

**SECONDARY  
PROGRAM OF STUDIES  
2023-2024**



# EXCELLENCE IN ACADEMICS 2023-2024 SECONDARY PROGRAM

## INTRODUCTION

Northland Christian School is committed to preparing all students for the world of tomorrow and to offering each student directed academic planning, giving them the best opportunities for the future. In our continued pursuit of these goals, Northland continues to deliver “Excellence in Academics”.

“Excellence in Academics” is a culture. It is our strategic plan for immersing students in a culture of excellence – in a culture where achievement is valued and excellence is encouraged; or even better, where excellence is required. It is designed to move students to an understanding of their God-given gifts. We are intentional about our claim to be a college preparatory school. “Excellence in Academics” is our action plan to vault our graduates into their college choices, excited to embrace all that each university can offer them.

This Academic Program book is designed to help students plan an effective course of study for both their middle school and high school years. It is the responsibility of students and their parents to read and discuss this information in order to make appropriate, effective academic plans. Administrators and counselors are available for assistance.

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## ABOUT NORTHLAND

Northland Christian School, a co-educational, college preparatory school, was founded in 1974. Northland currently enrolls approximately 500 students in PK3 - 12th grade. The faculty is composed of dedicated, degreed, Christian professionals. Many hold advanced degrees and are leaders in their fields of study.

Northland offers a traditional college preparatory curriculum and comprehensive co-curricular programs in Northwest Houston.

At Northland Christian School, our dedicated faculty instill in students a lifelong passion for learning as we prepare minds for leadership and hearts for service. It is our aim that each young person at Northland is equipped with the courage to act with conviction, live with integrity and compassion, and fearlessly pursue their dreams.

### Accreditations

AdvancedED

Cognia

Texas Private School Accreditation Commission (TEPSAC)

### Affiliations

Houston Area Independent Private Schools

National Association of Christian Schools

Texas Association of Non-Public Schools

### Memberships

American Society for Training & Development

Association for Supervision and Curriculum Development

Education Records Bureau

Houston Association of Independent School Counselors

International Society for Technology in Education

National Association of Secondary School Principals

Texas Association for College Admission Counseling

Texas Association of Private and Parochial Schools (TAPPS) conference (Northland is one of twenty-four 4A schools in the conference.)

Texas Computer Educators Association

Texas Private Schools Association

Texas Private School Music Educators Association

### Admissions Office

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Houston, TX 77014

281-440-1060

Fax 281-440-7572

[NorthlandChristian.org](http://NorthlandChristian.org)

### NOTICE OF NON-DISCRIMINATION

Northland Christian School does not discriminate on the basis of race, color, national or ethnic origin regarding her policies, educational offerings, financial assistance programs, athletic programs, or other school-sponsored activities.

## ACADEMIC POLICIES FOR MIDDLE SCHOOL AND HIGH SCHOOL

- All classes are offered based on sufficient enrollment, teacher availability, and consideration of circumstances which may warrant change.
- Enrollment in all Honors, Advanced Placement, and Dual Credit courses requires specific qualifying criteria by the Academic Committee.
- Middle School students who qualify and are eligible may choose to take Algebra I and/or Spanish I or Mandarin I to earn high school credit. Grades earned in these courses will not be included in the student's cumulative high school GPA.
- Credit cannot be given, or accepted, for tutoring by an individual acting privately or a tutoring business offering credits not approved by Northland Christian School.
- Students are required to make up a failed course in a Northland approved summer, evening, or online program. All students needing to take a course during summer school must receive prior approval from the academic counselor. Middle school students who fail Math or English can be retained in grade unless an approved summer program is successfully completed with a grade of 70 or higher. Promotion standards shall be approved by the Northland Academic Committee.
- The Northland Summer Reading Program is required of all 6th - 12th grade students. Teaching units and/or assignments based on the summer reading will be a part of the beginning activities of the school year.
- Students will be counseled to take courses commensurate with their ability, interests, and future plans for post-secondary schooling.
- Due to the curricula and level of difficulty, Honors, Dual Credit and Advanced Placement courses receive an increase in grade points. The numerical grade is not changed on the transcript or the report card. The increase is reflected only in the calculated GPA.
- Transcripts will reflect a grade for each semester of every high school course a student completes. All grades earning high school credit will be calculated into the student's high school Grade Point Average (GPA) with the exception of P.E./Athletics and courses taken in middle school which received high school credit. If a student repeats a course due to failure, both grades will be reflected on the transcript and calculated into the GPA. The student will receive credit for the repeated semester. If a student repeats a semester for any reason other than failure, both grades will be reflected on the transcript; however, credit will be earned and calculated into the GPA for the original semester only.
- Only those grades earned at Northland may be considered for the averaging of two semesters in order to receive a full year's credit in any course. For middle school students, passing is determined by averaging the two semesters. High school students must pass the second semester in order to earn credit by averaging.
- Classes may not be dropped mid-semester.
- No core classes (Bible, English, Math, Science, Social Studies, Foreign Language) may be completed at any outside location.
- There may be occasions where students have met Distinguished Level of Achievement requirements and may qualify for the privilege of late arrival or early dismissal. Students should request on Course Selection form and permission must be given by administration.

# NORTHLAND MIDDLE SCHOOL PLAN OF STUDY

## Requirements for All Middle School Students

Fifteen service hours per year are required for all Northland Middle School students.

### 6th Grade Courses

1. Bible
2. English 6
3. Math 6
4. Science 6
5. Social Studies 6
6. P.E. or Athletics
7. Elective
8. Elective

### Electives

Choose two Year-Long Courses

#### OR

Choose one Year-Long Course and two Semester Electives

#### OR

Choose four Semester Electives

### Year-Long Electives

- Choir
- Orchestra

### Semester Electives

- Art
- Choir
- Drama
- Intro to Debate
- Intro to Robotics
- Technology 6

### 6th Grade P.E. or Athletics

All middle school students are required to take P.E. or athletics each year.

*(Try-out required)*

**Boys:** Baseball, Basketball, Cross Country, Football, Soccer, Track & Field

**Girls:** Basketball, Cheerleading, Cross Country, Soccer, Softball, Track & Field, Volleyball

### 7th Grade Courses

1. Bible
2. English 7/English 7 Advanced \*
3. Math 7/PreAlgebra \*
4. Life Science
5. Texas History
6. P.E. or Athletics
7. Elective
8. Elective

*\* Must Qualify*

### Electives

Choose two Year-Long Courses

#### OR

Choose one Year-Long Course and two Semester Electives

#### OR

Choose four Semester Electives

### Year-Long Electives

- Art
- Choir
- Competitive Debate (application required)
- Competitive Robotics (application required)
- Drama Production
- Orchestra
- Yearbook (application required)

### Semester Electives

- Competitive Debate & Public Speaking (application required)
- Art
- Debate & Public Speaking
- Drama
- Unity Junior Computer Programming

### 7th Grade P.E. or Athletics

All middle school students are required to take P.E. or athletics each year.

*(Try-out required)*

**Boys:** Baseball, Basketball, Cross Country, Football, Soccer, Track & Field

**Girls:** Basketball, Cheerleading, Cross Country, Soccer, Softball, Track & Field, Volleyball

# NORTHLAND MIDDLE SCHOOL PLAN OF STUDY

## Requirements for All Middle School Students

### 8th Grade Courses

1. Bible
2. English 8/English 8 Advanced \*
3. PreAlgebra /Algebra I \* \*\*
4. Integrated Physics and Chemistry (IPC)\*\*
5. U.S. History
6. P.E. or Athletics
7. Elective
8. Elective

### Electives

Choose two Year-Long Courses

#### OR

Choose one Year-Long Course and two Semester Electives

#### OR

Choose four Semester Electives

### Year-Long Electives

- Art
- Choir
- Competitive Debate (application required)
- Competitive Robotics (application required)
- Drama Production
- Mandarin Chinese I \*\*
- Orchestra
- Spanish I \*\*
- Yearbook (application required)

### Semester Electives

- Communication Applications\*\*
  - Art
  - Competitive Debate (application required)
  - Debate & Public Speaking
  - Drama
  - Unity Junior Computer Programming
- \* Must Qualify  
\*\* Will receive High School credit

### 8th Grade P.E. or Athletics

All middle school students are required to take P.E. or athletics each year.

*(Try-out required)*

**Boys:** Baseball, Basketball, Cross Country, Football, Soccer, Track & Field

**Girls:** Basketball, Cheerleading, Cross Country, Soccer, Softball, Track & Field, Volleyball

# NORTHLAND GRADUATION REQUIREMENTS

FOUNDATION DISTINGUISHED LEVEL OF ACHIEVEMENT	
Bible	4
English	4
Math	4
Science	4
History/Social Studies	4
Foreign Language	2
Fine Arts	1
P.E./Athletics	1
Electives	6
<b>Total Credits</b>	<b>30</b>

## Foundation - Distinguished Level of Achievement

Northland Christian School requires that all students graduate with the Foundation - High School Program - Distinguished Level of Achievement in order to best prepare them for future success. All students will earn a multi-disciplinary endorsement as part of their regular coursework at Northland. In addition, students may earn other endorsements as well as performance acknowledgements. All students who begin at NCS for or prior to their 9th grade year will have a minimum of 30 credits. Those transferring in must graduate with the state minimum required for the Distinguished Level of Achievement of 26 credits to be eligible for top 10% automatic admission in the state of Texas. All endorsements and performance acknowledgements will be listed on the student's transcript.

## Endorsements

Students will earn one or more endorsements as part of their graduation requirements. Endorsements consist of a related series of courses that are grouped together by interest or skill set. They provide students with in-depth knowledge of a subject area.

### **Students can choose from 4 endorsement areas:**

- **Multi-Disciplinary** (All students at NCS will earn the Multi-Disciplinary Endorsement.)
- **Arts & Humanities**

- **STEM** - Science, Technology, Engineering, and Math
- **Business & Industry**

### **Multi-Disciplinary Studies Endorsement\***

A student may earn a Multidisciplinary Studies Endorsement by completing Distinguished Level of Achievement and:

- **Option 1:** Four credits in each of the four foundation subject areas.
- **Option 2:** Four credits in advanced placement, or dual credit selected from English, mathematics, science, social studies, economics, language other than English, or fine arts.

*\* All Northland students will graduate with a Multi-Disciplinary Studies Endorsement.*

### **Arts & Humanities Endorsement**

A student may earn an Arts and Humanities Endorsement by completing Distinguished Level of Achievement and:

- **Option 1:** A total of five social studies credits, or
- **Option 2:** Four levels of the same language other than English, or
- **Option 3:** A coherent sequence of four credits from one or two disciplines in Fine Arts
- **Option 4:** Two levels of the same language other than English and two levels of a different language in a language other than English

### **Science, Technology, Engineering and Mathematics (STEM)**

A student may earn a STEM endorsement by completing Distinguished Level of Achievement and:

- **Option 1:** A total of five credits in mathematics by successfully completing Algebra 1, Geometry, Algebra II, and two additional mathematics courses for which Algebra II is a prerequisite, or
- **Option 2:** A total of five credits in science by successfully completing biology, chemistry, physics, and two additional science courses.



### **Business & Industry Endorsement**

A student may earn a Business & Industry endorsement by completing Distinguished Level of Achievement and:

- **Option 1:** Four Technology Application elective credits, by selecting from the following:
  - HS Video Production
  - Digital Art I
  - Digital Art II
  - Unity Certified User Program
  - Dual Credit Introduction to Computers (COSC 1301)
  - Generation TECH
- **Option 2:** Four English elective credits by selecting three levels in one of the following areas:
  - Debate
  - Advanced Journalism: Yearbook
- **Option 3:** A coherent sequence of four credits from a combination of items from (Option 1) and/or (Option 2).

### **Performance Acknowledgements**

A student may earn a performance acknowledgement for outstanding performance in the following areas:

- **Bilingualism & Biliteracy** - demonstrate proficiency in two or more languages by completing all English Language requirements earning a grade of 80 or higher; AND completing three or more credits in a language other than English earning a grade of 80 or higher; OR earning a score of 3 or higher on a College Board advanced placement (AP®) exam for a language other than English.
- **Dual Credit** - earn 12 college credit hours with a grade of 80 or better
- **Advanced Placement® (AP®)** - earn a score of 3 or above on a College Board advanced placement exam
- **PSAT** - a score on the Preliminary SAT/ National Merit Scholarship Qualifying Test (PSAT/NMSQT) that qualified the student for recognition as a commended scholar or higher by the College Board and National Merit Scholarship Corporation.
- **SAT** - total score of 1350 or higher
- **ACT** - earn a composite score of 29 (excluding the writing sub-score)
- **PreACT** - earn a composite score of 29

### **Requirements for All High School Students**

- All students at Northland are required to take and pass Bible each year. Students transferring into Northland are required to take Bible for only the semesters that they are enrolled in Northland.
- Students are expected to take 8 classes per semester.
- Two years of the same foreign language are required. Three years of the same foreign language is strongly recommended to enhance the student's college profile.
- A math course must be taken every year during grades 9-12 (must include Algebra 1, Geometry and Algebra II). If Algebra 1 is taken during the 8th grade, the student will have 5 math credits upon completion of the senior year.
- Students are required to earn 4 credits in Science (must include Biology, Chemistry and Physics). It is strongly recommended that students take a science course each year of high school to enhance the student's college profile.
- All students enrolled in AP® courses are required to take the AP® exam. Students are responsible for the fee which is determined by the College Board. **The fee for 2022-2023 was \$97 per exam and \$145 for AP® Capstone (Seminar & Research) exams.**
- Dual credit courses require an additional fee which is determined by Lone Star College. **The fee for 2022-2023 was \$26 per credit hour. Students may be required to purchase books for the courses.**

## CRITERIA FOR PLACEMENT IN ADVANCED/ONLINE CLASSES

All courses taught at Northland meet a high academic standard and prepare students for college. All students are gifted in different ways and it is important that they be placed in the classes that best meet their needs. For interested students who are ready for the challenge, advanced courses are offered in most subject areas. **A parent/student signed contract will be required for all AP, Dual Credit, and online classes. Online classes require an additional fee.**

### Honors, Dual Credit or AP®

For placement in an Honors, Dual Credit or AP® class, the Academic Committee will use the following criteria:

- Standardized test scores (TerraNova, PSAT, TSI, SAT, or ACT)
- Teacher recommendations
- Grade in the previous class of an 85 or higher

The following guidelines will help decide whether students are ready for the challenge:

1. Did the student score in the 85th percentile or above on standardized tests in the subject area in which they wish to advance?
  - Math – Math section
  - English – Reading and Verbal skills
  - Biology – Reading and Verbal skills
  - Chemistry/Physics – Math section
  - History – Reading and Verbal skills
2. Did the student make an 85 or above in the previous course?
3. If the **high school** student is currently taking an advanced class, did he or she maintain a grade of at least an 85?  
If the **middle school** student is currently taking an advanced class, did he or she maintain a grade of at least an 85? Middle school students who do not maintain an 85 may be rescheduled during the first semester or may consider repeating the course the following year. Due to the importance of the foundation required to advance successfully in math, 8th graders taking Algebra I must make an 85 to advance.
4. Has the student demonstrated that he or she possesses the discipline and work ethic necessary to succeed in an advanced class?
5. **Students desiring to take more advanced math classes** (such as AP® Calculus and AP® Statistics) may take Geometry and Algebra II concurrently; however, as this represents an additional commitment of time and energy, the criteria for doing so are higher than for taking an honors level class.

### For students currently in Algebra I - 8th Grade:

- Each semester average in Algebra I is at least a 90.
- Recommendation of the current teacher. Students should discuss their desire to take additional math with their Algebra I teacher before requesting classes for the next year.

- Score in the 90th percentile or above on the most recent standardized test in math.
- Students who meet the above criteria may take both Honors Geometry and Honors Algebra II. If a student only wishes to take one of these at the Honors level, they will take regular Geometry and Honors Algebra II.
- Students meeting these requirements, and who would like to take these courses, should meet with their counselor to discuss these options before completing Course Selection.

### For students currently in Algebra I - 9th Grade:

- Each semester average in Algebra I is at least a 95.
- Recommendation of the current teacher. Students should discuss their desire to take additional math with their Algebra I teacher before requesting classes for the next year.
- Score in the 90th percentile or above on the most recent standardized test in math.
- Students who meet the above criteria may take both Honors Geometry and Honors Algebra II only with the recommendation of the Algebra I teacher. If a student only wishes to take one of these at the Honors level, they will take regular Geometry and Honors Algebra II.
- If you meet these requirements, and would like to take these courses, please meet with your counselor to discuss these options before completing Course Selection.

### Dual Credit Classes

Sophomore, Junior, and Senior students wishing to take dual credit classes not offered at Northland Christian School, must demonstrate a willingness to learn and the self-discipline to work diligently. Students interested in Dual Credit Classes must consult with the Counseling Center.

Dual Credit classes allow students to earn concurrent high school and college credit. Therefore, placement in these courses is based on the entrance requirements for Lone Star College. The application and testing procedures can be obtained from the Counseling Center. Student scores must meet Lone Star College standards on the TSI Assessment test unless exempt based on their PSAT, SAT or ACT score. Test scores must be approved and on file in the Counselor's Office prior to the first day of the application school year or the student will not be enrolled in the course when the school year begins. The Academic Counseling Center will arrange a mandatory dual credit orientation for students enrolled in dual credit classes. Additional fees are required by Lone Star College and is the responsibility of the student and parents. The fee for 2022-2023 was \$26 per credit hour. Students may be required to purchase books for the courses. Enrollment in dual credit classes may not exceed two courses per semester.

# NORTHLAND HIGH SCHOOL PLAN OF STUDY

## (Sample Preliminary Plan)

Each student, in consultation with his/her parents, should draw up his/her plan for the next school year. Please note this is a preliminary plan to be considered for consultation and approval by your counselor/administrator. Complete your schedule for each year, both previous and future school years. Please refer to previous page as a guide for requirements.

Name \_\_\_\_\_

Freshman \_\_\_\_\_ - \_\_\_\_\_

1. Bible:
2. English:
3. Math:
4. Science:
5. Social Studies:
6. Foreign Language:
- 7.
- 8.

Sophomore \_\_\_\_\_ - \_\_\_\_\_

1. Bible:
2. English:
3. Math:
4. Science:
5. Social Studies:
6. Foreign Language:
- 7.
- 8.

Junior \_\_\_\_\_ - \_\_\_\_\_

1. Bible:
2. English:
3. Math:
4. Science:
5. Social Studies:
- 6.
- 7.
- 8.

Senior \_\_\_\_\_ - \_\_\_\_\_

1. Bible:
2. English:
3. Math:
4. Science:
5. Social Studies:
- 6.
- 7.
- 8.

Advanced and Honors Courses: See page 8 of Course Catalog for Selection Criteria.  
Courses offered based on availability.

## WHAT CLASSES SHOULD I TAKE?

All students will be required to follow the Academic (College Preparatory) Path. These courses will prepare students for college level work and give them a solid foundation in all academic subjects. Students who wish to accelerate learning in their areas of interest may choose one of the other available paths, keeping in mind all prerequisites for each course listed on pages 13-34. Students who qualify and wish to take advanced level classes may do so during any high school year.

**Math** – Northland students are required to take math every year including Algebra I, Geometry and Algebra II. Students who are preparing for college need to take PreCalculus to be prepared for college level math and to bolster their college application. College Algebra will help prepare students for the college math required for Liberal Arts majors.

Level:	Honors Level (STEM majors)	Honors Level (non-math majors)	College Preparatory Path
<b>Possible College Majors:</b>	<b>Math, Engineering, Science</b>	<b>Business, Social Studies</b>	<b>Liberal Arts, Business, Fine Arts</b>
8th/9th	Algebra I	Algebra I	Algebra I
9th/10th	Geometry Honors	Geometry Honors	Geometry
10th/11th	Algebra II Honors	Algebra II Honors	Algebra II
11th/12th	PreCalculus Honors	PreCalculus or PreCalculus Honors	PreCalculus or College Algebra DC (online) or College Algebra
12th (If Alg. I taken in 8th grade)	AP <sup>®</sup> Calculus AB or BC AP <sup>®</sup> Statistics may be taken additionally	College Algebra DC (online) Calculus Honors (Business majors), or AP <sup>®</sup> Statistics	College Algebra DC (online) or College Algebra or PreCalculus

**Science** – Northland students are required to take four years of science, including Biology, Chemistry, and Physics, to meet graduation requirements. Students who take IPC in eighth grade may choose to take a science or non-science elective their senior year. It is strongly recommended that a science course be taken each year of high school to enhance the student’s college profile.

Level:	Honors Level (STEM majors)	Honors Level (non-math majors)	College Preparatory Path
<b>Possible College Majors:</b>	<b>Math, Engineering, Computer Science, Physics, Chemistry</b>	<b>Biology, Pre-Med</b>	<b>Liberal Arts, Business, Fine Arts</b>
9th	Biology Honors	Biology Honors	Biology
10th	Chemistry Honors	Chemistry Honors	Chemistry
11th	Physics Honors or Chemistry AP <sup>®</sup>	Physics Honors, Biology AP <sup>®</sup> , or Chemistry AP <sup>®</sup>	Physics
12th	Physics Honors, Physics AP <sup>®</sup> or Chemistry AP <sup>®</sup>	Physics Honors, Biology AP <sup>®</sup> , Chemistry AP <sup>®</sup> , or Physics AP <sup>®</sup>	Science Elective

**English** – Northland students are required to take four years of English at the high school level.

Level:	AP <sup>®</sup>	Honors Level (non-English majors)	College Preparatory Path
<b>Possible College Majors:</b>	<b>English, Liberal Arts, Pre-Law, History</b>	<b>Liberal Arts, Pre-Law, Business, History</b>	<b>Liberal Arts, Business, Fine Arts</b>
9th	English I Honors	English I Honors	English I
10th	English II Honors	English II Honors	English II
11th	Language & Composition AP <sup>®</sup>	Language & Composition AP <sup>®</sup> or English III Honor	English III
12th	Literature & Composition AP <sup>®</sup>	Literature & Composition AP <sup>®</sup> or English IV Honors	English IV

**Social Studies** - Northland students are required to take four years of Social Studies at the high school level.

Level:	AP®	College Preparatory Path
Possible College Majors:	English, Liberal Arts, Pre-Law, History	Liberal Arts, Business, Fine Arts
9th	World Geography	World Geography
10th	World History AP®	World History
11th	U.S. History AP®	U.S. History
12th	U.S. Government & Politics AP® Macroeconomics AP®	U.S. Government Economics

## GRADE POINT SCALE

Numerical Grade	Academic Classes	Honors	AP® /Dual Credit Classes
A100	5.0	6.0	6.5
A99	4.9	5.9	6.4
A98	4.8	5.8	6.3
A97	4.7	5.7	6.2
A96	4.6	5.6	6.1
A95	4.5	5.5	6.0
A94	4.4	5.4	5.9
A93	4.3	5.3	5.8
A92	4.2	5.2	5.7
A91	4.1	5.1	5.6
A90	4.0	5.0	5.5
B89	3.9	4.9	5.4
B88	3.8	4.8	5.3
B87	3.7	4.7	5.2
B86	3.6	4.6	5.1
B85	3.5	4.5	5.0
B84	3.4	4.4	4.9
B83	3.3	4.3	4.8
B82	3.2	4.2	4.7
B81	3.1	4.1	4.6
B80	3.0	4.0	4.5
C79	2.8	3.8	4.3
C78	2.6	3.6	4.1
C77	2.4	3.4	3.9
C76	2.2	3.2	3.7
C75	2.0	3.0	3.5
D74	1.8	1.8	1.8
D73	1.6	1.6	1.6
D72	1.4	1.4	1.4
D71	1.2	1.2	1.2
D70	1.0	1.0	1.0
F69 and below	0.0	0.0	0.0

# **NORTHLAND CHRISTIAN SCHOOL SECONDARY COURSE SELECTION**

## **BIBLE**

### **SECONDARY CAMPUS BIBLE OVERVIEW**

*The Northland Secondary Bible Program is designed to teach the Bible with the goal of life transformation through faith in Jesus Christ and the power of the Holy Spirit. Through our curriculum and enrichment, students will learn Biblical truths and have the opportunity to experience the power of God's word through community outreach, real world applications, and through an interactive and challenging classroom environment. Our Bible curriculum is intentionally designed to fulfill our mission that students grow spiritually, intellectually, physically, and socially for the glory of God.*

**6th Grade**

**The Birth and Early History of the Church -  
The life of Jesus and the book of Acts**

**2 Semesters**

The purpose and goal is to study and understand the connections of the work of Christ to the birth, early growth, and persecution of the Church. The spreading of the gospel from Jerusalem to Judea, Samaria and the ends of the earth will be examined. The life of Paul and his impact on the early church will also be discussed, including his arrest, trial, and journey to Rome.

**7th Grade**

**Route 66: Old Testament Survey**

**2 Semesters**

This study provides a basic introduction to the structure and themes of the Word of God. "Route 66" is a survey course with an emphasis on understanding God's relationship with man throughout history. As students' journey through this survey of the Old Testament, they will discover truths and applications that God placed in each book of the Bible. God's gracious work is clear—from creation to the cross to the consummation of time.

**8th Grade**

**The God Man**

**2 Semesters**

This course is a study on the person and work of Jesus as presented in the gospels. Students will gain an introductory understanding of the life of Christ with a special emphasis on the major events recorded in the gospel of John. This course will further introduce students to the cultural and historical context of the Gospels and important theological concepts found within. Finally, emphasis will be placed throughout the year on how the life and ministry of Jesus can be applied to our lives as Christians.

**9th Grade - 12th Grade**

**Bible 101**

**1 Credit**

**2 Semesters**

Students new to Northland without a background in Christianity/ Bible will enter into Bible 101 where they will look at the Thread that runs through the Bible cover-to-cover. They will learn the basic storyline of the Bible and the Triune God that we meet in the Word to prepare them for Bible classes going forward. Placement into this class will be determined by interview with the instructor and/or Department Chair.

**9th Grade**

**Theology - "Behold Your God"**

**1 Credit**

**2 Semesters**

This study has one purpose—to encourage students to know the attributes and character of God. By presenting the Bible as God's self-revelation, "Behold Your God" magnifies the character and work of the Father, the Son, and the Holy Spirit. As students know and love their incomprehensible God, they'll discover

a grace they can reflect to others as they learn how to live a life that is grounded and dependent on God's love and truth. Curriculum will be supplemented by an additional book at student expense. *Simply Christian* by N.T. Wright

**10th Grade**

**Old Testament**

**1 Credit**

**2 Semesters**

This course will provide an in-depth, detailed study of the Old Testament with attention paid to the language, culture, literature, and overall context of this immense portion of Scripture. The goal of this class is to improve biblical literacy, to show continuity in God's activity from creation on through Jesus and into the Church today, and to teach students how to read the Bible well and apply it in their lives.

**11th Grade**

**New Testament**

**1 Credit**

**2 Semesters**

This course will provide an in-depth comparative study of the four gospels with attention paid to the unique nature of all four books. Students will be able to understand the nature of scripture and the character of Christ. In addition, this course will cover the repeated themes seen throughout the Epistles in order to gain an understanding of their overall message, cultural and historical context and personal application.

**12th Grade**

**Christian Worldviews/Apologetics**

**1 Credit**

**2 Semesters**

Students will develop an understanding of logical thought in order to practice engaging in meaningful, productive conversation with individuals who may hold different beliefs. Students will also interact with the biblical text using a scholastic, hands-on approach in order to interpret the scriptures well and gain a better understanding of the biblical foundations upon which the Christian faith is built.

Students will study the history of the church and the development of theological doctrine that has helped guide the Christian faith to where it is today. Students will utilize their understanding of these topics in order to further discussion with individuals outside the Christian faith on what it means to be a follower of Christ and to adequately express and defend their beliefs through meaningful conversation with those who hold different views.

## ENGLISH

### English 6th Grade - Academic

This course is designed to develop, strengthen, and broaden a student's understanding and the use of language in its various forms—with a particular focus on grammar rules and constructs. Reading, writing, speaking, listening, and collaborative strategies are used purposefully to build knowledge and skills and to help students become independent readers, writers, and thinkers as they continue to progressively build the skills necessary for academic success in middle school. The primary goals of the course are to foster independent learning, encourage in-depth exploration of the content, practice close reading strategies and develop academic habits of mind. Outside and summer reading are required.

### English 7th Grade - Academic

This course is designed to develop, strengthen, and broaden a student's understanding and the use of language in its various forms. Reading, writing, speaking, listening, and collaborative strategies are used purposefully to build knowledge and skills and to help students become independent readers, writers, and thinkers as they continue to progressively build the skills necessary for academic success in middle school and high school. The primary goals of the course are to foster independent learning, encourage in-depth exploration of the content, explore various genres, and develop academic habits of mind. Outside and summer reading are required.

### English 7th Grade - Advanced

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

This course is designed with all the fundamentals of the Academic level class following the same scope and sequence. Through increased rigor, deeper thinking, and the development of more advanced products, students will further refine their reading and writing skills. Outside and summer reading are required.

### English 8th Grade - Academic

This course is designed to develop, strengthen, and broaden a student's understanding and the use of language in its various forms. Reading, writing, speaking, listening, and collaborative strategies are used purposefully to build knowledge and skills and to help students become independent readers, writers, and thinkers as they continue to progressively build the skills necessary for academic success in middle school and high school. The primary goals of the course are to foster independent learning, encourage in-depth exploration of the content, explore various genres, and develop academic habits of mind. Outside and summer reading are required.

### English 8th Grade - Advanced

*Prerequisite and Limitations: Previous levels of English and Selection criteria, see page 8.*

This course is designed with all the fundamentals of the Academic level class following the same scope and sequence. Through increased rigor, deeper thinking, alternate readings and assignments, and the development of more advanced products, students will further refine their reading and writing skills in preparation for their high school courses. Outside and summer reading are required.

### Communication Applications

#### 8th - 12th Grade

**.5 Credit**

**1 Semester**

Communication Applications is designed to teach the skills and strategies needed to become an effective communicator in a variety of “real life” situations. Students will build self-confidence while speaking in both formal and informal settings. Students are expected to identify, analyze, develop, and evaluate communication skills needed for professional and social success in interpersonal situations, interviews, group interactions, and professional or personal presentations. Assignments will focus on verbal and nonverbal messages, listening skills, and critical thinking. At the end of the semester, students will be able to communicate effectively and appropriately, which will allow them greater ease in expressing their thoughts and feelings.

### English I - 9th Grade

**1 Credit**

**2 Semesters**

High school freshmen will be led to develop analytical reading, academic writing, critical thinking and presentation skills. Course content includes myth, short stories, poetry, drama, and novels. Analytic reading instruction will extend understanding of literary elements and language. Writing instruction will extend development in various modes of writing including narrative, expository and argumentative. In addition, students will develop skills in critical thinking, effective discourse, collaboration and reflection. Outside and summer reading are required.

### English I Honors - 9th Grade

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

Students will follow the scope and sequence for the Academic 9th grade course with the addition of particular and specific attention to standards and rigor set forth by the College Board in preparation for the rigor of Advanced Placement classes in high school. Outside and summer reading are required.



## ENGLISH *continued*

### English II - 10th Grade

#### World Literature

1 Credit

2 Semesters

High school sophomores will learn specific writing skills and demonstrate their academic writing competence in various course assessments and projects. Course content includes short stories, poetry, drama and novels as well as a number of non-fiction essays and writings. Analytical reading instruction will extend understanding of literary elements and language. Writing instruction will extend development in various modes of writing. In addition, students will develop skills in critical thinking, effective discourse, collaboration and reflection. Outside and summer reading are required.

### English II Honors - 10th Grade

#### World Literature

1 Credit

2 Semesters

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

Students will follow the scope and sequence for the Academic 10th grade course with the addition of particular and specific attention to standards and rigor set forth by the College Board in preparation for the rigor of Advanced Placement classes in high school. Outside and summer reading are required.

### English III - 11th Grade

#### American Literature and Composition

1 Credit

2 Semesters

High school juniors will encounter the American literary heritage from its beginning to the present. They will become familiar with the traditions from different periods in literature while reading essays, poetry, short fiction and various historical speeches and essays. Analytical reading instruction will extend understanding of literary elements and language. Writing instruction will extend development in various modes of writing. In addition, students will develop skills in critical thinking, effective discourse, collaboration and reflection. Outside and summer reading are required.

### English III Honors - 11th Grade

#### American Literature and Composition

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

Students will follow the scope and sequence for the Academic 11th grade course with the addition of specific attention to college readiness writing and close reading skills. Additional outside reading assignments will be required along with summer reading.

### English III AP® - 11th Grade

#### Language and Composition

1 Credit

2 Semesters

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

The rigor of this college level course requires students to write in persuasive and argumentative styles as well as a variety of modes and for various audiences. Course content emphasizes analysis of rhetorical techniques and their application to a variety of writing situations. Students will also develop skills in collaboration and communication. Outside and summer reading are required. The College Board AP® Exam is required of students at the end of the year. Students will receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board.

### English IV - 12th Grade

#### British Literature and Composition

1 Credit

2 Semesters

This course prepares students for the reading, thinking, writing, and research tasks encountered in college course-work. Students will read, analyze and synthesize complex literary works and non-fiction prose to formulate their own academic arguments. Analytical reading instruction will extend understanding of literary elements and language. Writing instruction will extend development in various modes of writing. In addition, students will develop skills in critical thinking, effective discourse, collaboration and reflection. SAT vocabulary continues to be a focus. Outside and summer reading are required.

### English IV Honors - 12th Grade

#### Literature and Composition

1 Credit

2 Semesters

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

Students will follow the scope and sequence for the Academic 12th grade course with the addition of specific attention to college readiness writing and close reading skills as well as an argumentative research project. Additional outside reading assignments will be required along with summer reading.

## ENGLISH *continued*

### English IV AP® - 12th Grade Literature and Composition

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Previous levels of English and Selection criteria, page 8.*

In this college level course, students explore literary works from different periods. Careful attention is given to close reading of literary texts and to their historical context. Students are expected to read complex texts with understanding and to write complex prose that communicates effectively with mature readers. In addition, students will develop skills in critical thinking, effective discourse, collaboration and reflection. Summer and extensive outside reading are required. The College Board AP® Exam is required of students at the end of the year. Students will receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board.

### Journalism I 9th - 12th Grade

**1 Credit**

**2 Semesters**

This course is designed to provide opportunities for students to engage in an in-depth, hands-on experience in journalism and the news writing process. Students will learn various article formats and work towards developing their own voice using various writing styles. Students will be responsible for the planning, design, and publication of the online school newspaper. This production process will involve news, sports, and feature writing, page and graphic design, photography, and business management. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus.

### Journalism II 10th - 12th Grade

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Journalism I*

This course will build on and expand the knowledge and techniques learned in Journalism I. Students will serve as mentors for Journalism I students, modeling interviewing and editing techniques, coaching them in writing, and providing guidance as needed. Journalism II students will serve as section editors for the school online newspaper, focusing on advanced layout techniques, photojournalism, and broadcast journalism. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus.

### Journalism III & IV - Honors 11th - 12th Grade

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Journalism I and II*

Students will take the leadership roles for the online student newspaper and serve as Managing Editors. Along with continuing their own writing and column assignments, they will create assignments for the newspaper staff, brainstorm ideas for features and special pages, take the lead in assigning video news packages for broadcast news, and work to promote the news department to the student body of Northland. They will also work with the Broadcast News Editors to create a cohesive program. Students will also have the opportunity to compete at Journalism writing competitions.

# MATH

## Math - 6th Grade

The mathematics course for grade six is designed to not only teach mathematical concepts, but to also provide students with real-life situations in which their math skills can be utilized. There is an emphasis on working with decimals, fractions, ratios, proportions, and percents throughout the course. These skills are also applied to other topics such as geometric concepts and measurement. The course also introduces algebraic concepts through integers and informally solving equations.

## Math - 7th Grade

The 7th grade math course focuses on math operations involving fractions, decimals, percents, and integers. Students will apply these skills to solve real world problems involving measurement, probability, and financial literacy. Application of proportional relationships is emphasized throughout the course. Other concepts such as interpreting data, statistics, geometry, and solving one-step equations and inequalities are also covered.

## PreAlgebra - 7th Grade

*Prerequisite and Limitations: Selection criteria, page 8.*

In PreAlgebra, topics including numerical operations, estimation, algebraic functions, statistics, probability, geometry, measurement, problem solving, algebraic operations, solving basic equations, and graphing will be covered. Preparation for Algebra I is the main emphasis. Either a scientific calculator or a TI-84 graphing calculator is required.

## PreAlgebra - 8th Grade

The 8th grade PreAlgebra course is designed to prepare students for Algebra I. The course emphasizes fluency in working with linear equations, graphing, and solving basic equations and systems of equations. Other concepts such as statistics, geometry, and operations with exponents are also covered. A TI-84 graphing calculator is required for the second semester of the course.

## Algebra I - 8th Grade

**1 Credit** **2 Semesters**

*Prerequisite and Limitations: Selection criteria, page 8.*

Algebra I reinforces concepts learned in PreAlgebra (such as solving multi-step equations and linear graphing) and expands into solving systems of equations and inequalities, factoring and simplifying polynomials, solving quadratic equations and working with exponents and radicals. Students are given a foundation for concepts that will be learned in Geometry, Algebra II and PreCalculus. A TI-84 graphing calculator is required for the second semester of the course.

## Algebra I - 9th Grade

**1 Credit** **2 Semesters**

Algebra I reinforces concepts learned in PreAlgebra (such as solving multi-step equations and linear graphing) and expands into solving systems of equations and inequalities, factoring and simplifying polynomials, solving quadratic equations and working

with exponents and radicals. Students are given a foundation for concepts that will be learned in Geometry, Algebra II and PreCalculus. A TI-84 graphing calculator is required for the second semester of the course.

## Geometry - Academic

**9th or 10th Grade**  
**1 Credit** **2 Semesters**

*Prerequisite and Limitations: Algebra I*

This course is classical Euclidean geometry, including parallel lines, triangles, congruence, similarity, quadrilaterals, polygons, circles and solids. Use of algebra is incorporated throughout the course. Formal proofs as well as trigonometry will be used in multiple units of study. A TI-84 graphing calculator is required for the second semester of the course.

## Geometry - Honors

**9th or 10th Grade**  
**1 Credit** **2 Semesters**

*Prerequisite and Limitations: Algebra I and Selection criteria, page 8.*

This course includes all of the concepts in Academic Geometry, but with greater depth and complexity. Additional topics will include formal logic, special segments in triangles, midsegments of trapezoids and kites. A TI-84 graphing calculator is required for the second semester of the course.

## Algebra II - Academic

**10th or 11th Grade**  
**1 Credit** **2 Semesters**

*Prerequisite and Limitations: Algebra I and Geometry.*

*May be taken concurrently with Geometry - see Selection criteria, page 8.*

Algebra II includes the concepts of solving open sentences with one or more variables, algebraic operations with polynomials and rational expressions, properties of functions, matrices and determinants, graphing, quadratic and higher degree functions, complex numbers, conic sections, exponential and logarithmic functions, sequences and series, and probability. Technological applications of these topics will be integrated into the course. A TI-84 graphing calculator is required.

## Algebra II - Honors

**10th or 11th Grade**  
**1 Credit** **2 Semesters**

*Prerequisite and Limitations: Algebra I, Geometry and Selection criteria, page 8. May be taken concurrently with Geometry - see Selection criteria, page 8.*

Algebra II Honors focuses on the algebraic concepts of solving open sentences of different degrees, polynomials and rational expressions, function analysis, matrices and determinants, graphing, complex numbers, conic sections, exponential and logarithmic functions, sequences and series, and probability. This course emphasizes higher-level thinking and problem solving. Applications and technology are integrated into this course. This course is designed as preparation for PreCalculus or PreCalculus Honors. A TI-84 graphing calculator is required.

## MATH *continued*

### **PreCalculus - Academic**

**11th or 12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Algebra I, Geometry and Algebra II.*

Precalculus contains elements of trigonometry, analytic geometry, function analysis and graphing, sequences and series, and advanced algebraic topics. This course is designed as preparation for AP<sup>®</sup> Calculus AB, Honors Calculus, or AP<sup>®</sup> Statistics. A TI-84 graphing calculator is required.

### **PreCalculus - Honors**

**11th or 12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Algebra I, Geometry, Algebra II and Selection criteria, page 8.*

Precalculus Honors includes the study of trigonometry, analytic geometry, and function analysis. In-depth study of functions, graphs, advanced algebraic topics, proofs, and applications is emphasized in their relation to calculus. This course is designed as preparation for AP<sup>®</sup> Calculus AB or BC or AP<sup>®</sup> Statistics. A TI-84 graphing calculator is required.

### **Calculus - Honors**

**12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: PreCalculus or PreCalculus Honors and Selection criteria, page 8.*

This course is primarily intended for students intending to major in business or the social sciences in college. Calculus is the study of rates of change of various functions and their applications. In our development of the Calculus we will study applications to business, including the cost, revenue and profit functions as well as various social science applications such as rates of learning, population growth and equity of income distribution. A TI-84 graphing calculator is required.

### **AP<sup>®</sup> Calculus - AB**

**12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: PreCalculus Honors and Selection criteria, page 8.*

Calculus applies the study of limits, derivatives, integrals, and functions to various applications. Using calculus as a problem-solving tool and preparation for taking the Calculus AB exam is emphasized in this course. A TI-84 graphing calculator is required. The College Board AP<sup>®</sup> Exam is required of students at the end of the year. Students will receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board.

### **AP<sup>®</sup> Calculus - BC**

**12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Honors PreCalculus and Selection criteria, page 8.*

The primary goal and intended audience for this course is the same as for Calculus AP<sup>®</sup> - AB; however this is a more intense course as it covers the additional topics of convergence and divergence of infinite series, applications of Calculus to both polar and parametric functions, logistic growth and additional methods of finding antiderivatives. A TI-84 graphing calculator is required. The College Board AP<sup>®</sup> Exam is required of students at the end of the year. Students will receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board.

### **College Algebra**

**11th or 12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Algebra I, Geometry, Algebra II and Selection criteria, page 8.*

Students will review material covered on the TSI (Texas Success Initiative) math placement test, which covers four content areas: 1. Elementary Algebra and Functions (Algebra I), 2. Intermediate Algebra and Functions (Algebra II), 3. Geometry and Measurement, and 4. Data Analysis, Statistics and Probability. Students will also complete an in-depth study and applications of polynomial, rational, radical, absolute-value, piecewise defined, exponential and logarithmic functions, equations, inequalities, graphing skills and systems of equations using matrices.

### **Introduction to Dual Credit College Algebra**

**11th or 12th Grade**

**.5 Credit**

**1 Semester**

*Prerequisite and Limitations: Algebra I, Geometry, Algebra II and Selection criteria, page 8.*

The goal of this class is to prepare students to take College Algebra Dual Credit (online). In-depth study of prerequisite knowledge needed for College Algebra as well as an overview of topics covered in College Algebra. Prior to enrolling in College Algebra - Dual Credit (online) MATH 1314, students will be required to pass an entrance exam.

## MATH *continued*

### College Algebra - Dual Credit (online)

#### MATH 1314

11th or 12th Grade

.5 Credit

1 Semester

*Prerequisite and Limitations: Introduction to Dual Credit College Algebra and Selection criteria, page 8.*

Students who passed the entrance exam and qualified for dual credit will be taking this class (MATH 1314) online from Lone Star College. These students will be placed in a classroom on our campus with an instructor who will act as a facilitator. In-depth study and applications of polynomial, rational, radical, absolute-value, piecewise defined, exponential and logarithmic functions, equations, inequalities, graphing skills and systems of equations using matrices. Additional topics such as sequences, series, probability, conics and inverses may be included. Dual Credit courses require an additional fee which is determined by Lone Star College.

### AP® Statistics

12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Honors Algebra II with Teacher Recommendation or PreCalculus and Selection criteria, page 8. Excellent reading comprehension and writing skills are also needed.*

The AP® Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP® Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. The College Board AP® Exam is required of students at the end of the year. Students will receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board.

## SCIENCE

### Earth and Space Science - 6th Grade

Earth and Space science involves the study of planet Earth and the surrounding universe. It begins with a “big-picture” overview of the structure of Earth, including a basic mapping unit, and concludes with an introduction to astronomy. This course will focus on the processes and results associated with plate tectonics, earthquakes, and volcanoes; the rock cycle; weathering, erosion, and deposition; Earth’s spheres, weather and climate; and Earth’s water resources. The final unit introduces the solar system and celestial bodies. Students will use internet sources, textual information, and appropriate labs to investigate the content. They will also work on projects that involve research, creating a product, and presenting their findings in different ways including the use of 21st century technology.

### Life Science - 7th Grade

Life Science is the study of living things and the environment in which they live. This course will focus on examining the structure and function of cells, different organism including archaebacteria, bacteria, protists, fungi, plants, and animals, and the human body. It will conclude with a unit on basic ecology. Students will use internet sources, textual information, and appropriate labs to investigate the similarities and differences within groups of organisms. There will be four dissection labs: lily flower, grasshopper, squid, and frog. Students will work on projects that involve research, creating a product, and presenting their findings in different ways including the use of 21st century technology.

### IPC (Integrated Physics and Chemistry)

#### 8th Grade

1 Credit

2 Semesters

The focus of IPC is to provide students with an introduction to Physics and Chemistry. The first semester will be focused on the basic concepts of chemistry, which include the structure of an atom, the periodic table, chemical bonds and reactions, mixtures, and compounds. In the second semester students will focus on introductory Physics. They will cover topics such as density, buoyancy, forces, motion, machines, energy, electricity, magnetism, sound and light. Students will participate in weekly hands-on labs, group and individual projects and regular testing.

### Biology - 9th Grade

1 Credit

2 Semesters

This is a college preparatory laboratory science course based on regular laboratory and field investigations that include a study of structure and function of living organisms and their interactions with the environment. Topics of study include biochemistry, microscopy, cell structure and function, cellular energetics, cellular reproduction, genetics and heredity, taxonomy and classification, bacteria, protists, fungi, plants, animals, ecology, and human body systems. A special emphasis is placed on laboratory investigations including microscopic techniques, data collection and analysis, and laboratory dissection techniques with an extensive pig dissection which culminates in a large scale lab practical exam.

### Biology Honors - 9th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Selection criteria, page 8.*

This is a college preparatory laboratory science course that prepares students to be successful in an AP<sup>®</sup> Biology course. The course is based on understanding science as a process to help students begin to develop

a conceptual framework for modern biology. Students will perform regular laboratory and field investigations that include a study of structure and function of living organisms and their interactions with the environment. Topics of study include biochemistry, microscopy, cell structure and function, cellular energetics, cellular reproduction, genetics and heredity, taxonomy and classification, bacteria, protists, fungi, plants, animals, ecology, and human body systems. A special emphasis is placed on problem solving, written communication of concepts and observations, microscopic techniques, data collection and analysis, and laboratory dissection techniques with an extensive pig dissection which culminates in a large scale lab practical exam.

### Biology AP<sup>®</sup>

#### 11th or 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Biology, Chemistry and Selection criteria, page 8.*

The AP<sup>®</sup> Biology course is equivalent to a two-semester college introductory biology course designed to enable students to 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. The key concepts and related content that define the AP<sup>®</sup> Biology course and exam are organized around a few underlying principles called the big ideas, which encompass the core scientific principles, theories and processes governing living organisms and biological systems. The four big ideas that will be studied in this class are: Cellular Energy and Communication, Evolution, Genetics and Information Transfer, and Biological Interactions. Students will complete at least 10 multi-day lab investigations that reinforce the big ideas and encourage the development of scientific inquiry and reasoning skills. Completion of this course will prepare students for the AP<sup>®</sup> Biology exam. AP<sup>®</sup> Biology is historically a challenging and difficult class; therefore, students selecting this course should be highly motivated, self-disciplined and inquisitive. Students enrolled in AP<sup>®</sup> courses are required to take the AP<sup>®</sup> exam. Students are responsible for the exam fee which is determined by the College Board.

### Chemistry

#### 10th Grade

1 Credit

2 Semesters

The academic level of chemistry is designed for the student who will have a non-science college major. The student needs a mastery of basic algebra concepts. The topics covered in this course are dimensional analysis and International System unit conversions, history of atomic theory, structure of the atom, bonding, naming compounds, balancing equations, stoichiometry, states of matter and energy changes, gases, solutions, and acid/base systems. When time allows, oxidation-reduction reactions and electrochemistry will be introduced. These topics are sufficiently introduced but not with the depth of honors chemistry.

## SCIENCE *continued*

### Chemistry - Honors

10th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Biology, Algebra II, and Selection criteria, page 8.*

The honors chemistry course is geared for the student who will be majoring in engineering, pre-med, or a or a science/technology related field in college. Honors chemistry is math based and uses dimensional analysis throughout the course. Topics covered in this course are the International System of units, the periodic table, history of the atom, structure of the atom, bonding, naming compounds, balancing equations, stoichiometry, predicting, states of matter and energy changes, gases, solutions, and acid/base systems. An introduction of oxidations-reduction reaction and electrochemistry may also be covered. The honors chemistry student should be a self-motivated learner and have a strong math background.

### AP<sup>®</sup> Chemistry

11th or 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Biology, Chemistry and Selection criteria, page 8.*

AP<sup>®</sup> Chemistry is a course that deals with chemistry topics at a college level. The topics and laboratory work covered in AP<sup>®</sup> Chemistry are those specified by the College Board™. Students are expected to have previous knowledge of significant figures with measurements and calculations, scientific laws concerning matter, atomic theory, compounds and nomenclature, balancing equations, oxidation-reduction reactions, stoichiometry, states of matter, solutions, and acidic and basic systems. These topics will be reviewed during the first three weeks of the course. Other topics that are covered in more depth are quantum numbers, periodic relationships, geometry of molecules, intermolecular forces, predicting products and balancing equations, states of matter, spontaneity of reactions, kinetics, equilibrium (general, acid/base, and solution), and electrochemistry. There are sixteen experiments required by the College Board for the AP<sup>®</sup> chemistry student. Students must have one year of a laboratory based chemistry class before taking AP chemistry. Students entering NCS must have proof of 8-10 completed laboratory investigations. Students must be able to attend class 90% of the time in order to adequately participate in lab. The AP<sup>®</sup> Chemistry student should have very strong math skills and be self-directed, self-motivated, and willing to read and study independently. Students enrolled in AP<sup>®</sup> courses are required to take the AP<sup>®</sup> exam. Students are responsible for the exam fee which is determined by the College Board.

### Physics

11th or 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: concurrent or previous enrollment in Algebra II, and Selection criteria, page 8.*

Physics is a physical science concerned with the relationships between matter and energy. The ultimate goal of physics is to explain physical processes in terms of simple interactions and simple particles. The four main subdivisions of physics are: mechanics and thermal energy; wave motion; electricity; and nuclear and particle physics. This course will involve a considerable amount of laboratory experience. Investigations will be both qualitative and quantitative in nature and will require manipulation of apparatus, observation,

gathering of data, processing data and interpreting the data to form conclusions. Topics of study include (but are not limited to) measurement, dimensional analysis and units, statics, vectors, calculational techniques, momentum, "Galilean" relativity, center of mass, Newton's Laws, conservation of energy, power, conservative forces, simple oscillator, mechanical waves, gravity, Newton's Law of Gravity, Inverse Square Law, static electricity, charge and electric fields, Coulomb's Law, electric energy, conductors and capacitors, basic circuit theory, magnetic fields, induction, light and optics, and select topics in modern physics. Students will learn to clearly communicate their scientific work, a critical skill for today's workplace, through work in small cooperative groups, presentations of projects, homework problem solutions, and writing lab reports. This course will include a variety of activities to reach students with varied learning styles, including several cooperative group activities to help students solidify their own physics knowledge by teaching their peers.

### Physics Honors

11th or 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Concurrent or previous enrollment in PreCalculus and Selection criteria, page 8.*

Physics is a physical science concerned with the relationships between matter and energy. The ultimate goal of physics is to explain physical processes in terms of simple interactions and simple particles. The four main subdivisions of physics are: mechanics and thermal energy; wave motion; electricity; and nuclear and particle physics. This course will involve a considerable amount of laboratory experience. Investigations will be both qualitative and quantitative in nature and will require manipulation of apparatus, observation, gathering of data, processing data and interpreting the data to form conclusions. The Honors level involves a more mathematical treatment of the topics covered, which include measurement, dimensional analysis and units, statics, vectors, calculational techniques, momentum, "Galilean" relativity, center of mass, Newton's Laws, conservation of energy, power, conservative forces, simple oscillator, mechanical waves, gravity and impetus, Newton's Law of Gravity, Inverse Square Law, static electricity, charge and electric fields, Coulomb's Law, electric energy, conductors and capacitors, basic circuit theory, magnetic fields, induction, light and optics, and select topics in modern physics. Students will learn to clearly communicate their scientific work, a critical skill for today's workplace, through work in small cooperative groups, presentations of projects, homework problem solutions, and writing lab reports. This course will include a variety of activities to reach students with varied learning styles, including several cooperative group activities to help students solidify their own physics knowledge by teaching their peers. This course will serve as preparation for AP<sup>®</sup> Physics C Mechanics.

## SCIENCE *continued*

### **AP® Physics C-Mechanics**

**12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Successful completion of Physics Honors, concurrent or previous enrollment in Calculus and Selection criteria, page 8.*

AP® Physics C-Mechanics is a rigorous college level course designed to be equivalent to the first semester of a typical college Physics course. Major areas of study include kinematics, forces and motion, work and energy, systems of particles, rotational dynamics and statics, gravitation, and oscillations. Calculus is used throughout the course to unify concepts and develop the theoretical framework for the course. Students will develop their critical thinking and problem solving skills in a variety of ways. Understanding concepts and connections will be emphasized over memorizing equations. Homework and in-class activities will offer students opportunities to apply physics knowledge in new and meaningful ways. Students will utilize technology, from computer simulation and data analysis software to calculator and computer data collection equipment, in order to connect the physics they are studying to real-world situations. Students will learn to clearly communicate their scientific work, a critical skill for today's workplace, through work in small cooperative groups, presentations of projects, homework problem solutions, and writing lab reports. This course will include a variety of activities to reach students with varied learning styles, including several cooperative group activities to help students solidify their own physics knowledge by teaching their peers. This course follows all College Board guidelines and serves as preparation for the AP® Physics C-Mechanics exam. Students enrolled in AP® courses are required to take the AP® exam. Students are responsible for the exam fee which is determined by the College Board.

### **Anatomy/Physiology**

**10th, 11th or 12th Grade**

**1 Credit**

**2 Semesters**

This is a college preparatory laboratory science course which investigates the similarities and differences in the form and function of living organisms. This course will examine the gross anatomy of the systems of the human body, histology, fundamental concepts of physiology, and related terminology. This course concentrates on the body at a microscopic level and then moves on to the individual systems including integumentary, skeletal, muscular, nervous, cardiovascular, digestive, urinary, and reproductive systems. Along with these topics, students will explore current scientific issues so that they have direct access to new developments in the field of anatomy and physiology. A great deal of emphasis is placed on laboratory experiences including advanced microscopic techniques, chicken wing dissection, cow eye dissection, sheep brain dissection, sheep heart dissection, and an extensive feral cat dissection which culminates in a large scale lab practical exam.

### **Forensic Science**

**11th or 12th Grade**

**1 Credit**

**2 Semesters**

Forensic Science is an upper level course that utilizes other science disciplines such as biology, chemistry, physical science and earth science to solve crime scenes. The course is rich in exploration and lab investigation. Students work in teams and individually to separate, isolate and identify physical and chemical materials and analyze biological evidence. Topics that are covered include: fingerprinting; DNA; blood analysis; casts and impressions; arson investigation; entomology; ballistics and Anthropology.

### **Engineering Design and Analysis**

**11th or 12th Grade**

**1 Credit**

**2 Semesters**

Using The University of Texas at Austin Engineer Your World curriculum, students discover the engineering design process, make data-driven decisions, and work in multi-level teams to solve complex challenges. Students explore mechanical, chemical, civil, electrical and aerospace engineering through design challenges.

### **Environmental Science**

**11th or 12th Grade**

**1 Credit**

**2 Semesters**

Environmental Science provides high school students an introduction to the study of the natural world and how it is influenced by human activity. Students will explore the patterns and processes of Earth and how these are affected by natural and human impacts. They will study environmental problems that our planet is facing today and various efforts to solve these problems, ultimately understanding the need for a sustainable future.



## SOCIAL STUDIES

### Social Studies/Ancient World 6th Grade

Students are led through a survey that begins with the rise of civilization and ends with a study of Ancient Rome. The approach consists of a series of instructional practices that allow students of all abilities to experience key social studies concepts. The lessons incorporate the six types of multiple intelligence activities (verbal, logical, visual, kinesthetic, rhythmic, interpersonal, and intrapersonal) igniting each student's passion for learning. The use of cooperative group work promotes higher student achievement and increased student interaction. With this curriculum, what was once a dusty, dry area of learning is now fresh, exciting, and engaging.

### Texas History 7th Grade

Texas History covers the history of the land and the peoples of Texas from the prehistoric era to the present. Major emphasis is on periods prior to the twentieth century. The contributions of various cultures and the interaction of these cultures are presented early and are major themes throughout the course. Map reading skills are a vital element of this course. The study of Texas history will incorporate lecture, reading skills, note-taking, map-making, videos, and a variety of hands-on projects for most units covered. Multicultural heritage, geographical influences, technological advancement, democracy and civil rights, individual and family life, intellectual and religious development, free enterprise and economic development, conflict and cooperation are topics included in this study.

### U.S. History 8th Grade

This course is an introductory study of United States history. The adventure will begin with Native Americans and will discuss the social and cultural development of the United States through the Civil War. The course attempts to create in students a spirit of love and appreciation for the people and events that shaped the United States. There is an optional field trip in the spring.

### World Geography 9th Grade

**1 Credit** **2 Semesters**  
This survey course investigates the physical, cultural, religious, economic, and human geography of the world. Students see parallels in the physical, political and cultural development of nations and note the differences that make regions unique. The study is flexible to allow for reevaluation of past events in light of more current events. Students are exposed to various cultures from Eastern, African, and Western civilizations.

### World History 10th Grade

**1 Credit** **2 Semesters**  
This survey course focuses on the history of humankind from the development of agriculture to the present time. Students see parallels in development across nations and note the differences that make nations unique. The study of World History is flexible to allow for reevaluation of past events in light of more current events. Students are exposed to cultures of Eastern, African, and Western nations. As the history of the world is taught, the cultural and physical aspects of geography are reviewed with relation to the countries involved.

### AP® World History 10th, 11th, or 12th Grade

**1 Credit** **2 Semesters**  
This full-year course is for the high school student who wishes to earn college credit through a rigorous academic program. In AP® World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The College Board AP® Exam is required of students at the end of the year. Students may receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board. Students are required to purchase a current edition of AMSCO AP® World History: Modern. The fee for 2022-2023 was \$25.

### U.S. History 11th Grade

**1 Credit** **2 Semesters**  
This course picks up where 8th Grade US History leaves off. In this survey of US History since 1877, students will demonstrate an in-depth understanding of the significant details and concepts of eras of this time, covering Westward Expansion, Industrialization, Progressivism, both World Wars, the Cold War, and the Civil Rights Movement, among other relevant topics. The vision of the class is to connect relevant concepts from our past to current issues and conversations we are still having today in our country.

### AP® U.S. History 11th Grade

**1 Credit** **2 Semesters**  
This year-long survey course covers U.S. History from 1491 to the present day. The first semester examines early contact, the American Revolution, early American society, the Civil War, and Reconstruction. The second semester looks at Westward Expansion, both World Wars, the Cold War, the Civil Rights Movement, and other relevant topics. Students learn historical thinking skills, such as contextualization, comparison, and causation, and analyze primary and secondary sources. Writing strategies for short answer and essay questions for the AP® U.S. History exam are also practiced. The College Board AP® exam is required of students at the end of the year. Students may receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by the College Board. Students are required to purchase a current edition of AMSCO AP® U.S. History. The fee for 2022-2023 was \$25.

## SOCIAL STUDIES *continued*

### **Government**

#### **12th Grade**

**.5 Credit**

**1 Semester**

American Government will provide a foundation in the science of government to increase student knowledge and skills in all facets of government. Students will understand their right to exercise more control over government at all levels. The course will be comprised of the following: the basic principles on which American government is based; insight into the origins, history, and structure of government; issues of the American system; political groups and parties; the American system at local, state and national levels; the relationship among local, state and national levels; the interaction among the three branches of the national government; and, the rights, freedoms and responsibilities of American citizens. Prominence will be given to the Constitution of the United States. American Government will seek to help students understand these course elements and to recognize how each applies to them personally to enable each to exercise his or her franchise thoughtfully and effectively.

### **AP® U.S. Government and Politics**

#### **12th Grade**

**.5 Credit**

**1 Semester**

AP® Government will provide students with an increased understanding of the American political system, its framework, institutions, groups, traditions, beliefs, values, and ideas. Students will examine in detail the major processes and institutions through which the political system functions, as well as some of the public policies that are established and how these policies are implemented. Completing the required readings, taking detailed notes, and being prepared to take weekly reading quizzes is necessary for success in this course. Students will also be expected to answer free response essays on a weekly basis. The goal is for the student to complete college level work in a college level environment. The College Board AP® Exam is required of students at the end of the year. Students may receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board. Students are required to purchase a current edition of AMSCO AP® U.S. Government and Politics. The fee for 2022-2023 was \$25.

### **Economics**

#### **12th Grade**

**.5 Credit**

**1 Semester**

Economics emphasizes the free enterprise system. The focus is on the basic principles concerning production, consumption, and distribution of goods and services in the United States and a comparison with those in other countries around the world. Students examine the rights and responsibilities of consumers and businesses. Students analyze the interaction of supply, demand, and price and study the role of financial institutions in a free enterprise system. Types of business ownership and market structures are discussed, as are basic concepts of consumer economics.

### **AP® Macroeconomics**

#### **12th Grade**

**.5 Credit**

**1 Semester**

AP® Economics will enable students to gain an understanding of how the United States economy works and how it relates to the economies of other countries. Students will examine economic concepts

including production possibilities, supply and demand, comparative advantage, foreign exchange, GDP, unemployment, loanable funds, fiscal policy, monetary policy and taxes. Practicing graphs, taking detailed notes, and being prepared to take comprehensive unit exams are necessary behaviors for success in this course. The goal is for the student to complete college level work in a college level environment. The College Board AP® Exam is required of students at the end of the year. Students may receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board. Students are required to purchase a current edition of AMSCO AP® Macroeconomics. The fee for 2022-2023 was \$25.

### **Psychology I**

#### **10th - 12th Grade**

**.5 Credit**

**1 Semester**

This semester-long course will introduce psychology as a social science discipline. Students will learn the history of psychology, its biological origins, and human cognitive and social development across the lifespan. They will examine sensation and perception, learning, motivation, psychological disorders, and other topics of interest. These topics will provide an understanding of the many influences on human thinking and behavior.

### **AP® Psychology**

#### **11th or 12th Grade**

**1 Credit**

**2 Semesters**

This year-long course will introduce students to the systematic and scientific study of the behavior and mental processes of human beings. Topics include the history of psychology, the brain and nervous system, learning and development, sensation and perception, personality, psychological disorders, and others. Students practice applying concepts in authentic contexts, data analysis, and analyzing research studies. Writing strategies for answering free response questions for the AP® exam are also practiced. The College Board AP® Exam is required of students at the end of the year. Students may receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by the College Board.

### **Sociology**

#### **10th - 12th Grade**

**.5 Credit**

**1 Semester**

This semester-long course will introduce sociology as a social science discipline. Students will learn about the history of sociology, culture, socialization, social organization, inequalities, deviance and conformity, and social institutions. These topics will provide an understanding of influences on society and social interactions.

## FOREIGN LANGUAGE

### **Spanish I** **8th - 12th Grade** **1 Credit**

**2 Semesters**

This course is an introduction to the Spanish language and assumes no previous knowledge or limited knowledge. The class will use Spanish in speaking, writing, reading and listening skills. The students will be given opportunities to use the language through games, drama, celebrations, and special projects.

### **Spanish II** **9th - 12th Grade** **1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Spanish I.*

This course is a continuation of Spanish I. The students will continue to use the language in speaking, writing, reading and listening skills – with a deeper exploration into the written language. The students will be given opportunities to use the language in holiday projects, role-plays, games, videos, and stories.

### **Spanish III - Honors** **10th - 12th Grade** **1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Spanish II.*

This course is a continuation of Spanish II. The students will delve deeper into the spoken language, literature and writing skills. The students will also study cultural similarities and differences as well as geography and history of Spanish speaking nations. The students will be given opportunities to display their skills using videos, audio materials, and student-centered projects to share with lower level students.

### **AP® Spanish Language and Culture** **11th - 12th Grade** **1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Spanish III.*

This advanced course focuses on Spanish for active communication – concentration is specifically on using and fine tuning verbal skills as well as writing expository compositions. Major emphasis is placed on reading, writing, and speaking using ‘real-life’ texts, interviews, and short stories. The varied accents, vocabulary and idiom usage from different Latin countries are discussed and used as well. The last weeks of the course are dedicated toward the final preparation and practice for the AP® Spanish Language examination. The College Board AP® Exam is required of students at the end of the year. Students will receive college credit based upon the advanced placement policy of the college they choose to attend. Students are responsible for the exam fee which is determined by The College Board.

### **Mandarin Chinese I** **8th - 12th Grade** **1 Credit**

**2 Semesters**

This course is an introduction to the Chinese language and culture in this course. The basic objectives are to help each student attain an acceptable degree of proficiency in the four skills of listening, speaking, reading, and writing, and to present the language within the context of contemporary Chinese culture. Chinese characters will be introduced systematically as they are related to the listening/speaking activities conducted throughout the course.

### **Mandarin Chinese II** **9th - 12th Grade** **1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Mandarin Chinese I*

Mandarin II is a continuation course of Mandarin I. This course will help students further develop proficiency in Mandarin and expand knowledge of Chinese culture across the five standards: communication, culture, connection, comparisons, and community. Students will refine their tones and pronunciation, increase their vocabulary, and produce sentences with various grammatical structures. Emphasis will be placed upon practical use of Chinese through exposure to authentic texts such as short narratives, signage, tickets, and brochures. Students are expected to be more expressive in daily conversation about broader topics, such as school life, daily schedule, shopping, likes and dislikes of various items, transportation, and be able to read short essays. Cultural activities including legend-related crafts and ethnic food origins will be introduced to enhance students’ cultural awareness.

## FINE ARTS ELECTIVES

### Middle School Art

#### Art 6

**1 Semester**

*Prerequisites and Limitations: \$85 class fee, all supplies included*

This general art class is the study on proportion, scale, elements of art, and color relationships. Students will explore drawing, painting, and 3D mediums. At the end of the year, art students showcase their artwork in the Middle School Spring Art Gallery! Students will work as a team, collaborating on sculptures, decorations, and props for the art car. Students get to go to the Houston Art Car parade and represent their school in front of 200,000 live spectators.

### Middle School Art

#### Art 7, 8

**1 or 2 Semesters**

*Prerequisites and Limitations: \$85 class fee, all supplies included*

This general art class is a continuation of the study on proportion, scale, elements of art and principles of design, and color relationships. Students will explore drawing, painting, and 3D mediums. In addition, students begin to self-express personal connections in their artwork through the use of creative imagery. Students will keep a sketchbook to document mediums and artists and step-by-step art-making processes they have explored in art. Students also have the opportunity to submit their artwork into the Scholastic Art and Writing Competition. At the end of the year, art students showcase their artwork in the Middle School Spring Art Gallery! Additionally, students will work as a team, collaborating on sculptures, decorations, and props for the art car! Students get to go to the Houston Art Car parade and represent their school in front of 200,000 live spectators.

### High School Art

#### Art I

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: \$50 class fee.*

Art I is for students without previous high school visual arts experience. It includes a general overview of art concepts and some art history, as well as a variety of studio experiences. Students will also spend a great deal of time learning human proportions and drawing techniques. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus.

### High School Art

#### Art II

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Art I. \$50 class fee.*

Art II provides the opportunity for students to experience a deeper exploration of traditional media and experimentation of new media. Students will also learn to talk and write about their own art and the art of others through critiques and studying historically important works. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus.

### High School Art

### Art III Honors

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Art II. \$50 class fee.*

Art III delves deeper into the study of art as an expressive tool throughout history. Students will explore historical art styles and how they reflect and affect their respective societies. The purpose of art will also be questioned and the students will write their own philosophies on what they believe art to be and how it fits into their lives.

### High School Art

#### Art IV Honors

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Art III or Digital Art II. \$50 class fee.*

Art IV provides an opportunity for serious art students to create works of art on a much larger scale. It also provides the opportunity for the creation of a portfolio that will be helpful when applying for future opportunities in the field of art. Art IV provides more freedom in the selection of mediums and subject matter.

### High School Art

#### AP® Studio Art

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Application required. \$50 class fee.*

Students must submit an application and be approved by the teacher. For highly motivated students with at least two years of high school Art. AP® Studio Art offers the opportunity to earn college credit. By completing twenty-four high quality pieces, students advance to new levels of technical proficiency and expressive strength. Portfolios are graded by the College Board in a digital submission format. Students are responsible for the AP® Exam fee which is determined annually by the College Board.

### Digital Art I

#### High School

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Art I or pending teacher approval.*

The goal of this class is to create and foster a digital design skill set that is relevant and valuable for future career paths. This class will focus on the use of Photoshop, Premiere Pro, and Illustrator. This class will require outside of class time. Students will be expected to attend a certain amount of sporting and school events to help film those events and take photos with the purpose of learning how to edit graphics and video for social media. Students with a personal mirrorless or DSLR camera are highly encouraged.

## FINE ARTS ELECTIVES *continued*

### **Middle School Yearbook 7th - 8th Grade**

**2 Semesters**

*Prerequisite and Limitations: Application required. DSLR camera required. Students are required to attend after school games and events for photography assignments.* This year-long course will introduce students to the complete process of creating a school yearbook. Students will learn graphic design terminology and composition skills. Introduction to photojournalism, and writing and interviewing etiquette, along with time management and communication skills. Students will learn basic photography composition and the mechanics of a camera.

### **High School Yearbook Yearbook I, II**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Application required. DSLR camera required. Students are required to attend after school games and events for photography assignments for a grade. \$50 class fee.*

Yearbook staff members must submit an application and be approved by the yearbook advisor. This year-long course will introduce students to the complete process of creating a school yearbook. Students will be trained to use a creative software program and learn graphic design terminology and composition skills. Introduction to photojournalism, and writing and interviewing etiquette, along with time management and communication skills. Students will learn basic photography composition and the mechanics of a camera and will be assigned photography exercises to increase their understanding of how to use a camera.

### **High School Yearbook Yearbook Honors III, IV**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Two years High School Yearbook. Application required. DSLR camera required. Students are required to attend after school games and events for photography assignments for a grade.*

Yearbook staff members must submit an application and be approved by the yearbook advisor. This year-long course will introduce students to the complete process of creating a school yearbook. Students will be trained to use a creative software program and learn graphic design terminology and composition skills. Introduction to photojournalism, and writing and interviewing etiquette, along with time management and communication skills. Students will learn basic photography composition and the mechanics of a camera and will be assigned photography exercises to increase their understanding of how to use a camera. Third and fourth year staff members are expected to serve as leaders and mentors to other students while advancing their own photojournalistic skills to a higher level.

### **High School Photography**

**I, II**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: DSLR camera required. \$85 class fee. Students are required to attend after school games and events for photography assignments for a grade.*

Art Photography is a foundation course with an emphasis on photographic media. This course is designed to help students gain a basic knowledge of how to use both film and digital cameras in manual mode, darkroom film and print development, as well as learn the basics of image manipulation within Adobe Photoshop and Lightroom. Photography covers history of art and art criticism as well as basic skills in camera operation, chemistry solving, visual communication, manipulation of art media, and self-expression. Students will work in color and black and white film, with various camera types and formats. They will explore alternative photographic processes and digital media as well as working to further their own personal vision.

### **High School Photography**

**Honors III, IV**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Photography II. DSLR camera required. \$85 class fee. Students are required to attend after school games and events for photography assignments for a grade.*

Students in their third year of Photography choose an area of specialization and spend a semester creating a portfolio that demonstrates independent creative direction, curiosity, and experimentation. This advanced class is designed to help students gain mastery and growth in that subject or technique. Students will achieve an advanced knowledge of how to use both film and digital cameras in manual mode, and darkroom film and print development, as well as learn the basics of image manipulation within Adobe Photoshop and Lightroom. Completion of two different semester-long inquiries prepares students to tackle Advanced Placement 2D Design Portfolios

## FINE ARTS ELECTIVES *continued*

### Digital Art II High School 1 Credit

2 Semesters

*Prerequisite and Limitations: Digital Art I.*

The goal of this class is to build on skills learned in Digital Art I and to take on a leadership role among the digital art classes. Digital Art II students may go above and beyond to pursue additional creative projects to further themselves creatively in the software of choice.

### Sculpture I High School 1 Credit

2 Semesters

*Prerequisite and Limitations: Art I. \$50 class fee.*

The goal of this class is for students to learn how to apply the principles and elements of art to a 3 dimensional space. This class offers students a different way of thinking about how to create artwork by exploring materials such as but not limited to clay, stone, plastic, cardboard, and tape. Sculpture will give students with an aversion to 2 dimensional art classes another option for a visual arts class in high school. This class is not to build a consistent body of work, but to build a knowledge of how to use the materials so that in the future, a body of work may develop.

### Middle School Drama 6th Grade

1 Semester

*Prerequisite and Limitations: \$25 class fee.*

This course serves as an introduction to theatre and video performance, helping to develop an ability to perform in front of others. This course is project based and students will have the opportunity to act, direct, write scripts, edit video as well as create props, scenery and costumes. All students will participate in the production of either a play or short film at the end of the semester. The skills gained in this course help students gain stage presence, vocal and physical techniques, ability to work in an ensemble, and video editing skills.

### Middle School Drama 7th & 8th Grade

1 Semester

*Prerequisite and Limitations: \$25 class fee.*

This course serves as an introduction to theatre and video performance, helping to develop and builds on the skills learned in 6th Grade Drama. This course is project based and students will have the opportunity to act, direct, write scripts, edit video as well as create props, scenery and costumes. All students will participate in the production of either a play or short film at the end of the semester. The skills gained in this course help students gain stage presence, vocal and physical techniques, ability to work in an ensemble, and video editing skills.

### Middle School Drama Production 7th & 8th Grade

2 Semesters

*Prerequisite and Limitations: 6th Grade Drama or teacher approval. \$25 class fee.*

Students will build off of the skills they have learned in their previous Drama classes to create performance and competition quality stage and video performances. Students will participate in all areas of production, including script writing, directing, acting, camera operation, editing, as well as creating props, sets, costumes, hair and makeup. The class will participate in at least two off campus competitions and at least one full production, either on stage or short film, that will be presented for an audience.

### High School Video Production Video Production I

1 Credit

2 Semesters

*Prerequisite and Limitations: \$50 class fee.*

This course is designed to provide students who are focused on video and film production an opportunity to learn and refine their technical and conceptual skills through the creation of video/film projects. It is primarily a hands-on course, concentrating on all elements of the creation of short format videos in documentary, narrative, and experimental forms. The course will emphasize writing, producing, directing, and editing skills, with the effective use of camera work and sound design. Students will have the opportunity to participate in local film festivals. School camera and sound equipment will be available for class use; however, students are welcome to use their own equipment. Students will be required to use their own cell phone cameras and must be able to have cloud or external storage on their laptops for video projects. Honors credit is available for students who meet the requirements of participating in outside competitions and festivals (detailed in the syllabus).

### High School Theatre Arts Theatre I, II

1 Credit

2 Semesters

*Prerequisite and Limitations: \$25 class fee.*

Theatre I is designed to introduce students to various aspects of theatre and performance. Students will gain knowledge of vocal and physical acting, improvisation, theatre and video production, as well as prop, costume and set design. There will be opportunities for students to participate in main stage productions in Northland Theatre's extra curricular program, compete in solo and duet acting events, enter design pieces in costume, prop and set design competitions, and create original short films for competition. Theatre II students will build on what they learned in Theatre I and select an area they would like to focus on and begin growing their skills in either acting, costume, make-up, prop, set design or video production. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus.

## FINE ARTS ELECTIVES *continued*

### High School Theatre Arts

#### Theatre Honors III, IV

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Theatre I and II. \$25 class fee.*

Theatre III and IV students will select an area of theatre to focus on: acting, costume and make-up design, prop and set design or video production. Students will have the opportunity to create projects in their chosen discipline for events on campus and for various competitions. By the end of Theatre IV seniors will have a complete portfolio to present for college admissions and scholarship opportunities.

### Middle School Orchestra

#### 6th - 8th Grade

**2 Semesters**

*Prerequisite and Limitations: \$30 class fee. Incoming students may be required to pass a proficiency test for admittance into the class. If a student would like to join in August and has not previously played, students will be asked to take private lessons outside of school in order to have the basics of playing learned and be at a proficient level for this class.*

The 6th grade class is designed to continue and expand upon the student's 3rd-5th grade experience, with emphasis on higher positions, vibrato and more complex rhythms and sightreading. The 7th/8th grade class will emphasize the art of ensemble playing for stringed instruments and expand on the student's previous learning experience. Emphasis will be placed on musicality, the ensemble setting, and performance practice. Example performance opportunities might include chapel, a Christmas concert, spring concert, etc. Qualified students may be invited to participate in quartets or small ensembles outside the overall group. Students may also participate in TMEA and TPSMEA clinic/concerts, based on an audition process (extra fees may be included).

### High School Orchestra

#### Orchestra I, II

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: \$30 class fee. Students should have completed a minimum of two full years of study on their instrument. Incoming students may be required to pass a proficiency test for admittance into the class.*

This class is designed to emphasize the art of ensemble playing for stringed instruments and expand on the student's previous learning experience. Emphasis will be placed on musicality, the ensemble setting, and performance practice. Example performance opportunities might include chapel, a Christmas concert, spring concert, etc. Qualified students may be invited to participate in quartets or small ensembles outside the overall group. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus. Students may also participate in TMEA and TPSMEA clinic/concerts, based on an audition process (extra fees may be included).

### High School Orchestra

#### Orchestra Honors III, IV

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: \$30 class fee. Two years High School Orchestra.*

The honors level is for students who are participating in Orchestra for the third or fourth year in high school. In addition to the expectations of Orchestra I and II, students are expected to serve as leaders and mentors to other students while advancing their own skills to a higher level. Students may also participate in TMEA and TPSMEA clinic/concerts, based on an audition process (extra fees may be included).

### Middle School Choir

#### Beginner

**1 or 2 Semesters**

*Prerequisite and Limitations: \$30 class fee per semester.* Students participating in 6th Grade Choir must display a positive attitude toward music and performing. Since the choir travels several times per year, students signing up for choir should be in good academic standing. Students will learn to read music and be instructed in group vocal technique. Students will be required to purchase and wear the required uniform for performances.

### Middle School Choir

#### Intermediate

**2 Semesters**

*Prerequisite and Limitations: \$30 class fee per semester.* Students participating in the Middle School Choir are 7th and 8th graders who must display a positive attitude toward music and performing. Since the choir travels several times per year, students signing up for choir should be in good academic standing. Students will learn to read music and be instructed in group vocal technique.

### High School Choir

#### Choir I, II

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: \$30 class fee per semester.* Students enrolled in Choir will express themselves musically while developing healthy vocal technique through daily group vocal instruction. Choir students will perform music in several different languages and many different styles as they build music reading skills. Due to travel requirements for competitions and performances, students should be in good academic standing. Students may be eligible to receive honors credit in grades 9 & 10 if they meet established criteria as noted in the syllabus.

### High School Choir

#### Choir Honors III, IV

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Two years High School Choir. \$30 class fee per semester.*

Honors level Choir credit is available for students who are participating in High School Choir for a third or fourth year. Honors level students are expected to serve as leaders and mentors to other students while advancing their own skills to a higher level.

# PHYSICAL EDUCATION

## MIDDLE SCHOOL

### Athletics

**2 Semesters**

Year-long class focusing on strength and conditioning with team emphasis for individuals participating in team sports. Athletes that are not playing a sport at any particular time will be part of a rigorous training program focused on increasing strength, agility, endurance, explosiveness, and quickness.

Boys: Baseball, Basketball, Football, Soccer, Track  
Girls: Basketball, Cheerleading, Soccer, Softball, Track and Volleyball

### Physical Education

**2 Semesters**

Middle school physical education is geared toward fostering a knowledge and pursuit of life-long fitness and health. It will focus on conditioning, sports, and games. All middle school students are required to take P.E. each year. Approval for off-campus PE will only be given on a full semester basis and for category 1 participation (minimum of 15 hours per week). Academic counselor approval required prior to participation.

## HIGH SCHOOL ATHLETICS

### Strength & Conditioning

**.5 or 1 Credit**

**1 or 2 Semesters**

Students will follow an individual program designed to improve their physical strength, muscle endurance, and cardiovascular endurance. The training will take place on the track, in the gym, and in the weight room.



## TECHNOLOGY ELECTIVES

### Technology 6th Grade

1 Semester

This course reinforces students' current computer skills and allows them to explore new technologies. Topics include presentations, word processing, keyboarding, animation, internet safety, and digital citizenship. In addition, 6th grade will be focusing on Scratch Programming, a programming language that enables students to create their own interactive stories and games.

### Unity Junior Computer Programming 7th or 8th Grade

1 Semester

*Prerequisite and Limitations: \$40 fee for software/technology support.*

Unity Junior Programming is an introduction to computing and game design using C# programming. With emphasis on project-based learning and collaboration, Unity Junior Programming students will use visual, block-based programming that will seamlessly transition to text-based programming languages such as C#. Students will learn a diverse set of computational thinking concepts while working together to design and solve the fundamentals of game design by creating user friendly applications.

### Unity Certified User Programmer 9th - 12th Grade

1 Credit

2 Semester

*Prerequisite and Limitations: \$50 fee for software/technology support. \$125 fee for certification exam.*

This course is a continuation of the Unity Junior Computer Programming course aimed at developing and preparing a student for a career in Computer Programming or Computer Science. Emphasis will be on the fundamentals of structured design, development, testing, implementation, and documentation, including language syntax, data and file structures, input/output devices, files, and databases using C# programming language. Upon completion, students will be ready for the Unity Certified User: Programmer Exam.

### Dual Credit Introduction to Computers (COSC 1301) 10th - 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Algebra I and teacher recommendation*

Working with Lone Star College professors online, this course is designed to be equivalent to a first-semester introductory college computing course. Students will develop computational thinking skills vital for success across all disciplines. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

### GenerationTECH (Student Technology Support Team) 9th - 12th Grade

1 Credit

2 Semesters

Students taking the GenerationTECH course will be in the program as both a student and a troubleshooter. Students will learn the technical and communication skills necessary to troubleshoot, fix, and maintain the technology used at Northland. At the same time, students will be part of the Northland technology support team to help students and teachers keep their computers running properly. All students will be exposed to troubleshooting, time management, peer mentoring, resource development, problem solving and will have the opportunity to develop competency with numerous computer programs and procedures.

### Introductory Robotics 6th Grade

1 Semester

*Limitations: Class size is limited to 10 students. \$25 fee that covers a t-shirt and technology support.*

This elective course is for 6th grade students wishing to learn how to program and build LEGO Mindstorms robots. Students will learn using open-ended problem-solving activities. This elective is a prerequisite for participation in Middle School Competitive Robotics.

### Competitive Robotics 7th or 8th Grade

2 Semesters

Prerequisite and Limitations: Application and teacher recommendation required. Class size is limited to 8 students. \$75 fee that covers FLC team, registration, a t-shirt, competitions, and technology support. This course is for middle school students wishing to compete in the First LEGO League robotics competition. This elective is appropriate for students who have knowledge of robotics or programming and are strong math and science students. Students will have the opportunity to build and learn to program robots to solve challenges. Students will also be required to complete a research project that solves a real-world problem. This elective may require some weekend and after school practice. It will also require attendance at a minimum of two weekend robotics competitions. Additionally, to prepare students for the next division FIRST Tech Challenge, students will be introduced to basic Java Programming. Here, students expand their knowledge of block coding to use Java Programming to run an autonomous robot.

### **Robotics & Engineering Design I & II**

**9th - 12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Application required.*

Robotics and Engineering Design is a course designed for students interested in pursuing a career in engineering with special emphasis on robotics. Students will develop an understanding of how modern engineers use math and science, together with ingenuity, to design and build new technologies, be exposed to new and relevant applications of mathematics and science to solve engineering problems of the day, develop a deeper and broader set of computer skills, and be exposed to a variety of new and future career opportunities in engineering and technology. During the first semester students will design, program, and build a robot for competition in the First Tech Robotics competition. The second semester will focus on a series of engineering design projects intended to provide exposure to larger engineering disciplines. Students will be expected to attend competitions (generally held on Saturdays) and be responsible for an activity fee of \$50. Students in their 3rd and 4th year of HS robotics may be eligible to receive honors credit if they meet established criteria as noted in the syllabus.

### **Robotics & Engineering Design III & IV Honors**

**11th - 12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite and Limitations: Application required.*

Robotics and Engineering Design is a course designed for students interested in pursuing a career in engineering with special emphasis on robotics. Students will develop an understanding of how modern engineers use math and science, together with ingenuity, to design and build new technologies, be exposed to new and relevant applications of mathematics and science to solve engineering problems of the day, develop a deeper and broader set of computer skills, and be exposed to a variety of new and future career opportunities in engineering and technology. During the first semester student will design, program, and build a robot for competition in the First Tech Robotics competition. The second semester will focus on a series of engineering design projects intended to provide exposure to larger engineering disciplines. Students will be expected to attend competitions (generally held on Saturdays) and be responsible for an activity fee of \$50.

## GENERAL ELECTIVES

### Intro to Debate & Public Speaking

6th Grade

1 Semester

This course will be an introductory course to public speaking and debate. The course will focus on increasing confidence in public speaking and debate through activities, speech writing and presentations. Students will research, create and present speech outlines, participate in group presentations and debates throughout the semester. After participating in the course, students will have improved their critical thinking and communication skills.

### Debate & Public Speaking

7th & 8th Grade

1 Semester

This course will provide a fun learning environment for students to develop verbal, organizational, research and critical thinking skills through public speaking and debate. Students will write and present several speeches over the course of the semester and participate in a variety of group and individual debates. Speeches given will include informative speeches, persuasive speeches, Impromptu, Extemporaneous Speaking and Lincoln Douglas Debates. Students may take this course in seventh and eighth grade if desired. Class size is limited.

### Competitive Debate & Public Speaking

7th - 8th Grade

1 or 2 Semesters

Prerequisite and Limitations: Application and teacher recommendation required. Class size is limited to 16 students. Students must have 1 semester of debate experience.

This course is for middle school students wishing to compete in debate competitions and prepare for the high school debate program. Students will have the opportunity to focus on competition events such as Extemporaneous Speaking, World Schools, Lincoln Douglas Debate and Public Forum Debate. This elective may require some after school practices and will also require attendance at a minimum of two weekend debate competitions.

### Debate - Competitive & Public Speaking I, II

9th - 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Application Required.*

As a student in this class, you become a member of the nationally recognized Northland Christian School Debate Team. This class is intended to provide classroom focus for learning speech and debate skills for students that are in their first year of competitive debate. The course focuses exclusively on debate and public speaking events such as Lincoln-Douglas Debate, Public Forum Debate, Extemporaneous Speaking, World Schools Debate, Original Oratory, Impromptu Speaking

and Congressional Debate. The course is designed to foster critical thinking and argumentative skills which are crucial to success in college and beyond. Through public speaking practice in the classroom and in competition, students will develop the communication skills that they will utilize in academic, social, and workplace settings. Students are required to attend five tournaments during the school year. Class size is limited. Students may be eligible to receive honors credit in grades 9 &10 if they meet established criteria as noted in the syllabus.

### Debate - Competitive & Public Speaking

Honors III, IV

11th & 12th Grade

1 Credit

2 Semesters

*Prerequisite and Limitations: Debate I and II. Application required.*

The honors level is for students who are participating in Debate for the third or fourth year in high school. Students are expected to serve as leaders and mentors to other students while advancing their own skills to a higher level.

### Academic Decathlon - Competitive & Public Speaking

Honors I, II, III, IV

9th - 12th Grade

.5 Credit

2 Semesters

*Prerequisite and Limitations: Application required.*

The course enrollment is by invitation only. Students must participate in the ACADEC program to enroll in the course. If for some reason the student quits or is dismissed from the program, he/she exits the class.

### AP® Capstone™ Program

2 Credits

4 Semesters

AP® Capstone™ is an innovative diploma program from the College Board that equips students with independent research, collaborative teamwork, and communication skills. AP® Capstone is built on the foundation of two AP® courses, AP® Seminar and AP® Research, and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP® courses. These courses develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students who complete the two-year program can earn one of two different AP® Capstone awards – AP® Seminar & Research Certificate (3 or higher on AP® Seminar & AP® Research) or AP® Capstone Diploma (certificate requirements + 3 or higher on four additional AP® exams), which are valued by colleges across the United States and around the world.

## GENERAL ELECTIVES *continued*

### **AP® Seminar**

**10th - 12th Grade**

**1 Credit**

**2 Semesters**

AP® Seminar is a foundational course that engages students in cross-curricular investigations of real-world topics from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. Students are assessed with two through-course performance tasks and one end-of-course exam. All three assessments are summative and will be used to calculate a final AP® score for AP® Seminar. AP® Seminar is a prerequisite for AP® Research.

### **AP® Research**

**11th - 12th Grade**

**1 Credit**

**2 Semesters**

*Prerequisite: AP® Seminar.*

AP® Research prepares students to design, plan, and implement a yearlong, independent investigation to address a research question and cultivate the skills and discipline to establish their plan, document their processes, and produce a process and reflection portfolio which showcases their scholarly work. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product) and a presentation with an oral defense.

## SERVICE HOURS REQUIREMENTS

Service hours are required to enhance social and academic learning while developing character and citizenship skills.

*“And you will be my witnesses in Jerusalem, and in all Judea and Samaria, and to the ends of the earth.” - Acts 1:8*

### **Middle School Requirement**

15 hours per year of attendance at Northland.

Service Hour forms are available on our website, [www.northlandchristian.org](http://www.northlandchristian.org), under Cougar Life.

All forms need to be submitted to Mrs. Christi Domingue.

The service hour year is April 1st to March 31st.

Awards are given according to this guideline.

### **Middle School Service Award**

100 hours in one year

### **High School Requirement**

20 hours per year of attendance at Northland.

Service Hour forms are available on our website, [www.northlandchristian.org](http://www.northlandchristian.org), under Cougar Life.

All forms need to be submitted to Mrs. Christi Domingue.

The service hour year is April 1st to March 31st.

Awards are given according to this guideline.

### **High School Service Award**

100 hours in one year

Service Hours should be pre-planned activities such as National Charity Organizations, Mission Trips and community service volunteer work. A parent signature can be substituted if the supervisor's signature is not available. Service hours should be limited to the actual hours serving, not travel and sleeping hours. All service hours are unpaid hours. In order to be eligible, hours must be at a non-profit organization or for a qualified individual. An example of a qualified individual is a single parent, elderly individual or a child with disabilities. All service hours are subject to approval.

The required number of service hours for HS and MS are benchmarks only. Upon graduation from middle school or high school, the entire number of hours will be required (per number of years in attendance at Northland). If you are working toward the Middle School Service Award or the High School Service Award, which is 100 service hours in one school year, forms are due by the last school day in March. Diplomas may be withheld if minimum service hour requirements are not met.



