technology troubleshooting abilities, and engage in learning and keeping up with technological advances. Women and minorities are under-represented in this field. North Dakota’s successful progress into the Informational Economy hinges heavily on the preparation and skill of our students and future workforce.

Some of these courses provide opportunities to more specific IT certification programs.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>½</td>
<td>16640</td>
<td>Introduction to Computing Essentials</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16641</td>
<td>+Computer Hardware &amp; Operating Systems I</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16641DC</td>
<td>+Dual Credit Computer Hardware &amp; Operating Systems I</td>
<td>Overall 3.0 GPA</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16642</td>
<td>+Computer Hardware &amp; Operating Systems II</td>
<td>Computer &amp; Hardware Operating Systems I</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16642DC</td>
<td>+Dual Credit Computer Hardware &amp; Operating Systems II</td>
<td>Overall 3.0 GPA, Computer Hardware &amp; Operating System I</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16645</td>
<td>+Networking Essentials</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16645DC</td>
<td>+Dual Credit Networking Essentials</td>
<td>Overall 3.0 GPA</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16647</td>
<td>Cybersecurity Essentials</td>
<td>Networking Essentials</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16647DC</td>
<td>Dual Credit Cybersecurity Essentials</td>
<td>Networking Essentials</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16648</td>
<td>Programming Essentials I</td>
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</tr>
<tr>
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<td>16649</td>
<td>Programming Essentials II</td>
<td>Programming Essentials I</td>
<td>10-12</td>
</tr>
<tr>
<td>½ or 1</td>
<td>16910</td>
<td>Technology Help Desk Internship</td>
<td>Instructor Permission</td>
<td>11/12</td>
</tr>
</tbody>
</table>

+ Certification Available

16640 – INTRODUCTION TO COMPUTING ESSENTIALS
Grades 9-12

Introduction to Computing Essentials is an exploratory level course that provides students to an exposure to careers and issues related to the emerging area of information technology. Students will gain hands-on experience in three major IT areas, including: Networking, Computer Troubleshooting, and Programming/Computer Science.

16641 – COMPUTER HARDWARE & OPERATING SYSTEMS I
Grades 10-12

Computer Hardware and Operating Systems I introduces basic skills and safety procedures required to become an A+ Certified Technician. Emphasis will be on skills needed to build, upgrade, configure, and troubleshoot computers, peripherals, and operating systems. Internet resources are an integral part of instruction, troubleshooting, and research in the classroom. The work-based strategy appropriate for this course is job shadowing.

16641DC – DUAL CREDIT COMPUTER HARDWARE & OPERATING SYSTEMS I
Grades 10-12

3 Credits (CIS 128 Microcomputer Hardware) at Lake Region State College

Computer Hardware and Operating Systems I introduces basic skills and safety procedures required to become an A+ Certified Technician. Emphasis will be on skills needed to build, upgrade, configure, and troubleshoot computers, peripherals, and operating systems. Internet resources are an integral part of instruction, troubleshooting, and research in the classroom. The work-based strategy appropriate for this course is job shadowing.
16642 – COMPUTER HARDWARE & OPERATING SYSTEMS II  
Grades 10-12  
Semester, ½ credit  
Prerequisite: Computer Hardware & Operating Systems I  

Computer Hardware and Operating Systems II offers advanced hands-on training and theory to enhance skills introduced in Computer Engineering I. New topics include printers, portable systems, networks, Internet, and customer interaction. Course content follows industry guidelines for A+ Certification. Work-based strategies appropriate for this course are job shadowing, internship, cooperative education, and apprenticeship.

16642DC – DUAL CREDIT COMPUTER HARDWARE & OPERATING SYSTEMS II  
Grades 10-12  
Semester, ½ credit  
Prerequisite: Computer Hardware & Operating Systems I  

3 Credits (CIS 129 Microcomputer Hardware) at Lake Region State College  

Computer Hardware and Operating Systems II offers advanced hands-on training and theory to enhance skills introduced in Computer Engineering I. New topics include printers, portable systems, networks, Internet, and customer interaction. Course content follows industry guidelines for A+ Certification. Work-based strategies appropriate for this course are job shadowing, internship, cooperative education, and apprenticeship.

16645 – NETWORKING ESSENTIALS  
Grades 10-12  
Semester, ½ credit  

Networking Essentials covers basic networking concepts within the context of home and small business networks. Students will develop hands-on networking skills and understand the role networks play in our lives. Through interactive, multimedia content, lab activities, and multi-industry case studies, this course introduces students to networking careers and prepares them for further study. Major units include, planning and installing real network equipment, troubleshooting network connectivity, recognizing and mitigating security threats, configuring basic IP and sharing services.

16645DC – DUAL CREDIT NETWORKING ESSENTIALS  
Grades 10-12  
Semester, ½ credit  

3 Credits (CIS 224 Networking I) at Lake Region State College  

Networking Essentials covers basic networking concepts within the context of home and small business networks. Students will develop hands-on networking skills and understand the role networks play in our lives. Through interactive, multimedia content, lab activities, and multi-industry case studies, this course introduces students to networking careers and prepares them for further study. Major units include, planning and installing real network equipment, troubleshooting network connectivity, recognizing and mitigating security threats, configuring basic IP and sharing services.

16647 – CYBERSECURITY ESSENTIALS  
Grades 10-12  
Semester, ½ credit  
Prerequisite: Networking Essentials  

The Cybersecurity Essentials course develops basic understanding of information and network security. The course introduces students to characteristics of cybercrime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical and professional skills to pursue careers in cybersecurity. Major units include, implementing procedures to protect data confidentiality and integrity, configuring security controls on networks, servers and workstations, understanding security principles and policies that comply with cyber security laws.

16647DC – DUAL CREDIT CYBERSECURITY ESSENTIALS  
Grades 10-12  
Semester, ½ credit  
Prerequisite: Networking Essentials  

3 Credits (CIS 141 Introduction to Cybersecurity) at Lake Region State College  

The Cybersecurity Essentials course develops basic understanding of information and network security. The course introduces students to characteristics of cybercrime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical
and professional skills to pursue careers in cybersecurity. Major units include, implementing procedures to protect data confidentiality and integrity, configuring security controls on networks, servers and workstations, understanding security principles and policies that comply with cyber security laws.

16648 – PROGRAMMING ESSENTIALS I
Grades 10-12 Semester, ½ credit

Basic programming concepts are presented which are transferable to other programming languages. Foundational concepts and fundamentals of computer programming including logic, design, coding, structure, and controls are addressed. Careers in programming are explored and students are provided with opportunities to increase their communications, teamwork, and critical thinking skills. Business and technical projects are used to develop programming skills.

16649 – PROGRAMMING ESSENTIALS II
Grades 10-12 Semester, ½ credit
Prerequisite: Programming Essentials I

This course will build upon the fundamental programming concepts learned in Programming Essentials I. Crucial programming skills of logic, design, coding, structure, and controls are expanded and enhanced. Using Visual Basic .NET, students will learn about arrays, classes, bubble sorts, file streams, inheritance and polymorphism. Students will create advanced programming projects including MDI applications and ASP .NET applications working with database management and SQL features. This course will also present units on JAVA and C++. Within each unit of the respective language, students will be introduced how to use conditional control structures, data types, and object oriented development.

16910 – TECHNOLOGY HELP DESK INTERNSHIP
Grades 11-12 Semester, ½ Credit or Full Year, 1 Credit
Prerequisite: Instructor Approval
(S/U Grading)

The Technology Help Desk Internship class prepares students to interact with users providing first-line technical support resolving general device problems. Students primarily will serve in a help desk role troubleshooting hardware, establishing network configurations, supporting new technologies, repairing devices, and learning the importance of customer service in today’s world of technology. When students are not supporting students and/or faculty/staff technology needs, they work on a variety of independent pathways. These pathways allow the ability to explore and develop skills in a variety of technology subjects including computer programming, networking, app development, and web design. This class will be used to help prepare students for one of three certifications: IT Fundamental Certification, CompTIA A+, CCNA or CCENT Certification. This course may be taken for 1/2 or 1 credit and may be repeated. This course is graded and can be used to help meet the credit requirements of the North Dakota Academic and CTE Scholarships. Students requesting to take this class must get instructor permission prior to registration.
TECHNOLOGY AND ENGINEERING EDUCATION

If you enjoy working with your hands and take pride in personal accomplishments you will find many opportunities for success in the various technology education programs.

Remember that changing technology has created a growing need for young people in many technical career fields. Whether you are planning to go to college, technical school or right into the world-of-work you can gain information and preparation for your future. All technology courses are electives.

In courses denoted as PLTW, students engage in open-ended problem solving, learn and apply the engineering design process, and use the same industry-leading technology and software as are used in the world’s top companies. Students are provided an opportunity to learn about different engineering disciplines before beginning post-secondary education or careers.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16656</td>
<td>Robotics</td>
<td>Intro to Engineering Design Recommended</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16661</td>
<td>Introduction to Power Technology</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16670</td>
<td>Introduction to Building Trades I</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>½</td>
<td>16673</td>
<td>Introduction to Building Trades II</td>
<td>Intro to Building Trades I</td>
<td>9-12</td>
</tr>
<tr>
<td>1</td>
<td>16677</td>
<td>Introduction to Engineering Design (A PLTW Course)</td>
<td>None</td>
<td>9-12</td>
</tr>
<tr>
<td>1</td>
<td>16678</td>
<td>Civil Engineering and Architecture (A PLTW Course)</td>
<td>Intro to Engineering Design Recommended</td>
<td>10-12</td>
</tr>
<tr>
<td>1</td>
<td>16679</td>
<td>Principles of Engineering (A PLTW Course)</td>
<td>Intro to Engineering Design Recommended</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16904</td>
<td>Technology &amp; Trades Assistant</td>
<td>Principal Approval</td>
<td>-</td>
</tr>
</tbody>
</table>

**16656 – ROBOTICS**

Grades 10-12

Prerequisite: Introduction to Engineering Design Recommended

The study of Robotics is a class in which students apply STEM related learning in a competitive environment while having fun. Class members learn teamwork, critical thinking and problem solving skills. Topics of equilibrium, motion, momentum, energy conversion, electromagnetism, and optical phenomena is presented in current, real-world applications through an engaging, hands-on manner that helps challenge, motivate, and inspire students. Science, technology, engineering, math concepts and skills come together in order for students to build the best robot possible. The class will use VEX Robotic kits as a core unit and then modify the robots to improve their function based on the current game rules and game pieces. Students will learn to write programming code and apply engineering principles for gear ratios, electrical loads, leverage, motion etc.

**16661 – INTRODUCTION TO POWER TECHNOLOGY**

Grades 9-12

Students study the theory and operation of small engines and wind energy. Classroom activities include small engine exploration and repair and various experiments with other power systems. This course is an introduction to Automotive Technology.

**16670 – INTRODUCTION TO BUILDING TRADES I**

Grades 9-12

This course is designed to provide the student with basic construction work experience through classroom and hands-on instruction. Basic residential carpentry and related trades are studied and experienced through building a garden shed. Emphasis on safety, care and use of hand and power tools, building materials, material applications and costs are some of the units included in this course. This course is designed to lead to the Intro to Building Trades II class.
**16673 – INTRODUCTION TO BUILDING TRADES II**
Grades 9-12
Prerequisite: Introduction to Building Trades I

This course is designed to get more in-depth in topics covered in Introduction to Building Trades I. Some topics that will be covered are: Concrete work, constructing insulated foundations, electrical systems, plumbing systems, heating, ventilation and air conditioning systems, wall and window insulation and research into various careers available in the Building Trades. This class will build a shed with additional features learned in this class, such as window and door installation. After taking Parts I and II of Introduction to Building Trades, students will have an excellent knowledge base and be prepared to take the Building Trades class in which a house is constructed from start to finish.

**16677 – INTRODUCTION TO ENGINEERING DESIGN (A PLTW Course)**
Grades 9-12

The major focus of the course is learning how to take an idea through a design process that will eventually be manufactured or produced. Students will learn about various aspects of Mechanical Engineering and Engineering Design. The course covers the following: The Role of an Engineer, The Design Process, Product Design, and Product Analysis and Improvement. Students will use a state of the art 3-D design software package to complete projects. Working in teams, you will learn about documenting solutions, solving problems, and communicating solutions to other students.

**16678 – CIVIL ENGINEERING AND ARCHITECTURE (A PLTW Course)**
Grades 10-12
Prerequisite: Introduction to Engineering Design Recommended

The major focus of the course is a long-term project that involves the development of a property site. Students will learn about various aspects of civil engineering and architecture. The course covers the following: The Roles of Civil Engineers and Architects, Project Planning, Site Planning, and Building Design. Students will use a state of the art 3-D design software package to complete projects. Working in teams, students will learn about documenting projects, solving problems, and communicating solutions to other students.

**16679 – PRINCIPLES OF ENGINEERING (A PLTW Course)**
Grades 10-12
Prerequisite: Introduction to Engineering Design Recommended

The class focuses on the major concepts of engineering. Students will have an opportunity to investigate engineering and high tech careers. This course covers the following topics: mechanisms, energy sources and applications, machine control, fluid power, statics, material properties and testing, and kinematics. Working in teams, students will develop problem-solving skills and apply their knowledge to research and design to create solutions to various challenges, document their work, and communicate solutions to other students.

**16904 - TECHNOLOGY AND TRADES ASSISTANT**
Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
TRADES AND INDUSTRY

This group of courses builds on the information, concepts and skills learned in the Technology and Engineering Education courses. So once again if you enjoy working with your hands and take pride in personal accomplishments you will find many opportunities for success in the various Trades, Industry and Technical education programs.

Remember that changing technology has created a growing need for young people in many technical career fields. Whether you are planning to go to college, technical school or right into the world-of-work you can gain information and preparation for your future. All Trades and Industry education courses are electives.

While some of these classes are taught at only one school, they are open to all Grand Forks students who wish to enroll. Transportation between schools is the responsibility of the student.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
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<tr>
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<td>11-12</td>
</tr>
<tr>
<td>1</td>
<td>16671</td>
<td>Woodworking (formally Production Technology)</td>
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<td>16672</td>
<td>Building Trades</td>
<td>Intro to Building Trades II</td>
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<td>Introduction to Graphic Arts</td>
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<td>10-12</td>
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<td>Graphic Arts I</td>
<td>Intro to Graphic Arts</td>
<td>11-12</td>
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<tr>
<td>1</td>
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<td>Graphic Arts II</td>
<td>Graphic Arts I</td>
<td>12</td>
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<td>Technology &amp; Trades Assistant</td>
<td>Principal Approval</td>
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</table>

16662 –AUTOMOTIVE TECHNOLOGY I (Taught at Red River)  
Grades 10-12  
Full year, 1 credit  
Requirement: Students will be required to bring in their own vehicles to work on.

The General Service Technology program begins with an orientation to the eight areas of NATEF standardized programming - Engine Repair, Automatic Transmissions, Manual Drive, Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning, and Engine Performance. This is a sequential course and is a prerequisite to Automotive General Service Technology II.

16663 –AUTOMOTIVE TECHNOLOGY II (Taught at Red River)  
Grade 11-12  
Full year, 2 credits  
Prerequisite: Automotive Technology I.

The second year General Service Technology consists of a two-hour course continuing orientation to Engine Repair, Automatic Transmissions, Manual Drive, Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning, and Engine Performance. Automotive General Service Technology is a preparatory program to enter college Automotive Technology and does prepare students to be eligible for the national ASE certification.

16652 – AVIATION TECHNOLOGY I (Taught at Red River)  
Grade 10-12  
Full year, 1 credit  
This course covers fundamentals of flight, 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.

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16653 – AVIATION TECHNOLOGY II *(Taught at Red River)*
Grade 11-12                                      Full year, 1 credit
Prerequisite: Aviation Technology I

Students will be preparing to pass the Federal Aviation Administration, FAA, private pilot written exam. Course will cover advanced flight topics including complete special units related to the Unmanned Aerial System (UAS) and instrument procedures.

16671 – WOODWORKING *(formally Production Technology)*
Grades 10-12                                      Full year, 1 credit

This course will provide students with an introduction to production concepts. The students will learn to operate and safely use a variety of hand and power tools. These present day tools will be used in the production of parts, projects, and products from wood and plastic. Students will also be introduced to the use of computer software to design a project to be cut on a CNC carving machine. If you are interested in tools, equipment, and working with your hands, this class is a good choice.

16680 – INTRODUCTION TO GRAPHIC ARTS *(Taught at Central)*
Grades 10-12                                      Full year, 1 credit

The course centers on comprehensive graphic arts production skills used to create and reproduce imagery on different types of media. These include typography, layout and design, electronic typesetting and page make-up on paper media. Imagery is also created by sand carving, screen printing, and vinyl applications. The emphasis is on completing the various processes by modeling the methods and equipment used in the graphics industry. This is accomplished through a competency-based curriculum, where students progress at their own speed and work on “live” production work.

16681 – GRAPHIC ARTS I *(Taught at Central)*
Grade 11-12                                      Full year, 1 credit
Prerequisite: Introduction to Graphic Arts

This course is a continuation of the competency-based Introduction to Graphic Arts. Further emphasis will be placed on the hands-on application of the skills and the information acquired in Introduction to Graphic Arts. with the addition of more complexity. All projects and techniques used involve the use of additional colors and the layering and registration required for replication. Students will research and investigate opportunities in careers related to Graphic Design.

16682 – GRAPHIC ARTS II *(Taught at Central)*
Grade 12                                         Full year, 1 credit
Prerequisite: Graphic Arts I

This course is a continuation of the competency-based Graphic Arts I. The emphasis is to expand on the acquired skills and take them to the next level. Students will be introduced to the digital side of Graphic Design, including website design/redesign, digital displays and social media graphics. There is a work experience component available.

16904 – TECHNOLOGY & TRades ASSistant
Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
FAMILY AND CONSUMER SCIENCES

Consumer Life Skills classes provide the tools and skills a young adult needs to cope in today’s changing world. These classes help transfer reading, writing, and math to real life situations and help students adjust to new technology and living independently. The classes are geared to the maturity and changing interests of a senior high student.

<table>
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<th>Prerequisite</th>
<th>Grade</th>
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<td>16704</td>
<td>Independent Living</td>
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<td>16705</td>
<td>Food for Today</td>
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<td>½</td>
<td>16706</td>
<td>Specialty Foods</td>
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<td>16715</td>
<td>Interior Design</td>
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<td>½</td>
<td>16717</td>
<td>Fashion Styling and Design</td>
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<td>16718</td>
<td>Textile Arts</td>
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<td>Junior Educators of Tomorrow (JET)</td>
<td>Instructor Approval</td>
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<td>16805</td>
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<td>Principal Approval</td>
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</table>

16701 – LIFE SKILLS
Grades 9-10
Full year, 1 credit

This course is an introduction to food and nutrition, relationships, communication skills, child development, basic sewing, housing and money management. Labs and projects are an important part of the learning in this class.

16702 – CHILD DEVELOPMENT
Grades 10-12
Semester, ½ credit

This course is designed for students who want to understand human growth and development from prenatal through one year of age. Current topics such as teen pregnancy, sexually transmitted diseases, and birth defects will be discussed.

16703 – CHILD GUIDANCE
Grades 10-12
Semester, ½ credit

This course will provide the opportunity to study and interact with children preschool through second grade age. The physical, emotional, social, and intellectual development of children ages 1-6 is covered. Current topics include but are not limited to child abuse and neglect, discipline, social skills, school readiness, single and foster parenting, children with special needs and adoption.

16704 – INDEPENDENT LIVING
Grades 11-12
Semester, ½ credit

This course is designed to provide skills and knowledge to live successfully after high school. The class covers financial decision making, understanding and managing credit, housing, insurance, communication skills, and consumer rights and responsibilities.

16705 – FOOD FOR TODAY
Grades 10-12
Semester, ½ credit

This class will prepare students to meet individual and family food choices based on nutrition and personal lifestyles. Lab experiences develop basic cooking skills and food preparation techniques.
16706 – SPECIALTY FOODS  
Grades 10-12  
This course offers food preparation in specialty foods, including desserts, appetizers, soups, salads, breads and cultural cuisine with an emphasis on food presentation.

16712 – JUNIOR EDUCATORS OF TOMORROW (JET)  
Grades 11-12  
Prerequisites: Instructor Approval. Student career goals related to education, job shadow placement in an educational environment, GPA of at least 2.5, registered for at least five (5) other classes at the high school.

Recommended: Child Development, Child Guidance, Early Childhood Education, Psychology I, Sociology

Each JET student will be assigned to a cooperating elementary or middle school teacher and will spend a minimum of one hour in the classroom each day school is in session. Students will meet with the supervising high school teacher at least three times per quarter. Student will provide own transportation to and from the school. Regular journal assignments and in-school assignments will be expected.

16715 – INTERIOR DESIGN  
Grades 10-12  
Interior Design provides students with the opportunity to study the elements required to create attractive and functional living spaces. Students will study factors or selection and cost, as well as interior decoration based on art principles and personal choice. The class will also focus on current trends in housing and interior design. Creativity and application of the elements and principles of design are emphasized, through the creation of hand-on projects and activities. Careers in interior design and related occupations will be explored.

16717 – FASHION STYLING AND DESIGN  
Grades 10-12  
The purpose of this course is to introduce students to basic fashion design. Design terminology for apparel and recognition of design styles are also included as components of the course. Students work on developing and editing collections, studying current fashion trends, fashion history and designers. Students will be required to demonstrate creative use of inspiration and design experimentation through various projects.

16718 – TEXTILE ARTS  
Grades 10-12  
This course will develop the creativity and personal expression of each student utilizing a variety of art, craft and fabric media. Using fiber and textile media and techniques, students will create unique projects. Fiber and textile processes may include: weaving, knitting, fabric printing, tie dying, quilting, batik, and mixed media. Cultural, historic, and aesthetic aspects of these processes will be incorporated into the course. The course will also include a study of textiles and fibers, their properties, care, usage and history.

16905 – FAMILY AND CONSUMER SCIENCE ASSISTANT  
Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
MEDICAL CAREERS

The Medical Careers Program has been developed to provide students, interested in the medical field, assistance in determining an occupation that will best suit their capabilities and interests.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16720</td>
<td>Introduction to Medical Careers</td>
<td>None</td>
<td>10-12</td>
</tr>
<tr>
<td>½</td>
<td>16721</td>
<td>Certified Nursing Assistant (CNA)</td>
<td>Enrolled in or completion of Introduction to Medical Careers recommended and/or Instructor Approval</td>
<td>11-12</td>
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<tr>
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<td>16722</td>
<td>Medical Careers</td>
<td>Introduction to Medical Careers, Instructor Approval</td>
<td>11-12</td>
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<tr>
<td>½</td>
<td>16723</td>
<td>Medical Terminology</td>
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<td>16723DC</td>
<td>Medical Terminology Dual Credit</td>
<td>Online Only - None</td>
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</table>

16720 – INTRODUCTION TO MEDICAL CAREERS
Grades 10-12
Full year, 1 credit

This is a one period year-long class designed to introduce the student to a variety of medical related careers. Many speakers from the health care community enhance this learning experience. The course also addresses concepts specific to health care, such as infection control, medical ethics, anatomy and physiology, nutrition, growth and development. This is a good choice for students who want to explore the idea of working in the medical field.

16721 – CERTIFIED NURSING ASSISTANT (CNA)
Grades 11-12
Semester, ½ credit
Prerequisite: Enrolled in or completion of Introduction to Medical Careers recommended and/or Instructor Approval
Requirements: Students must provide own transportation to the class site and provide updated immunization records including current influenza, Hepatitis B or a signed waiver.

This course has been approved by the North Dakota Department of Health to prepare the student to take the CNA certification exam. This is a one period semester course designed to teach the student the skills necessary to work as a CNA. It includes sixteen hours of clinical experience at local nursing homes. This course has been articulated for college credit at Northland Community College. Students are required to have up to date immunizations, including current influenza vaccine and tuberculosis testing. The student must provide his/her own transportation to nursing home for tours and clinicals.

16722 – MEDICAL CAREERS
Grades 11-12
Full year, 2 credits
Prerequisite: Introduction to Medical Careers, Instructor Approval

Requirement: Students must furnish their own transportation to work station and provide updated immunization record including Hepatitis B or a signed waiver required by some job stations.

For students who have completed the Intro course and want to learn more. This is a two period year-long course. The student participates in tours of various local health care sites and spends nine weeks at clinical sites during the second semester. This allows the student to “try on” a variety of medical careers and settings. The class includes a deeper focus on issues such as anatomy and physiology, medical terminology, employability skills, legal and ethical responsibilities, communication, mental health, end of life needs, service learning projects, and wellness. The student also completes American Heart Association CPR and First Aid, which have been articulated for college credit at Northland Community College. HIPAA certification and Medical Terminology are also completed during Medical Careers. Students are required to have up to date immunizations, including current influenza vaccine and tuberculosis testing. The student must provide his/her own transportation to tour/clinical sites.

16906 – MEDICAL CAREERS ASSISTANT
Semester, ½ Credit (S/U Grading)

Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
16723 – MEDICAL TERMINOLOGY – (Online Course Only)  
Grades 10-12  
Semester, ½ Credit

This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Students will also learn medical terminology as it relates to pathology, diagnostic, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems.

16723DC – MEDICAL TERMINOLOGY DUAL CREDIT – (Online Course Only)  
Grades 10-12  
Semester, ½ Credit
Prerequisite: Students must be at least 16 years old by the first day of the course.

3 Credits (BOTE 171 Medical Terminology) at Lake Region 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.
AGRICULTURE EDUCATION

Agriculture Education helps prepares students for successful careers and a lifetime of informed choices in the global agriculture, food, and natural resources systems. Agriculture Education courses exposes students to the various careers pathways in the agricultural industry including production, financing, processing, marketing and distribution of agricultural products.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
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<th>Grade</th>
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<td>16730</td>
<td>Introduction to Agriculture</td>
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<tr>
<td>1</td>
<td>16731</td>
<td>Foundations of Agriculture</td>
<td>Online Only - None</td>
<td>10-12</td>
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</table>

16730 – INTRODUCTION TO AGRICULTURE (Online Course Only)
Grades 10-12

This course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Agriculture Education program. Individual units will familiarize students with: basic mechanical theory and skills – emphasis will be placed on safety and proper use of tools and equipment; principles of evaluation and selection of beef, swine, sheep, horse, and dairy animals; soil and plant relationships that affect the production of food and fiber.

16731 – FOUNDATIONS OF AGRICULTURE (Online Course Only)
Grades 10-12

This course is designed to enhance student’s perception of agriculture and includes a study of soils, irrigation, land judging, plants, crop and weed identification, range management, horticulture, nursery, diseases, insects, and chemicals. This course introduces students to agricultural sciences with emphasis on technical skills, entrepreneurship, and occupational opportunities. Additional units include operation and maintenance of equipment, determining a bill of materials, construction techniques, metal fabrication, and joining processes of metals and alloys.
FOREIGN LANGUAGES

Students who have studied a foreign language in high school will find that they are better prepared to enter many universities or other fields of study in professional and technical areas which require knowledge of a second language. Students will also find that more job opportunities will be available to them in a world which relies increasingly on the cooperative exchange of international business and the technological advances of science and industry. Foreign language programs prepare students to communicate with people from other countries and to be knowledgeable participants in the global community.

The primary purpose of the foreign language class is to enable students to understand, speak, read, and write in the target language. They will also gain a broader perspective of life when they are introduced to the literature, art and music of a particular culture. In addition, foreign language students will strengthen their critical thinking skills, knowledge, memory, and logical reasoning.

The classes will use a variety of methods and materials, including use of a variety of current technology, textbooks, workbooks, tapes, CDs, videos, dialogues, music, communicative activities, literature, realia, authentic material, art projects, native speakers, and ethnic foods in order to learn not only the language but about the lands and lives of the people who speak that language.

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
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<td>French II</td>
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<td>French III</td>
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<td>Principal Approval</td>
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17611 – FRENCH I
17621 – SPANISH I
17631 – GERMAN I

Grades 9-12

Recommended: A good background in language arts is desirable.

Level I students will learn to communicate in the target language about familiar and predictable topics: family and household, weather, school, places, free-time activities, food, and other vocabulary intrinsic to everyday conversation. They will learn to ask questions and handle elementary needs within the language such as expressing basic courtesies, likes and dislikes, and rudimentary opinions. Students will learn through instruction, modeling, and active practice with the language. At the same time, students will begin to learn about the cultures and peoples who speak the language of study.

17612 – FRENCH II
17622 – SPANISH II
17632 – GERMAN II

Grades 9-12

Prerequisite: Level I

Recommended: “C” avg. or above in Level I

Level II students will expand their vocabulary in the target language in order to communicate about an even wider range of everyday topics. They will be introduced to and practice with the structures that allow them to talk about events that
occurred in the past. Students at this level will begin to create more within the language, going from the use of isolated phrases to longer sequences of sentences. They also will be able to ask and answer more questions, handle more social situations and continue to learn about the cultures of the target language. Emphasis again is on active practice with the structures and vocabulary that allow them to fulfill these needs.

17613 – FRENCH III
17623 – SPANISH III
17633 – GERMAN III

Grades 10-12  Full year, 1 credit

Prerequisite:  Level II
Recommended:  “C” avg. or above in Level I & II

Level III students will learn to discuss even more about themselves and their world, give opinions, express emotions, desires, doubts and begin to communicate about topics outside their immediate experience. Students at this level will learn to sustain language for a longer time and will start communicating in small paragraphs. There is an increasing emphasis on being able to effectively discuss personal history and past activities. The methods for learning about the culture of the target language cultures include the use of more literature and authentic materials. Students should expect that the target language be the primary language of classroom communication.

Level III and Level IV classes are advanced academic classes. Upon completion of Level III and Level IV classes students may take CLEP or placement tests at their chosen university which may enable them to earn university credit and/or advanced placement in university language classes

17614 – FRENCH IV
17624 – SPANISH IV
17634 – GERMAN IV

Grades 11-12  Full year, 1 credit

Prerequisite:  Level III
Recommended:  “C” avg. or above in Level I, II, and III

Level IV students will expand the structures and strategies necessary to deal with topics that are not as familiar to them or situations that require problem solving. They will begin to narrate and describe in longer and more cohesive paragraphs about a wide range of subjects. Level IV will also focus more directly on a variety of special studies within the history, literature and art of various target language countries. Students should expect the target language to be the primary language of classroom communication in Levels III and IV.

* Level III and Level IV classes are advanced academic classes. Upon completion of Level III and Level IV classes, students may take CLEP or placement tests at their chosen university which may enable them to earn university credit and/or advanced placement in university language classes.

17641 – LATIN I

Grades 9-12  Full year, 1 credit

Recommended:  Good background in language arts and math desirable.

Latin is for those interested in professional fields such as law, theology, medicine, pharmacy, and biological sciences. It is also for those desiring certain ability in using language in many areas of public information, such as critics, teachers, writers, broadcasters, and secretaries. Unlike modern languages, which stress speaking as well as reading, the goal in Latin is learning to read the language. A student should have a “C” average or above to enroll in Latin courses. Basic Latin grammar is presented along with simple Latin readings. Side benefits of Latin I are a knowledge of the basic structure of many Western languages, strengthening of grammar skills in English, and vocabulary and spelling improvement in English through the study of Latin roots, prefixes and suffixes. Roman life and culture are introduced.

17642 – LATIN II

Grades 9-12  Full year, 1 credit

Prerequisite:  Latin I

Recommended:  “C” avg. or above in Latin I

Latin II emphasizes grammar, reading, vocabulary development, and word derivation. Intermediate grammar, Roman mythology, and some original works by Roman authors will be studied.
17643 – LATIN III
Grades 10-12 Full year, 1 credit

Prerequisite: Latin I & II
Recommended: “C” avg. or above in Latin I & II

Latin III continues the ECCE Romani series with the introduction of original, unedited Latin texts from Cicero. Advanced grammar is presented along with stylistic textual analysis and the study of oratorical style. Medieval Latin and an introduction to medieval pronunciation may be introduced. Stress on a broad vocabulary base and derivatives are maintained.

17644 – LATIN IV
Grades 11-12 Full year, 1 credit

Prerequisite: Latin III
Recommended: “C” avg. or above in Latin I, II & III

The major thrust of Latin IV is a study of the epic, The Aeneid of Vergil, ancient Rome’s greatest poet. Continued study of Medieval Latin reinforces the introduction of Latin III. Further vocabulary development is stressed and derivative study continues throughout the year. Part of Ovid’s poem, The Metamorphoses, will be studied, along with other poets, such as Martial, Catullus and Horace. Latin grammar is reviewed formally throughout the year and the final advanced areas are covered.

17901 – FOREIGN LANGUAGE ASSISTANT
Semester, ½ Credit (S/U Grading)

Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
MUSIC

The Grand Forks Public School system seeks to provide a musical education to all students striving for aesthetic, musical experiences gained through study, performance, listening, and creating.

Music education is indispensable to the well-rounded cognitive, emotional and expressive development of all children. Music education provides the student with opportunities for: self-expression, creativity, aesthetic, intellectual and emotional judgment, development of self-esteem, development of full human potential, and the study of the cultural and historical importance of music.

Music is an essential part of every culture and the appreciation of music can provide the key to understanding the unique qualities of different people of the world, past, present, and future. In today’s diverse society music serves as a “universal language”.

The art of music provides and promotes the social and psychological development of students through both the physical performances of the art and through the interaction and communication with other students. Music provides students with a unique way to deal with life and its changing emotions through learning the art itself. There is unique experience between the performers and the audience that teaches self-expression and communications.

The music program in every American school should: be suited to the individual needs of the students, reflect the multi-musical nature of our pluralistic American culture, include samples of the various music of the world, and be responsive to the requirements of the diverse special populations present in our schools, including the musically gifted and talented. Musically American Schools should also provide sufficient course offerings for students who lack time, talent (or commitment) to participate in select performing groups and related activities and incorporate the music, media, and technology of contemporary America.

Public school music education instruction must be on a sequential learning program that begins in kindergarten and continues through high school graduation, striving for the aesthetic musical experience through the study, performing, listening, and creating.

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<th>Course Title</th>
<th>Prerequisite</th>
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18611 – CHOIR I
Grade 9-12
Full year, ½ credit

Choir I is made up of 9th grade students registering for a full year of choir. The choir rehearses every other day opposite Band I. Basic objectives are fundamentals of musicianship, choral techniques, the study of a variety of choral literature, basic music theory, and vocal techniques. Individual instruction is available to students in Choir I.

18612 – CHOIR II
Grade 10-12
Full year, 1 credit

Choir II rehearses daily, and is focused on progressively more difficult literature and music fundamentals. Increased study of the human voice is a main focus of this performance ensemble. Individual instruction is available to all students.
18613 – CHOIR III
Grade 10-12
Prerequisite: Audition required, Selected by directors

The singers strive to provide a greater understanding of music, musical concepts and vocal development. Vocal students have the opportunity of individualized instruction, as well as large and small ensemble training. Students in grades 10-12 are invited to audition for this ensemble which rehearses daily for the entire year. Activities include concerts, solos, ensembles, and participation in musical production.

18614 – CHOIR IV
Grade 10-12
Prerequisite: Audition required, Selected by directors

The choir is designed to offer a challenging musical experience to the singers within the group. It further creates an awareness of the individual performer within the framework of excellent literature. Excellence in performance is the major goal of the choir. Students in grades 10-12 are invited to audition for this select ensemble. Other activities include concerts, trips, music festivals, solos, ensembles, and participation in musical production.

18616 – CHAMBER CHOIR I
Grade 9-10
Prerequisite: Selected by director and enrolled in Choir I, III, or IV

The group provides opportunities to develop vocal skills and techniques of ensemble singing. The literature used is mostly of the secular variety from the 16th through the 20th centuries. This choir performs at school concerts, as well as other performances including community, festivals, contests, etc. The director selects this ensemble of 16-24 singers through a screening process.

18617 - CHAMBER CHOIR II
Grades 11-12
Prerequisite: Selected by director and enrolled in Choir IV

The instructor selects this small ensemble (12-16). Members must be from the Choir IV. The group uses community and school performances as its major goal. The literature is mostly of the secular variety from the 16th through the 20th Century. The group is non-directed in performance.

18621 – HARMONY
Grades 11-12
Prerequisite: Some formal study on an instrument, experience in band, orchestra or chorus and approval by instructor

This course deals with the structure of written music. Students learn to completely dismantle a musical composition and discover what there is about it that makes it good or bad. This process involves an analysis of the melody for its rhythmic significance, as well as for its melodic aspects. In addition, the harmonic structures are studied. Students learn to put a song of their own together in both form and harmonic structure. Students should be able to listen to all types of music more intelligently as a result of this type of study.

18631 – BAND I
Grade 9

This band is made up of 9th graders and will meet every other day, opposite Choir I. This band provides an opportunity for the student to develop the techniques and skills necessary for the performance of quality band literature. Individual lessons are required for the continued development of tone, pitch, technique, and style. Other performing opportunities would include concerts, solos, and ensembles.

18632 – BAND II
Grades 10-12

This band is made up of 10-12 grader students. This band provides an opportunity for the student to develop the techniques and skills necessary for the performance of quality band literature. Individual lessons are required for the
continued development of tone, pitch, technique and style. Other performing opportunities would include concerts, solos, and ensembles, Marching Band, Pep Band and Graduation.

18633 – BAND III
Grades 9-12
Prerequisite: Selected by audition

This is a select band. This band provides an opportunity for the student to develop the techniques and skills necessary for the performance of quality band literature. Individual lessons are required for the continued development of tone, pitch, technique, and style. Besides the concert opportunities this band may take a semi-annual trip for additional performance opportunities. Solo and ensembles, Marching Band, Pep Band and Graduation are also part of this band’s curriculum.

18641 – JAZZ BAND I
18642 – JAZZ BAND II
18643 – JAZZ BAND III
Grades 9-12
Prerequisite: Jazz band members must be members of Band I, Band II, or Band III. Exceptions may be made for keyboard and string performers. The director will assign students to the appropriate Jazz Band.

Jazz Band will meet every other day. The course emphasis will be the performance and study of jazz literature, history, techniques, and improvisational skills.

18651 – ORCHESTRA I
Grades 9-12
Prerequisite: Previous training and experience on violin, viola, cello or double bass

Orchestra I provides a string orchestra experience for students in grades 9-12. Development of fundamental skills and learning to play musically in a larger ensemble are stressed. Students will receive individual instruction on their instrument and have the opportunity to participate in regional and state music festivals and contests. The Orchestra performs three to four major concerts each year.

18652 – ORCHESTRA II
Grades 10-12
Prerequisite: 1 year of Orchestra I and selected by audition

Orchestra II is an advanced string orchestra for students in grades 10-12. Students are selected by audition to be part of this ensemble. The emphasis of this ensemble is on the study and performance of advanced string orchestra literature. Students continue to receive individual instruction and participate in regional and state music festivals and contests. The orchestra performs in four to five major concerts each year and may take trips for additional performance opportunities.

18653 – STRING CHAMBER MUSIC
Grades 10-12
Prerequisite: Orchestra I or II and selected by audition

This course offers advanced string students an intensive, in-depth experience in string chamber music, with an emphasis on the study and performance of small ensemble music. Acceptance is by audition, and students must be enrolled in Orchestra I or II concurrently. The ensembles will perform both on school concerts and in the community.

18655 – INTRO TO GUITAR
Grades 9-12
Prerequisite: Guitar is a performance-based techniques class offering introductory experience in, and opportunity for development and improvement of fundamental skills in guitar. This class is open to students with no previous musical experience. The
purpose of this course is to prepare students for a lifetime of guitar playing and music appreciation. Topics covered include: tuning, instrument care, and basic maintenance, basic guitar playing technique, learning note names on the guitar fretboard and how to find them, reading music notes, rests, music symbols, and guitar tablature from the printed page, reading melodies, chords, and scales, identifying different music forms, structures, and styles, basic strumming and picking patterns/techniques performing a mixture of different song styles as a soloist, with a partner, and as a group

18656 – INTERMEDIATE GUITAR
Grades 9-12
Semester, ½ credit
Prerequisite: Intro to Guitar

This class is open to students who have completed the Beginning Guitar class. Students may also be accepted by audition. Students will learn and improve upon the skills learned in Beginning Guitar

18901 – MUSIC ASSISTANT
Semester, ½ Credit (S/U Grading)
Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
ART

Visual Arts is a year-long elective course incorporating art curriculum and 21st Century learning skills which are used to explore the areas of drawing, compositional design, painting, printmaking, ceramics, sculpture, digital art, and art history. Students will develop and build technical skills essential in the creation of original works of art. Students will also develop critical and analytical thinking skills in creativity, problem solving, and analysis as they create and study their art and the art of others throughout the year.

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<th>Grade</th>
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18661 – ART I
Grades 9-12
Full year, 1 credit

Art I is a foundation course that introduces a variety of techniques and skills into art production areas such as drawing, painting, ceramics, printmaking, sculpture, computer art, etc. Art I also incorporates studies in art criticism (understanding art), art history (art in culture and the study of past art movements), as well as aesthetics (influences of good design).

18662 – ART II
Grades 10-12
Prerequisite: Art I
Full year, 1 credit

This is a course that builds on the foundation established in Art I. Students are guided and encouraged to build and master their skills in the various art production areas as they develop more confidence in their expressive freedom. Art II also continues to study and incorporate within the areas of study: art criticism, art history, and aesthetics.

18663 – ART III
Grades 11-12
Prerequisite: Art I and II
Full year, 1 credit

Recommendations: “B” avg. in previous art courses and teacher approval.

This course is designed to expand on the student’s individual creative expression and techniques in art production areas for those students who are preparing for college or post high school study of art. Art III also continues to study and incorporate art criticism, art history, and aesthetics.

18664 – ART IV
Grades 11-12
Prerequisite: Art I, II, and III
Full year, 1 credit

Recommendations: “B” avg. in previous art courses and teacher approval

This course is designed to meet the needs of the advanced art student who is preparing for college or post high school study in art. The Art IV student is required to prepare a portfolio of fifteen pieces of quality artwork in various media demonstrating mastery of concepts and techniques. In addition, the student is required to produce and present commentary on one of their major art projects, which concentrates on a specific concept and technique. Art IV also continues to prepare a student for studies in art criticism, art history, and aesthetics.

18902 – ART ASSISTANT
Prerequisite: Principal Approval

Semester, ½ Credit (S/U Grading)

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
THEATRE ARTS

Theatre Arts is designed to provide an opportunity for students to explore the performing arts. Skills developed will help the students not only create and perform, but also an opportunity to work in groups, problem solve, and develop self-esteem.

Theatre Arts offers the student an excellent background in theatre appreciation. It also provides practical skills of performance. Students are also exposed to the technical aspects of theatre including lights, sound, and construction.

The Theatre Arts curriculum will provide the student with lifelong benefits of theatre appreciation and practical skills from the world of dramatic art.

<table>
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18671 – THEATRE ARTS I
Grades 9-12
Full year, 1 credit

This course provides the students with an introduction to creative dramatics. It is designed to develop self-expression and self-confidence. Students will be exposed to the basic elements of creative dramatics, including movement, storytelling, improvisation, and play development. Included will be a discussion of theatre history and dramatic criticism. The course is for any student interested in theatre or the performing arts.

18672 – THEATRE ARTS II
Grades 10-12
Prerequisite: Theatre Arts I or instructor approval
Full year, 1 credit

This course provides the student with a second year of creative dramatics. It is designed to develop self-expression and self-confidence. Students will be exposed to the basic elements of creative dramatics, including movement, storytelling, improvisation, and play development. Included will be a discussion of theatre history and dramatic criticism. The course is for any student interested in theatre or the performing arts. This will be a continuation of the introduction course.

18673 – THEATRE ARTS III
Grades 11-12
Prerequisite: Theatre Arts I or II or instructor approval
Full year, 1 credit

This course is designed for the more advanced theatre student. The curriculum will focus on playwriting and directing. The curriculum will also include elements of lighting design, set design, and other elements of play production.

18903 – THEATRE ARTS ASSISTANT
Grades 11-12
Prerequisite: Principal Approval
Semester, ½ credit

The Theatre Arts Assistant will assist with the Theatre Arts I class. They will provide technical support, as well as help in small group settings. They will also provide help with some organizational tasks for the Theatre Department.
MILITARY SCIENCE

The objective of this program is to develop in each student better citizenship, self-reliance, leadership, responsiveness to constituted authority, and understanding of the role of the US Army in our society. They will also develop an ability to communicate effectively and an appreciation of the importance of physical education to the accomplishment of these objectives.

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18681 – JROTC I
Grades 9-12

Full year, 1 credit

Level I students will develop teamwork, leadership, communication skills, and an appreciation for physical fitness. Emphasis is on team learning, responsibilities and rights of citizenship, self-reliance and discipline. They will learn citizenship, techniques of communication, first aid, leadership principles, and military history. There are also many extracurricular activities they may participate in including drill teams, color guards, raiders, military ball, parades, community activities, and various camps.

18682 – JROTC II
Grades 10-12

Full year, 1 credit

Prerequisite: JROTC I

Level II students expand and refine their teamwork, leadership, communication skills, and improve their physical fitness. Emphasis shifts to leadership development, improving communication skills and strength of character development. They will learn citizenship, techniques of communications first aid, leadership theory, military history, military map reading, career opportunities, first aid and drug abuse prevention. There are also many extracurricular activities available such as drill team, color guards, raiders, military ball, parades, community activities, and camps.

18683 – JROTC III
Grades 11-12

Full year, 1 credit

Prerequisite: JROTC I and II

The primary focus of Level III is leadership. Level III students will be placed in leadership positions and are responsible for training, teaching, and leading Level I and Level II students. Emphasis is on advanced leadership, communication, and physical fitness skills. They will learn citizenship, techniques of communication, first aid, AIDS awareness, leadership theory, military history, orienteering, role of US Armed Forces, and career planning. The opportunities for extracurricular activities remain the same as Level I and II.

18684 – JROTC IV
Grade 12

Full year, 1 credit

Prerequisite: JROTC I, II, and III and instructor approval

Primary emphasis for Level IV will be the practical application of the cadet’s leadership duties and responsibilities within the corps of cadets. The class is structured to allow students to apply advanced communication skills, to perform their assigned command and staff duties, and act as a class instructor for subjects such as leadership and military history. The extracurricular activities remain the same as previous levels.

18904 – JROTC ASSISTANT

Semester, ½ Credit (S/U Grading)

Prerequisite: Principal Approval

The student will assist the classroom teacher. This course does not count toward the eligibility requirement.
### OFFICE – LIBRARY – COUNSELING

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**19901 - OFFICE ASSISTANT**  
Grades 11-12  
Semester, ½ Credit (S/U Grading)

Prerequisite: Principal Approval – Good attendance

The office aide is responsible for delivering request slips and/or messages for the office staff, and doing various office duties as requested by the office personnel. Students may repeat the course but only one credit may be used toward graduation requirements.

This course does not count toward the eligibility requirement.

**19902 – LIBRARY ASSISTANT**  
Grades 11-12  
Semester, ½ credit/ Full year, 1 credit  
(S/U Grading)

The library is an important part of the school and the curriculum, serving the needs of students and staff through a variety of print and electronic sources.

Student assistants deliver messages and items to classrooms, assist with photocopying, hand out printouts and laptop computers to students, assist with recycling, and complete other duties as assigned.

**19903 - COUNSELOR ASSISTANT**  
Grades 11-12  
Semester, ½ Credit (S/U Grading)

The counselor aide is responsible for delivering request slips and/or messages for the counseling staff, and doing various office duties as requested by the counseling personnel. Students may repeat the course but only one credit may be used toward graduation requirements.

This course does not count toward the eligibility requirement.
STUDENT LEADERSHIP

<table>
<thead>
<tr>
<th>Credit</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisite</th>
<th>Grade</th>
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<tr>
<td>½</td>
<td>20066</td>
<td>Student Leadership</td>
<td>Must be a Student Council Cabinet Member</td>
<td>10-12</td>
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20066 – STUDENT LEADERSHIP
Grades 10-12

(meet every other day)
Prerequisite: Student Council Cabinet member

Student Leadership is designed to strengthen students' personal and group leadership skills. This class is offered to students involved in Student Council Cabinet to cover such topics as public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics. This class is also designed to prepare and plan for school activities including prep rallies, dance, community service events, and special events in the school. The students will also participate in a book study on leadership providing them opportunities in writing reflections, class discussion and group exercises.