



**2022-2023**

***Course  
Description  
Book***  
**Program of  
Studies**

**“To Provide Opportunities for  
All Students to Develop Their  
Maximum Potential”**

# TABLE OF CONTENTS

High School Graduation Course Requirements	4	12601B Regular Pre-Calculus B	20
Post-Secondary Admission Criteria	5	12602A Enriched Pre-Calculus A	20
Programs and Course Offerings/Dual Credit	5	12602B Enriched Pre-Calculus B	21
Common Grading/Weighted Grades	6	12605A Calculus A	21
North Dakota Scholarship Opportunities	8	12605B Calculus B	21
NCAA Freshman-Eligibility Standards	10	12610 Discrete Mathematics	21
		12611 Probability & Statistics	21
		12615A Advanced Placement Statistics A	22
		12615B Advanced Placement Statistics B	22
		12801A Advanced Placement Calculus A	22
		12801B Advanced Placement Calculus B	22
		12901 Mathematics Assistant	22
<b>ENGLISH</b>		<b>SCIENCE</b>	
11101A English IA	11	13101A Physical Science A	24
11101B English IB	12	13101B Physical Science B	24
11201A English IIA	12	13201A Basic Biology A	24
11201B English IIB	12	13201B Basic Biology B	24
11301A English IIIA	12	13202A Biology A	24
11301B English IIIB	12	13202B Biology B	24
11401 English IV Composition I	12	13600A Advanced Placement Chemistry A	25
11401DC English IV Composition I	13	13600B Advanced Placement Chemistry B	25
11411DC English IV Composition II	13	13601A Chemistry A	25
11402 English IV Literature	13	13601B Chemistry B	25
11404A English IV: Practical Applications of English A	13	13602A Enriched Chemistry A	25
11404B English IV: Practical Applications of English B	13	13602B Enriched Chemistry B	25
11501 Speech Communications	13	13603A Geology A	26
11501DC Dual Credit Speech	13	13603B Geology B	26
11601 Film Study	14	13604A Physiology/Anatomy A	26
11603 Creative Writing	14	13604B Physiology/Anatomy B	26
11605 Innovations I	14	13605A Physics A	26
11606 Innovations II	14	13605B Physics B	26
11610A Journalism IA	14	13606A Field Biology A	27
11610B Journalism IB	14	13606B Field Biology B	27
11611A Journalism IIA	14	13607A Applied Biology/Chemistry A	27
11611B Journalism IIB	14	13607B Applied Biology/Chemistry B	27
11612 Journalism III	14	13801A Advanced Placement Biology A	27
11701A Advanced Placement Language & Comp A	15	13801B Advanced Placement Biology B	27
11701B Advanced Placement Language & Comp B	15	13801DC Dual Credit Biology A	27
11801A Advanced Placement Literature & Comp A	15	13801DCB Dual Credit Biology B	28
11801B Advanced Placement Literature & Comp B	15	13805A Advanced Placement Environmental Science A	28
11901 English Assistant	15	13805B Advanced Placement Environmental Science B	28
		13901A Science Lab Technician A	28
		13901B Science Lab Technician B	28
		13902A Field Biology Lab Technician A	29
		13902B Field Biology Lab Technician B	29
<b>MATHEMATICS</b>		<b>SOCIAL STUDIES</b>	
12500A Algebra I A Enhancement	17	14101A World History A	30
12500B Algebra I B Enhancement	17	14101B World History B	30
12501A Introduction to Algebra I A	17	14301A United States History A	31
12501B Introduction to Algebra I B	17	14301B United States History B	31
12502A Conclusion to Algebra I A	17	14801A Advanced Placement United States History A	31
12502B Conclusion to Algebra I B	17	14801B Advanced Placement United States History B	31
12503A Algebra I A	17	14801DC Dual Credit United States History A	31
12503B Algebra I B	18	14801DCB Dual Credit United States History B	31
125808DC College Algebra	18	14401 American Government	31
12510A Informal Geometry A	18	14802 Advanced Placement Government	32
12510B Informal Geometry B	18	14401DC Dual Credit American Government	32
12511A Geometry A	18	14402 Economics	32
12511B Geometry B	18	14803 Advanced Placement Economics	32
12512A Enriched Geometry A	18	14602 North Dakota Studies	32
12512B Enriched Geometry B	19		
12515A Intermediate Algebra A	19		
12515B Intermediate Algebra B	19		
12504A Algebra II A	19		
12504B Algebra II B	19		
12505A Enriched Algebra II A	19		
12505B Enriched Algebra II B	20		
12520A Applied Mathematics A	20		
12520B Applied Mathematics B	20		
12601A Regular Pre-Calculus A	20		





## High School Graduation Course Requirements

Units of Credit	Subject	Course Requirements
4	English	English I A English I B English II A English II B English III A English III B English IV – Literature/Composition
.5	Speech	Speech
3	Math	Algebra I or Introduction to Algebra I Conclusion Two (2) Other Math Courses
3	Science	Physical Science A/B Biology A/B One (1) Other Science Course A/B
3	Social Studies	Global Education A/B U.S. History A/B Government/Economics
1.5	Physical Education	Foundations of Fitness Two (2) Other Physical Education Courses
.5	Health	Health
3	Required Electives	Foreign Language, Fine Arts, or Career & Technical Education
5.5	Additional Electives	
<b>24.0</b>	<b>Minimum credits required for graduation</b>	

### Recommended Course Registration by Grade

Grade 9	CR	Grade 10	CR	Grade 11	CR	Grade 12	CR
English I A/B	1	English II A/B	1	English III A/B	1	Eng. IV Literature	½
Global Education A/B	1	Math	1	US History A/B	1	Eng. IV Composition	½
Math	1	Biology A/B	1	Speech	½	Economics	½
Physical Science A/B	1	Health	½	Physical Education	½	Government	½
Foundation of Fitness	½	Physical Education	½	Other Science and Math	1	Other Science and/or Math	1
Electives	2 ½	Electives	2	Electives	2	Electives	3
<b>Recommended Credits</b>	<b>7</b>	<b>Required Credits</b>	<b>6</b>	<b>Required Credits</b>	<b>6</b>	<b>Required Credits</b>	<b>6</b>

## 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 how 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**

AP Biology	AP Calculus	AP Economics	AP Chemistry
AP United States History	AP Psychology	AP Government	AP Art History
AP Literature & Composition	AP Language & Composition	AP World History	

### 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 ten, eleven or twelve in public high school who has received permission from his or her school principal and who has a cumulative GPA of at least 3.0 will be considered.

### **How to Participate**

#### **Permission to Enroll**

The student must obtain written approval from his or her school principal before enrolling in a course for dual credit.

#### **Credits**

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

Course	Grade	Grade Points	Credits	Total Points
English	B	3	1	3
German II	A	4	1	4
Physical Ed.	B	3	.5	1.5
Enriched Alg II	A	4	1	4
AP History A/B	B	3	1	3
AP Biology A/B	B	3	1	3
Concert Band	A	4	1	4
<b>Totals</b>			<b>6.5</b>	<b>22.5</b>
<b>Regular GPA</b> <b>22.5 divided by 6.5 = 3.46</b>				

#### Report Card with Weighted GPA

Course	Grade	Grade Points	Credits	Total Points
English	B	3	1	3
German II	A	4	1	4
Physical Ed.	B	3	.5	1.5
Enriched Alg II	A	5	1	5
AP History A/B	B	4	1	4
AP Biology A/B	B	4	1	4
Concert Band	A	4	1	4
<b>Totals</b>			<b>6.5</b>	<b>25.5</b>
<b>Regular GPA</b> <b>25.5 divided by 6.5 = 3.92</b>				

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:
  - 1 credit of Algebra II
  - 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 (Workplace Documents, Graphic Literacy, 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](http://www.act.org/workkeys).
- Students who are eligible for the Career and Technical Education Scholarship due to scores earned on the WorkKeys assessments must also send a copy of their reports to the ND Department of Public Instruction, 600 East Boulevard Avenue, Bismarck, ND 58505-0440.

*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					
Hospitality & Tourism Career Cluster			Arts, A/V Technology & Communications Career Cluster		
Restaurants & Food/Beverage Services Pathway			Visual Arts Pathway		
Course #	Course Title	Credits	Course #	Course Title	Credits
16701	Life Skills I	1	16701	Life Skills I	1
16704	Independent Living	.5	16704	Independent Living	.5
16705	Food for Today	.5	16710	Fashion Merchandising	1
16706	Specialty Foods	.5			
Must take at least 2 credits			Must take at least 2 credits		

**To View All Coordinated Plans of Study**  
**Go to the GFPS Website -> Departments -> Career & Technical Education**

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

## **Academic Requirements**

To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA.

## **Core Courses**

Only core courses that appear on your high school's list of NCAA core courses will count toward the 16 core-course requirement. Visit [eligibilitycenter.org/courselist](http://eligibilitycenter.org/courselist) for a full list of your high school's approved core courses. See table below for a list of these courses.

## **Grade Point Average**

The NCAA Eligibility Center calculates your grade-point average based only on the grades you earn in NCAA-approved core courses.

- Division I requires a minimum 2.3 GPA
- Division II requires a minimum 2.2 GPA

## **Test Scores**

You may take the SAT or ACT an unlimited number of times before you enroll full time in college. Every time you register for the SAT or ACT, use the NCAA Eligibility Center code 9999 to send your scores directly to us from the testing agency. If you take either test more than once, the best subscore from either test are used to give you the best possible score.

## **Sliding Scale**

Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. Find more information about test scores at [ncaa.org/test-scores](http://ncaa.org/test-scores).

<b>DIVISION I 16 Core Courses</b>	<b>DIVISION II Core Courses (2013 and After)</b>
4 years of English.	3 years of English.
3 years of mathematics (Algebra I or higher).	2 years of mathematics (Algebra I or higher).
2 years of natural/physical science (1 year of lab if offered by high school).	2 years of natural/physical science (1 year of lab if offered by high school).
1 year of additional English, mathematics or natural/physical science.	3 years of additional English, mathematics or natural/physical science.
2 years of social science.	2 years of social science.
4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).	4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).

## ENGLISH

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.

Credit	Course #	Course Title	Prerequisite	Grade
½	11101A	English I A	None	9
½	11101B	English I B	English I A	9
½	11201A	English II A	English I A, English I B	10
½	11201B	English II B	English I A, English I B, English II A	10
½	11301A	English III A	English I A, English I B, English II A, English II B	11
½	11301B	English III B	English I A, English I B, English II A, English II B, English III A	11
½	11401	English IV Composition I	English I, II, & III	12
½	11401DC	Dual Credit English IV Composition I	English 3.0 GPA, English III	12
½	11411DC	Dual Credit English IV Composition II	English 3.0 GPA, English I, II, III and Dual Credit English IV Composition I	12
½	11402	English IV Literature	English I, II, & III	12
½	11404A	English IV: Practical Applications of English A	English I, II, & III	12
½	11404B	English IV: Practical Applications of English B	English I, II, & III, English IVA	12
½	11501	Speech Communications	None	11-12
½	11501DC	Dual Credit Speech	Overall 3.0 GPA	11-12
½	11601	Film Study	None	10-12
½	11603	Creative Writing	None	9-12
½	11605	Innovations I	None (Does not fulfill required English credit)	10-12
½	11606	Innovations II	Innovations I (Does not fulfill required English credit)	10-12
½	11610A	Journalism I A	None	9-12
½	11610B	Journalism I B	Journalism IA	9-12
½	11611A	Journalism IIA	Journalism IA, Journalism IB	10-12
½	11611B	Journalism IIB	Journalism IA, Journalism IB	
½	11612	Journalism III	Journalism I or rec. by counselor/teacher	9-12
½	11701A	Adv. Placement Language & Composition A	English I A/B, English II A/B	11
½	11701B	Adv. Placement Language & Composition B	English I A/B, English II A/B, Ad. Placement Lang & Comp A	11
½	11801A	Adv. Placement Literature & Composition A	English I A/B, English II A/B, English III A/B or Adv. Placement & Comp A/B	12
½	11801B	Adv. Placement Literature & Composition B	English I A/B, English II A/B, English III A/B, or Ad. Placement Lang & Comp A/B, Adv Placement Lit & Comp A	12
½	11901	English Assistant	Principal Approval	-

### 11101A – ENGLISH I A

Required Grade 9

Semester, ½ credit

English I A integrates academic writing, critical reading, and speech communication, providing students with an introduction to effective patterns for examining ideas and a solid basis for successful pursuit of higher education and careers. The first semester focuses on informational reading and writing, with a focus on writing skills that will be used across all content areas. Literary selections include nonfiction pieces and independent novels. Study of the elements of language includes grammar, usage, and punctuation. Students will engage in daily independent reading and word study. 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  
Prerequisite: English I A

Semester, ½ credit

English I B builds on the foundations of reading, academic 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 include nonfiction, 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  
Prerequisite: English I A, English I B

Semester, ½ credit

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. Literary selections include short stories, poetry, and novels. Study of the elements of language includes grammar, usage, and punctuation. The ability to engage in collaborative discussions, evaluate main ideas, present findings, and incorporate presentation and multimedia components is ongoing throughout the course.

**11201B – ENGLISH II B**

Required Grade 10  
Prerequisite: English I A, English I B, English II A

Semester, ½ credit

English II B builds on the foundations of literature, composition, and speech communication established in English II A. The second semester focuses on narrative and argumentative 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.

**11301A – ENGLISH III A**

Required Grade 11  
Prerequisite: English I A, English I B, English II A, English II B

Semester, ½ credit

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  
Prerequisite: English I A, English I B, English II A, English II B, English III A

Semester, ½ credit

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  
Prerequisite: English IA, IB, IIA, IIB, & IIIA, IIIB

Semester, ½ credit

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**

Required Grade 12

Semester, ½ credit

Prerequisite: English IA, IB, IIA, IIB, &amp; 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.

**11404 – ENGLISH IV: PRACTICAL APPLICATIONS OF ENGLISH A**

Required in Grade 12

Semester, ½ credit

Practical Applications of English is an alternative class for those students who are planning on attending a two-year technical college or a trade program, going right into the work force, or for students who are unsure of their educational path after high school. This course exposes students to real world experiences and teaches them how to use writing in practical ways. It also allows students the chance to read a wide variety of non-fiction texts, conduct informal research, and develop beneficial skills to help in pursuit of a career.

**11404 – ENGLISH IV: PRACTICAL APPLICATIONS OF ENGLISH B**

Required in Grade 12

Semester, ½ credit

Practical Applications of English is an alternative class for those students who are planning on attending a two-year technical college or a trade program, going right into the work force, or for students who are unsure of their educational path after high school. This course exposes students to real world experiences and teaches them how to use writing in practical ways. It also allows students the chance to read a wide variety of non-fiction texts, conduct informal research, and develop beneficial skills to help in pursuit of a career.

**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.

### **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 fulfill English credit required)*

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

### **11611B – JOURNALISM II B (Newspaper)**

Grades 10-12

Semester, ½ credit

Prerequisite: Journalism IA, Journalism IB, Journalism II A  
*(Does not fulfill required English credit)*

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

### **11612 – JOURNALISM III (Yearbook)**

Grades 9-12

2<sup>nd</sup> Semester, ½ credit

Prerequisite: Journalism I or recommended by counselor and teacher

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.

### **11701A – ADVANCED PLACEMENT LANGUAGE AND COMPOSITION A**

Grade 11

Semester, ½ credit

Prerequisite: English I A/B, English II A/B  
(Fulfills junior English requirement)

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 writer's 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.

### **11701B – ADVANCED PLACEMENT LANGUAGE AND COMPOSITION B**

Grade 11

Semester, ½ credit

Prerequisite: English I A/B, English II A/B, AP Lang & Comp A  
(Fulfills junior English requirement)

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 writer's 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.

### **11801A – ADVANCED PLACEMENT LITERATURE & COMPOSITION A**

Grade 12

Semester, ½ credit

Prerequisite: English I A/B, English II A/B, English III A/B or  
Advanced Placement & Comp A/B  
(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.

### **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**

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.



## MATHEMATICS

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.

Credit	Course #	Course Title	Prerequisite	Grade
½	12500A	Algebra I Enhancement A	Instructor Approval	9-12
½	12500B	Algebra I Enhancement B	Instructor Approval & Algebra Enhancement A	9-12
½	12400A	Informal Algebra A	8 <sup>th</sup> grade Math	9-12
½	12400B	Informal Algebra B	Informal Algebra A	9-12
½	12503A	Algebra I A	8 <sup>th</sup> grade Math	9-12
½	12503B	Algebra I B	8 <sup>th</sup> grade Math, Algebra I A	9-12
½	12508DC	DC College Algebra	Algebra 1, Geometry, Algebra 2, an overall GPA of 3.00 and a score of 22 or higher on the ACT mathematics subtest	11-12
½	12510A	Informal Geometry A	Algebra I A & B	10-12
½	12510B	Informal Geometry B	Algebra I A & B, Informal Geometry A	10-12
½	12511A	Geometry A	Algebra I A & B	9-12
½	12511B	Geometry B	Algebra I A & B, Geometry A	9-12
½	12512A	Enriched Geometry A	Algebra I	9-12
½	12512B	Enriched Geometry B	Algebra I, Enriched Geometry A	9-12
½	12515A	Intermediate Algebra A	Algebra I A & B, Geometry A & B or Informal Geometry A & B	11-12
½	12515B	Intermediate Algebra B	Algebra I A & B, Geometry A & B or Informal Geometry A & B, Intermediate Algebra A	11-12
½	12504A	Algebra II A	Algebra I A & B and Geometry A & B or Informal Geometry A & B and consent of instructor	9-12
½	12504B	Algebra II B	Algebra I A & B, Geometry A & B or Informal Geometry A & B and consent of instructor, Algebra II A	9-12
½	12505A	Enriched Algebra II A	Algebra I A & B, Enriched Geometry A & B or Regular Geometry A & B and consent of instructor	9 -11
½	12505B	Enriched Algebra II B	Algebra I, Enriched Geometry or Regular Geometry and consent of instructor, Enriched Algebra II A	9 -11
½	12520A	Applied Mathematics A	Senior, or junior with consent of instructor	11-12
½	12520B	Applied Mathematics B	Senior, or junior with consent of instructor	11-12
½	12601A	Regular Pre-Calculus A	Algebra I A & B, Geometry A & B, & Algebra II A & B	11-12
½	12601B	Regular Pre-Calculus B	Algebra I A & B, Geometry A & B, Algebra II A & B, & Regular Pre-Calculus A	11-12
½	12602A	Enriched Pre-Calculus A	Algebra I, Enriched Geometry A & B & Enriched Algebra II A & B or Regular Algebra II A & B with consent of instructor	11-12
½	12602B	Enriched Pre-Calculus B	Algebra I, Enriched Geometry A & B & Enriched Algebra II A & B or Regular Algebra II A & B with consent of instructor, & Enriched Pre-Calculus A	11-12
½	12605A	Calculus A	Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus or Regular Pre-Calculus A & B	11-12

½	12605B	Calculus B	Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus or Regular Pre-Calculus A & B, Regular Calculus A	11-12
½	12610	Discrete Mathematics	Algebra I A & B, Geometry A & B, & Algebra II A & B	11-12
½	12611	Probability & Statistics	Algebra I A & B, Geometry A & B, & Algebra II A & B	11-12
½	12615A	Advanced Placement Statistics A	Algebra I A & B, Geometry A & B, Algebra II A & B	10-12
½	12615B	Advanced Placement Statistics B	Algebra I A & B, Geometry A & B, Algebra II A & B, AP Statistics A	10-12
½	12801A	AP Calculus A	Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus A & B or Regular Pre Calculus A & B with consent of instructor	11-12
½	12801B	AP Calculus B	Algebra I, Enriched Geometry A & B, Enriched Algebra II A & B, & Enriched Pre-Calculus A & B or Regular Pre Calculus A & B with consent of instructor, and AP Calculus A	11-12
1/2	12901	Mathematics Assistant	Principal Approval	-

### 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).

### 12400A – INFORMAL ALGEBRA A

Grades 9-12

Semester, ½ credit

Prerequisite: Had difficulty in 8th grade Math or consent of instructor

This course is designed for students who have experienced significant difficulty finding success in previous math courses and need to be taught Algebra at a slower pace and less in depth. Consent of the 8<sup>th</sup> grade Mathematics instructor or previous year's teacher is required for enrollment in this course. Semester A of the course includes foundational Algebra concepts, solving linear equations and inequalities, exploring functions, looking for patterns and descriptors of lines, graphing lines and writing the equations of the line.

### 12400B – INFORMAL ALGEBRA B

Grades 9-12

Semester, ½ credit

Prerequisite: Had difficulty with 8th grade Math or consent of instructor

This is designed for students who have experienced significant difficulty finding success in previous math courses and need to be taught Algebra at a slower pace and less in depth. Semester B of the course includes representing and solving systems of linear equations, relationships in simplifying, exponential expressions, graphing basic exponential functions, polynomial operations, simplifying square roots, and an introduction to quadratics.

### 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 algebraic expressions, solving linear equations and inequalities, functions and function notation, a complete study of linear functions, and systems of linear equations and inequalities.

**12503B – ALGEBRA I B**

Grades 9-12

Semester, ½ credit

Prerequisite: Algebra I A

Semester B topics include exponents and exponential functions, sequences, operations on polynomials, factoring, simplifying radicals, and an introduction to quadratics.

**12508DC – COLLEGE ALGEBRA**

Grades 11-12

Semester, ½ credit

Prerequisite: Algebra I, Geometry, Algebra 2, an overall GPA of 3.0 and score of 21 or higher on ACT math subtest or 255 or higher on Accuplacer.

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 Informal Algebra 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, transformation in the coordinate plane, and congruent triangles.

**12510B – INFORMAL GEOMETRY B**

Grades 10-12

Semester, ½ credit

Prerequisite: Algebra I A & B, Informal Algebra A & B and teacher recommendation and Informal Geometry A.

Semester B includes studying similar polygons (primarily triangles) quadrilaterals, 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 and segments, lines, angles and arcs related to a circle.

**12511A – GEOMETRY A**

Grades 9-12

Semester, ½ credit

Prerequisite: Algebra I A & B  
Recommendation: At least a "C" average in 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 and congruence. 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 similarity; 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 student's 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),  
Intermediate Algebra 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 Intermediate Algebra B students could 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 A topics include function transformations, linear systems, factoring, quadratic functions, complex numbers, and polynomial functions. 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 radical functions, 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 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 ALGEBRA II B**

Grades 9-11

Semester, ½ credit

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

Semester, ½ credit

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.

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

Semester, ½ credit

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

Semester, ½ credit

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. 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

Semester, ½ credit

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, sequences and series, conic sections, and introduces the limit concepts of calculus. 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,**

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,**

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, and codes.

### **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.

#### **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. 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 or Regular Geometry A & B, Enriched or Regular Algebra II A & B, & Enriched or Regular Pre-Calculus

Advanced Placement Calculus A consists of a semester of work in calculus comparable to courses in college and universities. 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 graphically, 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 or Regular Geometry A/B, Enriched or Regular Algebra II A & B, Enriched or Regular Pre-Calculus A/B 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**

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.

## SCIENCE

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.

Credit	Course #	Course Title	Prerequisite	Grade
½	13101A	Physical Science A	None	9
½	13101B	Physical Science B	Physical Science A	9
½	13201A	Basic Biology A	Physical Science A/B; Recommend Teacher/Counselor approval	10-11
½	13201B	Basic Biology B	Physical Science A/B; Basic Biology A; Recommend Teacher/Counselor approval	10-11
½	13202A	Biology A	Physical Science A/B	10-11
½	13202B	Biology B	Physical Science A/B; Biology A	10-11
½	13600A	Advanced Placement Chemistry A	General Chemistry A/B or Enriched Chemistry A/B	10-12
½	13600B	Advanced Placement Chemistry B	AP Chemistry A	10-12
½	13601A	Chemistry A	Physical Science A/B, Biology A/B& Algebra I, Geometry, Recommend: Algebra II or enrolled)	11-12
½	13601B	Chemistry B	Physical Science A/B, Biology A/B& Algebra I, Geometry, Chemistry A, Recommend: Algebra II or enrolled)	11-12
½	13602A	Enriched Chemistry A	Physical Science A/B, Algebra I Recommend: Algebra II	9-12
½	13602 B	Enriched Chemistry B	Physical Science A/B, Algebra I Recommend: Algebra II	9-12
½	13603A	Geology A	Physical Science A/B, Biology A/B or Basic Biology A/B	11-12
½	13603B	Geology B	Physical Science A/B, Biology A/B or Basic Biology A/B, Geology A	11-12
½	13604A	Physiology/Anatomy A	Physical Science A/B, Biology A/B, Chemistry A/B	11-12
½	13604B	Physiology/Anatomy B	Physical Science A/B, Biology A/B, Chemistry A/B, Physiology/Anatomy A	11-12
½	13605A	Physics A	Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B; Algebra II Recommend Geometry or Advanced Math course	11-12
½	13605B	Physics B	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	11-12
½	13606A	Field Biology A	Physical Science A/B, Biology A/B or Basic Biology A/B	11-12
½	13606B	Field Biology B	Physical Science A/B, Biology A/B or Basic Biology A/B; Field Biology A	11-12
½	13607A	Applied Biology/Chemistry A	Physical Science A/B, Basic Biology A/B and/or Biology A/B, with recommendation by teacher/counselor	11-12
½	13607B	Applied Biology/Chemistry B	Physical Science A/B, Basic Biology A/B and/or Biology A/B, Applied Biology/Chemistry A with recommendation by teacher/counselor;	
½	13801A	Advanced Placement Biology A	Physical Science A/B & Enriched Chemistry A/B	11-12
½	13801B	Advanced Placement Biology B	Physical Science A/B & Enriched Chemistry A/B Advanced Placement Biology A	11-12
½	13801DCA	Dual Credit Biology A	Physical Science, Enriched Chemistry, and 3.0 cumulative GPA	11-12
½	13801DCB	Dual Credit Biology B	Physical Science, Enriched Chemistry, 3.0 cumulative GPA and Dual Credit Biology, sem. 1	11-12
½	13805A	Advanced Placement Environmental Science A	Biology A/B plus one (1) additional science credit	11-12
½	13805B	Advanced Placement Environmental Science B	AP Environmental Science A	11-12



½	13901A	Science Lab Technician A	Chemistry A/B or Biology A/B; teacher approval	11-12
½	13901B	Science Lab Technician B	Chemistry A/B or Biology A/B; Science Lab Technician A; teacher approval	11-12
½	13902A	Field Biology Technician A	Field Biology A/B & teacher approval	11-12
½	13902B	Field Biology Technician B	Field Biology A/B & teacher approval; Field Biology Technician A	11-12

### 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

Semester, ½ credit

Prerequisite: Physical Science A/B; Biology A

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 integral part of this course.

**13600A - ADVANCED PLACEMENT CHEMISTRY A**

Grades 10-12

Semester, ½ credit

Prerequisite: General Chemistry A/B or Enriched Chemistry A/B

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 CHEMISTRY B**

Grades 10-12

Semester, ½ credit

Prerequisite: Advanced Placement Chemistry A

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

Semester, ½ credit

Prerequisite: Physical Science A/B, Biology A/B & Alg. I, Geometry  
Recommend Algebra II or enrolled

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

Semester, ½ credit

Prerequisite: Physical Science A/B, Biology A/B & Alg. I, Geometry,  
Chemistry A  
Recommend Algebra II or enrolled

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

Semester, ½ credit

Prerequisite: Physical Science A/B, Algebra I  
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: 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, 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 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

Semester, ½ credit

Prerequisite: Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B, Algebra II

Recommend: 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

Semester, ½ credit

Prerequisite: Physical Science A/B, Biology A/B, Chemistry A/B or Enriched Chemistry A/B Algebra II, Physics A

Recommend: 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

Semester, ½ credit

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

Semester, ½ credit

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

Semester, ½ credit

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, and 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, and 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 11-12

Semester, ½ credit

Prerequisite: Biology A/B plus one (1) additional science credit

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 11-12

Semester, ½ credit

Prerequisite: 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.

Credit	Course #	Course Title	Prerequisite	Grade
½	14101A	World History A	None	9
½	14101B	World History B	World History A	9
½	14301A	United States History A	World History A/B	11
½	14301B	United States History B	World History A/B	11
½	14801A	Advanced Placement United States History A	World History A/B	11
½	14801B	Advanced Placement United States History B	World History A/B	11
½	14801DCA	Dual Credit United States History A	World History A/B will be considered	11
½	14801DCB	Dual Credit United States History B	World History A/B, GPA will be considered	11
½	14401	American Government	World History A/B, US History A/B	12
½	14802	Advanced Placement Government	World History A/B, US History A/B	12
½	14401DC	Dual Credit American Government	World History A/B, US History. GPA will be considered	12
½	14402	Economics	World History A/B, US History A/B	12
½	14803	Advanced Placement Economics	World History A/B, US History A/B	12
½	14602	North Dakota Studies	None	9-12
½	14603	The Great Wars	World History A/B	10-12
½	14604	Current Events and the 21 <sup>st</sup> Century	None	9-12
½	14611	Psychology I	None	10-12
½	14621	Sociology	None	10-12
½	14804A	Advanced Placement Psychology A	None	10-12
½	14804B	Advanced Placement Psychology B	AP Psychology A	10-12
½	14806DC	Dual Credit Intro to American Indian Studies	None	10-12
½	14631	Japanese Studies	None	9-12
½	14805A	Advanced Placement World History A	Permission required for Freshman	9-12
½	14805B	Advanced Placement World History B	AP World History A	9-12
½	14901	Social Studies Assistant	Principal Approval	-
½	18668A	Advanced Placement Art History	World History A/B or AP World History A/B	10-12
½	18668B	Advanced Placement Art History	AP Art History A	10-12

### 14101A – WORLD HISTORY A

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. World History 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 – WORLD HISTORY 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. World History 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.

**14301A – UNITED STATES HISTORY A**

Grade 11

Semester, ½ credit

Prerequisite: World History 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 20<sup>th</sup> 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: World History 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 20<sup>th</sup> 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: World History 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: World History 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: World History 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 20<sup>th</sup> and 21<sup>st</sup> 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

Semester, ½ credit

Prerequisite: World History 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 2<sup>nd</sup> 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 20<sup>th</sup> and 21<sup>st</sup> 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

Semester, ½ credit

Prerequisite: World History 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

Semester, ½ credit

Prerequisite: World History 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

Semester, ½ credit/

Prerequisite: World History 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

Semester, ½ credit

Prerequisite: World History 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

Semester, ½ credit

Prerequisite: World History A/B, US History A/B

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.

#### **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: World History A/B

This course is a comprehensive study of the two largest conflicts of the 20<sup>th</sup> 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.

**14604 – CURRENT EVENTS AND THE 21<sup>ST</sup> CENTURY**

Grades 9 -12  
Prerequisite: None

Semester, ½ credit

An interactive, issue-based semester course that focuses on the global events in the world today. This course centers around the interactions between world events and the countries that create them, the significance of technology, trade, geography, the conflict and how these pieces fit together to shape our world and the impact these developments will have on the future.

**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 10-12

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  
Prerequisite: Sophomores with approval

Semester, ½ credit

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  
Prerequisite: AP Psychology A

Semester, ½ credit

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.

**14806DC – DUAL CREDIT INTRODUCTION TO AMERICAN INDIAN STUDIES**

Grades 10-12  
Prerequisite: None

Semester, ½ credit

This course explores the history and culture of the Native Americans of North Dakota, from their origins to today. It focuses primarily on the last two hundred years. The course gives a timeline for this history, explores the context of events, and addresses some cultural issues. The course addresses social organization, economies, religion, kinship, diplomacy, and the reasons, motivations, consequences for cultural change. This class introduces students to the complexities of Native cultures in the northern Plains.

**14631 – JAPANESE STUDIES**

Grades 9-12  
*Offered at Red River High School Only*

Semester, ½ credit

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**

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.

**18668A – ADVANCED PLACEMENT ART HISTORY A**

Grades 10-12

Semester, ½ credit

Prerequisite: World History A/B or Advanced Placement World History A/B

AP Art History is an introductory college-level Art History course. Students cultivate their understanding of art history through analyzing works of art and placing them in historical context as they explore concepts like culture and culture interactions, theories and interpretations of art, the impact of materials, processes, and techniques on art and art making, and understanding purpose and audience in art historical analysis. Content covered will include examples of art and architecture from prehistory to the present in both eastern and western civilizations, as well as the cultural and political landscapes that influenced these works.

**18668B – ADVANCED PLACEMENT ART HISTORY B**

Grades 10-12

Semester, ½ credit

Prerequisite: World History A/B or Advanced Placement World History A/B, AP Art History A

AP Art History is an introductory college-level Art History course. Students cultivate their understanding of art history through analyzing works of art and placing them in historical context as they explore concepts like culture and culture interactions, theories and interpretations of art, the impact of materials, processes, and techniques on art and art making, and understanding purpose and audience in art historical analysis. Content covered will include examples of art and architecture from prehistory to the present in both eastern and western civilizations, as well as the cultural and political landscapes that influenced these works.

## HEALTH AND PHYSICAL EDUCATION

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.

Credit	Course #	Course Title	Prerequisite	Grade
½	15001	Adaptive Physical Education	None	10-12
½	15105	Foundations of Fitness	None	9
½	15202	Health	None	10-12
½	15601	Personal Wellness	Foundations of Fitness	10-12
½	15602	Strength and Conditioning	Foundations of Fitness	10-12
½	15606	Team Sports	Foundations of Fitness	10-12
½	15612	Advanced Strength and Conditioning	Foundations of Fitness, Strength & Conditioning, and/or Instructor Approval	10-12
½	15623	Aerobics/Group Exercise	Foundations of Fitness	10-12
½	15624	Sports and Games	Foundations of Fitness	10-12
½	15625	Dance	Foundation of Fitness	10-12
½	15626	Breathe & Stretch and Cardio Training	Foundations of Fitness	10-12
½	15627	Advanced Physical Training	Foundations of Fitness	10-12
½	15635	General Physical Education	Foundations of Fitness	10-12
½	15635	Unified Physical Education	Foundations of Fitness, Application and Recommendation	10-12
½	15641	Lifetime Fitness and Wellness	None	11-12
½	15901	Physical Education Assistant	Principal Approval	-

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:

Grade 9	Foundations for Fitness - #15105	½ credit
Grade 10	Health - #15202 One course #15601 through #15635	½ credit ½ credit
Grade 11 or 12	One course #15601 through #15635	½ credit

**Each Physical Education course can be only taken for a total of one (1) credit throughout High School. If a student takes more than one half credit (1/2) of PE in a given school year, one half credit will be used to meet graduation requirements and the other(s) will be used toward elective credits for graduation.**

### 15001 – ADAPTIVE PHYSICAL EDUCATION

Grades 10-12

Prerequisite: Foundations of Fitness

Semester, ½ credit

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, ½ 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.

**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.

**15641 – LIFETIME FITNESS and WELLNESS**

Grades 11-12

Semester, ½ credit

Prerequisite: None.

This class is designed for seniors so they will understand the need for and assume the responsibility of maintaining a healthy lifestyle. Students will gain knowledge of current health issues through classroom and movement-based activities. These activities will include fitness and wellness practice activities that will enrich their quality of life and preparedness post-high school.

**15901 – PHYSICAL EDUCATION 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.

## 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.

Credit	Course #	Course Title	Prerequisite	Grade
½	16605	Microsoft Office Essentials	None	9-12
½	16610	Personal Finance	None	9-12
1	16611	Accounting I	None	10-12
1	16612	Accounting II	Accounting I	11-12
½	16615	Personal & Business Law	None	10-12
½	16617	Business Communication	None	10-12
1	16618	Video Production I	None	9-12
1	16619	Video Production II	Video Production I	10-12
½	16620	+Microsoft Word	Microsoft Office Essentials recommended	9-12
½	16621	Web Design	Microsoft Office Essentials recommended	9-12
½	16622	+Microsoft Excel	MS Word or Microsoft Office Essentials recommended	9-12
½	16623	+Microsoft PowerPoint & Publisher	MS Word or Microsoft Office Essentials recommended	9-12
½	16625	Multimedia	Microsoft Office Essentials recommended	9-12
½	16901	Business Education Assistant	Principal Approval	-

+ **Certification available.**

### 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, and presentation 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 – INTRODUCTION TO PERSONAL FINANCE

Grades 9-12 or Special Approval

Semester, ½ credit

This course introduces students to personal finance topics and encourages students to take control of their finances. This course is designed for 9-10 grade students and is one semester in length. Topics covered include: basics of checking/savings accounts, credit, budgeting, finding a job, insurance, investing and more. The course provides real-life scenarios that allow students the opportunity to interact with and learn from topics before having to actually apply them in financial situations. Students who take this course are also encouraged to take the advanced course at some point in their high school career.

### 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

Prerequisite: Accounting I

Full year, 1 credit

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.

**16617 – BUSINESS COMMUNICATIONS**

Grades 10-12

Semester, ½ credit

This course is designed to teach students to use oral and written communication in a clear, courteous, concise, and complete manner on both personal and professional levels. Listening skills, learning styles, and activities will be incorporated to provide the student with a solid base so they are able to communicate effectively. Topics covered include but are not limited to- proper business & business letter writing; proper business & personal email writing; proper technology use in business/personal; interviewing professionals in career interest areas, career research, and cyber security awareness. Students will actively write and create products to use in real-life scenarios. The topics include many practical life applications and are intended to all students, not just those who think they want to pursue business in their future.

**16618 – VIDEO PRODUCTION I**

Grades 9-12

Full year, 1 credit

This course is course designed to provide students with the basic knowledge and skills related to the video production industry. 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 digital video cameras, lighting and audio equipment, and editing software.

**16619 – VIDEO PRODUCTION II**

Grades 10-12

Prerequisite: Video Production I

Full year, 1 credit

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.

<u>Course</u>	<u>MOS Exam</u>
Microsoft Word	Word
Microsoft Excel	Excel
Microsoft PowerPoint & Publisher	PowerPoint

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

Prerequisite: Microsoft Office Essentials recommended

Semester, ½ credit

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

Prerequisite: Microsoft Office Essentials recommended

Semester, ½ credit

This course is designed to guide students in a project-based environment in the development of up-to-date concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding and Cascading Style Sheets



(CSS). Students follow the steps to create a website by planning, designing, developing, deploying, and maintaining of the website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own website(s).

**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.

**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 learn 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.

**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.

**16627 – ADVANCED PERSONAL FINANCE**

Grades 11-12

Semester, ½ credit

Prerequisite: None

This course reviews basic personal finance topics, goes more in-depth on advanced personal finance topics and encourages students to take control of their finances. This course is designed for 11-12 grade students, is one semester in length, and does not have any prerequisites, although students who took the introductory course would still greatly benefit from this course. Advanced topics include: exploring post-secondary options, paying for post-secondary options, taxes, investing and IRAs/Roths, insurance, budgeting, credit, and financial pitfalls many adults face. This course provides real-life scenarios that allow students the opportunity to interact with and learn from topics before having to actually apply them in financial situations.

**16901 – BUSINESS EDUCATION 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.

## 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.

Credit	Course #	Course Title	Prerequisite	Grade
½	16602	Introduction to Marketing	None	9-12
1	16630	Marketing I	None	10-12
1	16631	Marketing II	Marketing I or instructor approval	11-12
½ or 1	16632	Model School Store	Enrolled or completion of Marketing II	11-12
1/2	16902	Marketing Education Assistant	Principal Approval	-

### 16602 – INTRODUCTION TO MARKETING

Grade 9-12

Semester, ½ credit

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

Full year, 1 credit

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

Full year, 1 credit

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

Semester, ½ credit or Full year, 1 credit

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

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.

## INFORMATION TECHNOLOGY EDUCATION

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.

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

### + Certification Available

#### 16640 – INTRODUCTION TO COMPUTING ESSENTIALS

Grades 9-12

Semester, ½ credit

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

Semester, ½ credit

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

Semester, ½ credit

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 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 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

Credit	Course #	Course Title	Prerequisite	Grade
1	16656	Robotics	Intro to Engineering Design Recommended	10-12
½	16661	Introduction to Power Technology	None	9-12
½	16674	Engineering Essentials (A PLTW Course)	None	9-12
1	16677	Introduction to Engineering Design (A PLTW Course)	Engineering Essentials Recommended	10-12
1	16678	Civil Engineering and Architecture (A PLTW Course)	Intro to Engineering Design Recommended	10-12
1	16679	Principles of Engineering (A PLTW Course)	Intro to Engineering Design Recommended	10-12
½	16904	Technology & Trades Assistant	Principal Approval	-

### 16656 – ROBOTICS

Grades 10-12

Full year, 1 credit

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

Semester, ½ credit

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.

### 16674 – ENGINEERING ESSENTIALS (A PLTW Course)

Grades 9-12

Semester, ½ credit

Engineering Essentials provides students opportunities to explore the various engineering careers as they solve engaging and challenging real world problems. The course is intended to be a high school student's first exposure to the Project Lead The Way (PLTW) Engineering pathway. PLTW Engineering courses empower students to step into the role of an engineer, adopt a problem-solving mind set, and make the leap from dreamers to doers. The program's courses engage students and challenge them to become better collaborators and thinkers. Students take from the course in demand knowledge and skills they will use in high school and the rest of their lives, on any career path they take.

### 16677 – INTRODUCTION TO ENGINEERING DESIGN (A PLTW Course)

Grades 10-12

Full year, 1 credit

Prerequisite: Engineering Essentials Recommended

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

Full year, 1 credit

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

Full year, 1 credit

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

Semester, ½ credit (*S/U Grading*)

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.

Credit	Course #	Course Title	Prerequisite	Grade
1	16652	Aviation Technology I	None	10-12
1	16653	Aviation Technology II	Aviation Technology I	11-12
1	16662	Automotive Technology I	None	10-12
2	16663	Automotive Technology II	Automotive Technology I	11-12
1	16668	Introduction to Building Trades	None	9-12
1	16671	Woodworking	None	10-12
2	16672	Building Trades	Intro to Building Trades	11-12
1	16680	Introduction to Graphic Arts	None	10-12
1	16681	Graphic Arts I	Intro to Graphic Arts	11-12
1	16682	Graphic Arts II	Graphic Arts I	12
1/2	16904	Technology & Trades Assistant	Principal Approval	-

### 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.

### 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.

### 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.

### **16668 – INTRODUCTION TO BUILDING TRADES**

Grades 9-12

Full year, 1 credit

This course is designed to provide the student with basic construction work experience through classroom and hands-on instruction. Basic residential carpentry, roofing and siding installation 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. Additional trades studied include: electrical wiring, plumbing, HVAC, blue print, and more. After taking Introduction to Building Trades, students will have an excellent knowledge base and be prepared to take Wood Working and also Building Trades class in which a house is constructed from start to finish.

### **16671 – WOODWORKING**

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.

### **16672 – BUILDING TRADES** (*House constructed on site*)

Grades 11-12

Full year, 2 credits

Prerequisite: Introduction to Building Trades or Instructor Approval

This course is designed to provide basic work experience through classroom instruction and hands-on experience. Basic residential carpentry, plumbing, electrical, drywall, and other related aspects of the trades are studied and experienced by constructing a house. Whenever possible the similarities between residential and commercial construction will be noted. Students are responsible for transportation to construction site.

### **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

Semester, ½ credit (*S/U Grading*)

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 to 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.

Credit	Course #	Course Title	Prerequisite	Grade
1	16701	Life Skills	None	9-10
½	16702	Child Development	None	10-12
½	16703	Child Guidance	None	10-12
½	16704	Independent Living	None	11-12
½	16705	Food for Today	None	10-12
½	16706	Specialty Foods	None	10-12
½	16715	Interior Design	None	10-12
½	16717	Fashion Styling and Design	None	10-12
½	16718	Textile Arts	None	10-12
½ or 1	16712	Junior Educators of Tomorrow (JET)	Instructor Approval	11-12
½	16905	Family and Consumer Science Assistant	Principal Approval	-

### 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 learn about pregnancy and prenatal development as well as physical, emotional, social, and intellectual development of newborns through age 1. Topics will include brain development, teen pregnancy, sexually transmitted infections, birth defects, child birth preparation, labor and delivery process and current practices. An important part of this course will relate to appropriate infant care and development with a focus on safety considerations to promote the overall health and wellbeing of the child. RealCare infant simulator experience is a required part of this course.

### 16703 – CHILD GUIDANCE

Grades 10-12

Semester, ½ credit

This course will provide the opportunity to study the development of children from age one through age six. Physical, social, emotional, and intellectual development of toddlers, preschoolers, and school-aged children will be discussed. Other topics covered include safety issues, discipline, abuse and neglect, parenting, social skills, school readiness, special needs, and current events.

### 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 course covers the basics of food preparation in the areas of fruits, vegetables, grains, dairy foods, eggs, meat, poultry, and baking basics. Nutrition, special dietary considerations and consumer information will be discussed. Students will have the opportunity to participate in labs which will give them the skills to prepare a variety of foods on their own.

### 16706 – SPECIALTY FOODS

Grades 10-12

Semester, ½ credit

This course the students the opportunity to participate in culinary lab experiences, related to the preparation of desserts, appetizers, soups, sauces, salads, main dishes, and breads. Special focus is placed on cultural cuisine, advanced cooking terminology and techniques, knife skills, and food presentation.

**16712 – JUNIOR EDUCATORS OF TOMORROW (JET)**

Grades 11-12

Semester, ½ credit/Full year, 1 credit

Prerequisites: Principal and Instructor Approval. Student career goals related to education, GPA of at least 3.0, and registered for at least five (5) other classes at the high school.

Recommended: Child Development and Child Guidance

Each JET student will be assigned to a cooperating elementary 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. Students will provide their own transportation to and from the cooperating elementary school site. Regular journal assignments and in-school assignments will be expected.

**16715 – INTERIOR DESIGN**

Grades 10-12

Semester, ½ credit

Interior Design provides students with the opportunity to study the elements required to create attractive and functional living spaces. Students will study factors of 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

Semester, ½ credit

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

Semester, ½ credit

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

Semester, ½ credit (*S/U Grading*)

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 suite their capabilities and interests.

Credit	Course #	Course Title	Prerequisite	Grade
1	16720	Introduction to Medical Careers	None	10-12
½	16721	Certified Nursing Assistant (CNA)	Enrolled in or completion of Introduction to Medical Careers recommended and/or Instructor Approval	11-12
2	16722	Medical Careers	Introduction to Medical Careers, Instructor Approval	11-12
½	16906	Medical Careers Assistant	Principal Approval	-
½	16723	Medical Terminology	Online Only - None	10-12
½	16723DC	Medical Terminology Dual Credit	Online Only - None	10-12

### 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

Requirement: Students must furnish their own transportation to work site and provide updated immunization record including Hepatitis B or a signed waiver and current COVID and influenza vaccines required by clinical sites.

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 site and provide updated immunization record including Hepatitis B or a signed waiver and current COVID and influenza vaccines required by clinical sites.

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

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.

**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.

## 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.

Credit	Course #	Course Title	Prerequisite	Grade
1	17611	French I	None	9-12
1	17612	French II	French 1	9-12
1	17613	French III	French I & II	10-12
1	17614	French IV	French I, II, & III	11-12
1	17621	Spanish I	None	9-12
1	17622	Spanish II	Spanish I	9-12
1	17623	Spanish III	Spanish I & II	10-12
1	17624	Spanish IV	Spanish I, II, & III	11-12
1	17631	German I	None	9-12
1	17632	German II	German I	9-12
1	17633	German III	German I & II	10-12
1	17634	German IV	German I, II, & III	11-12
½	17901	Foreign Language Assistant	Principal Approval	-

### 17611 – FRENCH I

### 17621 – SPANISH I

### 17631 – GERMAN I

Grades 9-12

Full year, 1 credit

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

Full year, 1 credit

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.

**17901 – FOREIGN LANGUAGE 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.

## 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.

Credit	Course #	Course Title	Prerequisite	Grade
½	18611	Choir I	None	9-12
1	18612	Choir II	None	10-12
1	18613	Choir III	Audition	10-12
1	18614	Choir IV	Audition	10-12
½	18616	Chamber Choir I	Selected by director	9-10
½	18617	Chamber Choir II	Selected by director	11-12
1	18621	Harmony	Approval by instructor	11-12
½	18631	Band I	None	9
1	18632	Band II	None	10-12
1	18633	Band III	Audition	9-12
½	18641	Jazz Band I	Selected by director	9-12
½	18642	Jazz Band II	Selected by director	9-12
½	18643	Jazz Band III	Audition	9-12
1	18651	Orchestra I	Previous experience	9-12
1	18652	Orchestra II	Orchestra I and selected by audition	10-12
½	18653	String Chamber Music	Orchestra I or II and selected by audition	10-12
½	18655	Intro to Guitar	None	9-12
½	18656	Intermediate Guitar	Intro to Guitar	9-12
½	18901	Music Assistant	Principal Approval	-

### 18611 – CHOIR I

Grade 9-12

Full year, ½ credit

Choir I is made up of 9<sup>th</sup> 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

Full year, 1 credit

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

Full year, 1 credit

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

Full year, ½ credit

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 16<sup>th</sup> through the 20<sup>th</sup> 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

Full year, ½ credit

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 16<sup>th</sup> through the 20<sup>th</sup> Century. The group is non-directed in performance.

**18621 – HARMONY**

Grades 11-12

Full year, 1 credit

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

Semester, ½ credit

This band is made up of 9<sup>th</sup> 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

Full year, 1 credit

This band is made up of 10-12 grade 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

Full year, 1 credit

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

Semester, ½ credit

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

Full Year, 1 credit

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

Full Year, 1 credit

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

Semester, ½ credit

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

Semester, ½ credit

This class will give students a basic overview of the guitar with emphasis on the various techniques of performance as well as fundamental concepts of music theory and practice.

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 21<sup>st</sup> 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.

Credit	Course #	Course Title	Prerequisite	Grade
1	18661	Art I	None	9-12
1	18662	Art II	Art I	10-12
1	18663	Art III	Art I & II	11-12
1	18664	Art IV	Art I, II, III	11-12
1/2	18902	Art Assistant	Principal Approval	-

### 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

Full year, 1 credit

Prerequisite: Art I

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

Full year, 1 credit

Prerequisite: Art I and II

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

Full year, 1 credit

Prerequisite: Art I, II, and III

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.

### 18669 – 3D SCULPTURE AND FORM

Grades 9-12

Semester, ½ credit

Prerequisite: None

This course is a hands-on introduction to basic three-dimensional design through multiple sculptural processes such as carving, modeling, casting, and construction. Students will gain knowledge in additive, subtractive, and assemblage techniques. Various materials may include clay, wood, wire, cloth, paper, metal, cardboard, tape, plaster, or found objects.

### 18902 – ART 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.

## 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.

Credit	Course #	Course Title	Prerequisite	Grade
½	18671A	Theatre Arts I A	None	9-12
½	18671B	Theatre Arts I B	None	9-12
½	18672A	Theatre Arts II A	None	10-12
½	18672B	Theatre Arts II B	None	10-12
½	18673A	Theatre Arts III A	Theatre Arts I or II or instructor approval	11-12
½	18673B	Theatre Arts III B	Theatre Arts I or II or instructor approval	11-12
½	18903	Theatre Arts Assistant	Theatre Arts I and instructor approval	10-12

### **18671A – THEATRE ARTS I A**

Grades 9-12

Semester, ½ 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.

### **18671B – THEATRE ARTS I B**

Grades 9-12

Semester, ½ 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.

### **18672A – THEATRE ARTS II A**

Grades 10-12

Semester, ½ credit

Prerequisite: None

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. Although this course is designed as a continuation of Theatre I, there is no prerequisite to enroll.

### **18672B – THEATRE ARTS II B**

Grades 10-12

Semester, ½ credit

Prerequisite: None

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. Although this course is designed as a continuation of Theatre I, there is no prerequisite to enroll.

### **18673A – THEATRE ARTS III A**

Grades 11-12

Semester, ½ credit

Prerequisite: Theatre Arts I or II or instructor approval

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.

### **18673B – THEATRE ARTS III B**

Grades 11-12

Semester, ½ credit

Prerequisite: Theatre Arts I or II or instructor approval

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

Semester, ½ credit

Prerequisite: Principal Approval

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.

Credit	Course #	Course Title	Prerequisite	Grades
1	18681	JROTC I	None	9-12
1	18682	JROTC II	JROTC I	10-12
1	18683	JROTC III	JROTC I and II	11-12
1	18684	JROTC IV	JROTC I, II, and III and instructor approval	12
½	18904	JROTC Assistant	Principal Approval	-

### 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

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.

## OFFICE – LIBRARY – COUNSELING

Credit	Course #	Course Title	Prerequisite	Grade
½	19901	Office Assistant	Principal Approval – Good attendance	11-12
½	19902	Library Assistant	Principal and Library Media Specialist Approval	11-12
½	19903	Counselor Assistant	Counselor Approval	11-12

### 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

Prerequisite: Librarian approval  
(*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*)

Prerequisite: Counselor Approval

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

Credit	Course #	Course Title	Prerequisite	Grade
1	20066	Student Leadership	Must be a Student Council Cabinet Member	10-12

### 20066 – STUDENT LEADERSHIP

Grades 10-12

Full Year, 1 credit

*(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.