



# REGISTRATION GUIDE

2018-2019

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## REGISTRATION GUIDELINES FOR 2017-2018

This course guide contains the DPS and NHS graduation requirements, college entrance requirements, list of courses offered and descriptions of courses. Review the graduation requirements, then review the course offerings and plan your own course of study with your parents/guardians. Your choice of courses should be based on the graduation requirements, teacher recommendations, your interests and abilities, past achievements and your post high school plans. When selecting courses, you will notice that some have symbols which indicate the following:

(\*) Indicates weighted course credit, including Honors, Advanced Placement and IB courses

(CCA) Designates approved concurrent enrollment through Community College of Aurora

(CU) Designates approved concurrent enrollment through CU Succeeds

(AP) Indicates Advanced Placement program classes

(IB) Indicates International Baccalaureate courses

Some of the courses in the guide may not be offered if the number of students requesting a particular course is below a minimum class size. Each student should select alternate elective choices in case the first choice is not offered.

### ***REGISTRATION GUIDELINES***

1. Class requirements per semester
  - a. Freshmen and Sophomores – 7 classes plus Advisement
  - b. Juniors and Seniors – 6 classes plus Advisement
2. Familiarize yourself with specific college admissions
  - a. If in doubt about credits for graduation or college admission, see your counselor
3. Plan ahead for your entire high school career
4. Students must complete the paper pre-registration process, indicating the courses desired for the 2017-2018 school year, including obtaining the required signatures.
5. Students will enter pre-registration course selections in February.

## GRADUATION REQUIREMENTS

In addition to DPS graduation requirements, **all** NHS students must complete IB Community Action Service (CAS) requirements, two (2) years of a foreign language and 3.5 credits in Social Studies (includes .5 Civics)

### Community Action Service (CAS)

Creativity, Activity, and Service (CAS) is the International Baccalaureate (IB) service learning experience. During their junior and senior years at Northfield, students must complete one or more CAS projects, collect evidence and present evidence through reflections as well as interviews with their CAS supervisor (NHS staff member) for each of the seven learning outcomes outlined below:

- 1) Reflected on strengths and areas of growth to plan engagement with CAS
- 2) Undertaken new challenges and developed new skills in the process.
- 3) Initiated and planned a CAS experience
- 4) Committed and persevered through challenges during their CAS experiences.
- 5) Worked collaboratively and recognized the benefits of doing so.
- 6) Engaged with issues of global significance.
- 7) Recognized and considered the ethics of choices and actions.

CAS projects must be related to issues of global significance, but students have the freedom to choose topics about which they are passionate and craft projects to address them. For example, a student concerned about food security might research the nature of hunger in the Denver area and take steps to increase the availability of healthy food.

### DPS Graduation Requirements (class of 2019 and 2020)

A total of 240 credit hours (24 Units) will be required for graduation. The minimum DPS requirements are:

<b>Department</b>	<b>Number of Years</b>	<b>Credits/Units</b>
English	4 years	40 Credits / 4 Units
Mathematics	4 years	40 Credits / 4 Units
Social Studies	3 years (NHS 3.5)	30 Credits / 3 Units
Science	3 years	30 Credits / 3 Units
Physical Education/Dance/Marching Band/ROTC	1 year	10 Credits / 1 Unit
Fine Arts or CTE (Music, Art, Drama or CTE)	1 year	10 Credits / 1 Unit
Academic Elective (Career Ready / Vocation)	1 year	10 Credits / 1 Unit
Other Electives	NHS – 2 years of a Foreign Language	70 Credits / 7 Units

## DPS Graduation Requirements (class of 2021 and beyond)

- 1) A total of 24 Units will be required for graduation
- 2) Demonstrate college and career readiness in English and Math
- 3) Completion of the requirements and goals as listed on a student’s Individual Career and Academic Plan (ICAP) and /or Individualized Education Plan (IEP), which may include modified standards.

The minimum DPS requirements are:

Department	Unit
English	4 units
Math	4 units
Science	3 units
Social Studies	3 units (NHS requires 3.5)
Physical Education/Dance/Marching Band/ROTC	1 unit
Arts or eligible CTE (Music, Art, Drama or CTE)	1 unit
Approved Electives	8 units (NHS requires 2 years Foreign Language)

Students must provide documentation of meeting or exceeding the required level of readiness in Mathematics and English through one of the following:

Assessment Test	English	Math
Accuplacer	95	61
ACT	18	19
ACT WorkKeys – National Career Readiness Certificate	Bronze or higher	Bronze or higher
Advanced Placement	3	3
ASVAB –Armed Services Vocational Aptitude Battery	31	31
Concurrent Enrollment (CE)	C- or higher in eligible course	C- or higher in eligible course
District Capstone	District approved	District approved
Industry Certificate	District approved	District approved
IB - International Baccalaureate	4	4
SAT	470	500
Standards-based assessment	Statewide scoring criteria	Statewide scoring criteria

This menu is subject to change and revision from the state. When changes are made, the district will update its policy to ensure adherence to the state’s guidelines.

**ACCUPLACER** is a computerized test that assesses reading, writing, math and computer skills. The results of the assessment, in conjunction with a student’s academic background, goals and interests, are used by academic advisors and counselors to place students in college courses that match their skill levels.

**ACT** is a national college admissions exam that is accepted or required at nearly all four- year colleges and universities in the U.S.. It measures four subjects - English, reading, math and science. The highest possible score for each subject is 36.

**ACT WorkKeys** is an assessment that tests students’ job skills in applied reading, writing, mathematics and 21st century skills. Scores are based on job profiles that help employers select, hire, train, develop and retain a high-performance workforce. Students who score at the bronze level (at least 3) in applied mathematics, mapping and reading earn the ACT’s National Career Readiness Certificate.

**Advanced Placement (AP)** exams test students' ability to perform at a college level. Districts choose which AP exams will fulfill this menu option. Scores range from 1 to 5 (highest). The [DPS Course Master list](#) will indicate which courses are eligible to meet this requirement.

**Armed Services Vocational Aptitude Battery (ASVAB)** is a multiple-aptitude assessment that measures developed abilities and helps predict future academic and occupational success in the military. The ASVAB can also be used to demonstrate required competencies for graduation from a DPS high school. This assessment is multiple choice, measuring verbal skills, math skills, science and technical skills, general science skills, arithmetic reasoning, word knowledge, paragraph comprehension, mathematics knowledge, electronics information, auto and shop information and mechanical comprehension. Students with a composite score of at least 31 are eligible for service (along with meeting other standards that include physical condition and personal conduct) but are not required to enlist in the military. To count the ASVAB toward the college and career competency demonstration requirement, students must complete the assessment in a manner that meets eligibility for military enlistment. This assessment is free and may be administered to a student multiple times. See the High School Procedures Guide for additional guidance.

**Capstone** is another way for students to demonstrate competency and standards mastery in English and math through student products rather than college assessments. There are two approaches to the DP capstone - the portfolio and/or the capstone course/college and career ready elective. In either approach, students will include a portfolio of their best work that demonstrates they have met grade level competencies required for graduation. Schools must accredit their capstone approaches according to the district's criteria outlined in the DPS High School Procedures Guide. These criteria include a requirement that schools implement a rigorous portfolio assessment and evaluation process to promote fairness and to ensure student will be ready for college and career.

**Concurrent enrollment** provides students the opportunity to enroll in college courses, simultaneously earning high school and college credit. School districts and institutions of higher education each determine passing grades for credit. A passing grade is determined by district and higher education policy for concurrent enrollment. An eligible concurrent enrollment course is 1) the prerequisite directly prior to a credit-bearing course or 2) a credit-bearing course. The [DPS Course Master list](#) will indicate which courses are eligible to meet this requirement.

**Industry certificates** are credentials recognized by business and industry. These certificates indicate a student's competency in an occupation, and they validate a knowledge base and skills that show mastery in a particular industry. Only those industry certificates which require student demonstrations of competency in English and/or math at a college and career ready level will be applied toward meeting the required competencies for graduation. The DPS High School Procedures Guide annually will include a list of which, if any, industry certificates satisfy this requirement.

**International Baccalaureate (IB)** exams assess students enrolled in the official IB Diploma Programme. Courses are offered only at authorized IB World Schools. Scores range from 1 to 7 (highest). The [DPS Course Master list](#) will indicate which courses are eligible to meet this requirement.

**Scholastic Aptitude Test (SAT)** is a college entrance exam that is accepted or required at nearly all four- year colleges and universities in the U.S. The current SAT includes sections on reading, writing and math. The highest possible score for each section is 800.

**Standards-Based Assessment** competency option will be defined by the Colorado Department of Education. For example, the CDE may determine minimum scores for the state's standardized assessments in English and math for the competency menu.

For a complete list of DPS Graduation options, please visit [www.dpsk12.org](http://www.dpsk12.org) .

## Northfield High School Planning Guide

### Four Year Planning Guide

Course (unit/credit)	Grade 9	Grade 10	Grade 11	Grade 12
English - 4 units	English 1	English 2	IB Language and Literature	IB Language and Literature
Math - 4 units	Integrated 1 or 2	Integrated 2, 3 or IB options	Integrated 3 or IB options	IB or AP options
Science - 3 units	Biology	Earth Science or Chemistry	IB options	
Social Studies - 3.5 units	AP Human Geography	Us History	IB History of Americas or IB Global Politics	.5 Civics
World Language - 2 units	World Language	World Language		
Physical Education – 1 unit	PE			
Fine Arts – 1 unit	Art/Music/Drama			
Electives – 5.5 units				

## COLLEGE CREDIT OPPORTUNITIES

Northfield High School expects all students to earn college credit during high school. Students may earn college credit through the International Baccalaureate Programme, College Board Advanced Placement and Concurrent Enrollment through the Community College of Aurora or CU Succeeds. Motivated students may be able to complete 3 – 12 college credits while in high school.

The Denver Public School District offers students and parents the opportunity for an official transcript that reflects a weighted grade point average. Weighted grades are given in those courses designated as either Honors, AP, or IB. These courses are weighted on a 5.2 scale.

### International Baccalaureate Programme

The internationally recognized IB Diploma Program aims to develop inquiring, knowledgeable, and caring young people who help to create a better and more peaceful world through international mindedness as well as intercultural understanding and respect. The rigor, well-roundedness, and focus on the whole student build college readiness, persistence, and success. NHS provides students with the full Diploma program or course options in areas of student strength. Students should meet with their counselor to determine the appropriate IB track. The IB program is fee based with cost for the full diploma program averaging \$1,000.00.

Students have an opportunity to earn college credit if they receive a score of 4 or higher on the IB exams. Each college or university has its own criteria for when and if to award IB credit; students should check these criteria with the individual institutions.

Diploma Programme candidates must fulfill numerous requirements as laid out by the IB organization.

Candidates must:

- Pursue course work in groups 1-5, plus 1 more
  - 3 or 4 courses at the Higher Level (HL)
  - 2 or 3 courses at Standard Level (SL)
- **Score a total of 24 of 45 points on 6 IB exams/assessments. Scores range from 1-7.**

- Complete the Theory of Knowledge (TOK) course with a passing grade (D or higher). Receiving an “N” in TOK disqualifies a student from candidacy.
- Complete the 7 learning outcomes of Creativity, Action, and Service (CAS)
- Complete the required Extended Essay (EE) with a passing grade (D or higher). Receiving an “N” in EE disqualifies a student from candidacy.
- Receive no grade 1s in any subject or level.
- Receive no more than two grade 2s awarded for any (HL or SL) course.
- Receive no more than three grade 3s awarded for any (HL or SL) course
- Must gain 12 points or more points on HL subjects (for candidates who register for four HL subjects, the three highest count).
- Must gain 9 points or more on SL subjects (for candidates who register for two SL subjects, they must gain at least 5 points at SL).

### Advanced Placement (AP)

Northfield High School participates in the College Board’s national Advanced Placement Program. AP courses offered at NHS include:

- United States History
- Human Geography
- Studio Art 2D

Students who take an AP course (with the exception of AP Human Geography) are expected to take the exams with an average cost of \$95.00.

Students have the opportunity to earn college credit if they receive a 3 or higher on the AP exam. Each college or university has its own criteria for when and if to award AP credit; students should check these criteria with the individual institutions.

### Concurrent Enrollment

NHS participates in Concurrent Enrollment with the Community College or Aurora and CU Succeeds. In order to enroll in these courses, students must demonstrate college and career readiness using the criteria identified below (Some CE courses may have additional enrollment criteria):

- Accuplacer Score in English – 95 (Sentence Skills)
- Accuplacer Score in Math – 61 (Elementary Algebra)

Students are also required to complete the following:

- Concurrent Enrollment Application . A Concurrent Enrollment application form shall include, but need not be limited to, the following: Assurance of consent by the Qualified Student and parent or legal guardian to the following: The qualified student will register for the College Opportunity Fund (COF) stipend and understands that credits earned will be deducted from the COF lifetime account (145.0 credit hours) for courses being taken at Institutions of Higher Education that participate in the COF, with the exception of basic skills credits.
- CCA and CU Succeeds Application for each course

The student must be enrolled in this class for the entire semester or year and finish with a grade of C- or higher to earn college credit. The college credit will be awarded through CCA or CU Succeeds. Students should check with their transferring institution regarding the transferability of the course.

***\*\*Concurrent Enrollment college credit is subject to course and teacher approval and completion of all required registration steps by the majority of the class within the designated semester deadline. Courses may be subject to cancellation for Concurrent Enrollment college credit due to unforeseen changes.***

## COLLEGE ADMISSIONS

Preparing for college starts as early as ninth grade, if not earlier. Parents and students often ask counselors, “What will it take for me to be accepted to (Fill in the Blank) College?” That is a difficult questions to answer, as competition has intensified for a spot at many colleges, and it is hard to ascertain which factors colleges will emphasize in a particular year. We do know that colleges, especially those who are most competitive in admissions, seek students who are academically prepared for the rigors of college-level courses, who can contribute to their campus community, and who have a clear sense of why they are a good match for that college.

### Top Factors Influencing Admissions Decisions

Each year, the National Association for College Admission Counseling (NACAC) surveys colleges and universities to determine the top factors influencing admission decisions. Grades in college preparatory courses and strength of curriculum were considered by colleges to be the top factors in the admission decision, followed closely by admission test scores and grades in all courses.

Nearly 80 percent of all colleges and universities rated grades in college prep courses as “considerably important,” followed by 60 percent for strength of curriculum, 60 percent for grades in all courses, and 55 percent for admission test scores. According to the 2015 “State of College Admissions Report,” the following factors, in order of importance, were:

1. Grades in college prep courses (CP)
2. Strength of curriculum
3. Grades in all courses
4. Admission test scores (ACT,SAT)
5. Essay or writing sample
6. Counselor recommendation
7. Student’s demonstrated interest
8. Teacher recommendation
9. Extracurricular activities
10. Subject test scores (AP, IB)
11. Interview

SOURCE: NACAC Admission Trends Survey, 2015

### Higher Education Admission Requirements (HEAR)

In 2003, the Colorado Commission on Higher Education adopted the Higher Education Admission Requirements (HEAR) which are entry requirements for students planning to attend any of Colorado’s public four-year colleges or universities. Private colleges and universities set their own admission standards, so students should contact those institutions directly for information regarding their enrollment policies. Additionally, public two-year colleges have open enrollment policies, meaning that students applying to these schools do not need to meet the following admissions requirements.

Students planning to attend a four-year college or university in Colorado will need to complete the following classes in order to fulfill the HEAR. Meeting the HEAR does not guarantee admission to a four-year public institution. Colleges and universities may have additional requirements.

Academic Area*	Graduates
English **	4 years
Mathematics (must include Algebra I, Geometry, Algebra II or equivalents)***	4 years
Natural/Physical Sciences (2 units/credits must be lab based)	3 years

Social Sciences (Studies) (at least one unit/credit of US or World History)	3 years
World Language	1 year
Academic Electives***	2 years

CCHE, CDE, and School Districts are developing standards for alternative demonstration of proficiency to be accepted in lieu of course completion. For course guidelines see paragraph 4.01 of the Admissions Standards Policy, available online at

<http://higher.ed.colorado.gov/Publications/Policies/Current/i-partf.pdf>.

\*\*Two credits of ELA English may count for HEAR requirements when combined with two credits of successfully completed college preparatory English.

\*\*\*Acceptable Academic Electives include additional courses in English, mathematics, natural/physical sciences and social sciences, foreign languages, art, music, journalism, drama, computer science, honors, Advanced Placement (AP), International Baccalaureate courses, and appropriate CTE courses.

### Four-Year Academic Plans and Recommended High School Programs of Study

Each year, NHS counselors meet with students to develop and evaluate their Four-Year Academic Plans, keeping in mind each student's interests, goals and dreams as they prepare for their post-graduate experience. To best prepare for the college admission process, we encourage students to pursue the sample academic programs below; however, be aware that completion of a sample program like these does not guarantee admission, especially at highly and most selective colleges.

Most Selective Institutions		
Recommended Minimum Program of Study	English	4 years with Honors/AP/IB Level
	Math	4 years with Honors/AP/IB Level
	Social Studies	3-4 years with Honors/AP/IB Level
	Science	3-4 years with Honors/AP/IB Level
	World Language	3-4 years with Honors/AP/IB Level

Highly Selective Institutions		
Recommended Minimum Program of Study	English	4 years with Honors/AP/IB encouraged
	Math	3-4 years with Honors/AP/IB encouraged
	Social Studies	3-4 years with Honors/AP/IB encouraged
	Science	3-4 years with Honors/AP/IB encouraged
	World Language	3-4 years with Honors/AP/IB encouraged

Very Selective Institutions		
Recommended Minimum Program of Study	English	4 years
	Math	4 years
	Social Studies	3-4 years
	Science	2-4 years depending on major
	World Language	2 years minimum

**Note:** For these types of schools, NHS counselors recommend that students complete the minimum academic standards, which should match our NHS graduation requirements, but also challenge themselves further with additional and/or honors coursework when appropriate. Many applicants to Very Selective colleges/universities complete 1-3 AP/IB classes at a minimum.

Less Selective Institutions		
Recommended Minimum Program of Study	English	4 years
	Math	4 years
	Social Studies	3 years
	Science	3 years depending on major
	World Language	1 year, per HEAR requirements

**Note:** NHS counselors recommend that students interested in less selective institutions plan to complete our minimum graduation requirements, and take two years of a foreign language, if possible. Community and junior colleges, vocational schools and military induction require that all graduation requirements are met.

## INFORMATION FOR PROSPECTIVE COLLEGE ATHLETES

### ***NCAA ELIGIBILITY REQUIREMENTS***

Students who wish to participate in collegiate athletics at the Division I or II level must apply for certification through the National Collegiate Athletic Association (NCAA) Eligibility Center after their junior year in high school. Northfield High School counselors can assist students in completing the necessary application. The website is [www.ncaaeligibilitycenter.org](http://www.ncaaeligibilitycenter.org).

The most comprehensive guide for athletes is the **NCAA Guide for the College Bound Student Athlete** produced by the NCAA.

This Guide has been designed to help you and your family understand the NCAA initial-eligibility process and to prepare you for transitioning from high school to becoming an NCAA Division I or II student-athlete. With more than 1,000 colleges and universities across three divisions, NCAA schools offer a variety of academic and athletics programs to meet your needs. The NCAA Eligibility Center encourages you, the student, to take an active role in this process. Take time to complete the registration yourself or jointly with your parents. As a future student-athlete, it is important that you become personally involved.

Download the comprehensive guide for free at:

<http://www.ncaapublications.com/productdownloads/CBSA18.pdf>

### **List of NCAA Approved Core Courses (formerly 48H)**

The NCAA Initial Eligibility Center has approved courses for use in establishing the certification status of student athletes from Northfield High School. If you intend to participate in college athletics, please see your counselor concerning how this list affects your registration for classes.

To access NHS's List of Approved Core courses:

- Go to [www.ncaaeligibilitycenter.org](http://www.ncaaeligibilitycenter.org).
- Click on "General Information"
- Click on "List of Approved Core Courses" on left hand side.
- Enter our high school code 850949 in the box and click "Search"
- Click on the "Show all Proposed Courses" box
- You now have the most up to date list of our approved Core courses.

Be aware that not all NHS Core Courses are approved by the NCAA Eligibility Center. We strongly encourage student-athletes and parents to consult with their counselor and the list of approved Core Courses early in their academic planning to ensure that approved courses are selected.

The following *Course List* provides an at-a-glance review of all courses and departments. More detailed information on each course can be found in *Course Descriptions* immediately following this section.

## COURSE SELECTION

Course Title	Academic Level	Grade Level	Prerequisite Course or Expectation	Course Length/Credit (Unit)
<b>ENGLISH</b>				
CE ENG 121/122	Concurrent Enrollment	11-12	Accuplacer and/or Teacher Recommendation	Year/1
English I	Honors Option	9		Year/1
English II	Honors Option	10		Year/1
IB Language and Literature I,II (non-IB Diploma)	IB	11-12		2 Year/2
IB Language and Literature I,II (Diploma)	IB Group 1 (HL)	11-12		2 Year/2
<b>MATHEMATICS</b>				
CE Introductory Statistics	Concurrent Enrollment	11-12		Semester/.5
Financial Algebra		11-12		Year/1
Integrated I		9-10		Year/1
Integrated II	Honors Option	9-10		Year/1
Integrated III	Honors Option	11 (or Placement Test)		Year/1
IB Math Studies I, II	IB Group 5 (SL)	11-12	Integrated Math II or equivalent	2 Year/2
IB Mathematics I, II	IB Group 5 (SL,HL)	11-12	Teacher Recommendation	2 Year/2
<b>SCIENCE</b>				
Biology	Honors Option	9		Year/1
Chemistry	Honors Option	10-12		Year/1
Earth Science	Honors Option	10-12		Year/1
IB Biology I,II	IB Group 4 (SL,HL)	11-12		2 Year/2
IB Chemistry I	IB Group 4 (SL)	11-12	Chemistry	1 Year/1
IB Environment Systems and Societies	IB Group 4 (SL)	11-12		Year/1
Physics	Honors Option	11-12		Year/1
<b>SOCIAL STUDIES</b>				
AP US History	Advanced Placement	10	Teacher Recommendation	Year/1
AP World History	Advanced Placement	10-12		Year/1
Civics		11-12		Semester/.5
Economics		11-12		Semester/.5
Global Politics		11-12		Semester/.5
US History	Honors Option	9,10		Year/1
IB Global Politics	IB Group 3 (SL)	11-12		Year/1
IB Global Politics	IB Group 3 (HL)	11-12		2 Years/2
IB History of Americas I,II	IB Group 3 (HL)	11-12		2 Years/2
<b>WORLD LANGUAGES</b>				
French 1		9-12		Year/1
French 2		9-12	French 1 or Equivalent	Year/1
French 3		9-12	French 2 or Equivalent	Year/1

French 4		9-12	French 3 or Equivalent	Year/1
IB French Ab Initio (Introductory French)	IB Group 2	11-12		2 Year/2
IB French (SL)	IB Group 2	11-12	French 3 or 4 or Teacher Recommendation	2 Year/2
Mandarin Chinese 1		9-12		Year/1
Mandarin Chinese 2		9-12	Mandarin 1 or Equivalent	Year/1
Mandarin Chinese 3		9-12	Mandarin 2 or Equivalent	Year/1
Mandarin Chinese 4		9-12	Mandarin 3 or Equivalent	Year/1
IB Mandarin Chinese (SL)	IB Group 2	11-12	Mandarin 3 or 4 or Teacher Recommendation	2 Year/2
Spanish 1		9-12		Year/1
Spanish 2		9-12	Spanish 1 or Equivalent	Year/1
Spanish 3		9-12	Spanish 2 or Equivalent	Year/1
Spanish 4		9-12	Spanish 3 or Equivalent	Year/1
IB Spanish Ab Initio (Introductory Spanish)	IB Group 2	11-12		2 Year/2
IB Spanish (3,4,5)	IB Group 2	11-12	Spanish 3 or 4 or Teacher Recommendation	2 Year/2
<b>VISUAL ART</b>				
AP Studio Art 2D (Drawing)	Advanced Placement	11-12	Two years of Art and Teacher Approval	Year/1
Ceramics 1 (Sem 1,2)		9-12		Semester/.5
Ceramics 2		10-12	Ceramics 1 (Sem 1 and 2)	Year/1
Design 1 (Sem 1,2)		9-12		Semester/.5
Design 2 (Sem 1,2)		10-12	Design 1 (Sem 1,2)	Semester/.5
Digital Design		10-12	Design 1	Semester/.5
Drawing and Painting 1 (Sem 1,2)		9-12		Semester/.5
Drawing and Painting 2		10-12	Drawing and Painting 1(Sem 1,2)	Semester/.5
Photography		10-12	Digital Design and/or Teacher Approval	Semester/.5
IB Visual Arts	IB Group 6 (SL,HL)	11-12	Two years of Art	2 Years/2
<b>PERFORMING ARTS</b>				
<b>INSTRUMENTAL MUSIC</b>				
Beginning Orchestra/Strings		9-12		Year/1
Chamber Strings		9-12	Audition or Teacher Recommendation	Year/1
Beginning and Intermediate Wind Band		9-12		Year/1
<b>VOCAL MUSIC/OTHER MUSIC COURSES</b>				
Male Choir (Introduction)		9-10		Year/1
Choir I (Introduction)		9-10		Year/1
Choir II (Intermediate)		10-12		Year/1
Bella Voce (All Female Choir)		9-12	Audition Only	Year/1
<b>THEATRE</b>				
Introduction to Theatre		9		Year/1
Technical Theatre II		10-12		Year/1
Theatre Arts II		10-12		Year/1
Theatre Production		10-12	Permission of Instructor	Year/1
IB Theatre SL	IB Group 6	11-12	2 years of Theatre Arts	2 years/2
IB Theatre HL	IB Group 6	11-12	2 years of Theatre Arts	2 years/2
<b>BUSINESS</b>				

Entrepreneurship		9-12		Semester/.5
Intro to Business		9-12		Semester/.5
IB Business Management	IB Group (SL)	11-12	Introduction to Business	Year/1
<b>PHYSICAL EDUCATION</b>				
Team Life I		9		Year/1
Lifetime Activities		10-12		Year/1
Fitness, Conditioning and Weight Training I		9-12		Year/1
Advanced Strength and Conditioning		10-12	Fitness, Conditioning and Weight Training or Teacher Recommendation	Year/1
<b>CAREER AND TECHNICAL EDUCATION</b>				
Intro to Engineering/Design		9-12		Year/1
Principles of Engineering		10-12	Introduction to Engineering/Design	Year/1
Engineer 3 Design and Develop		11-12	Principles of Engineering	Year/1
IB Design Technology	IB Group 4 (SL,HL)	11-12	Principles of Engineering	2 Years/2
CTE Computer Science Essentials		9-12		Year/1
AP Computer Science Principles		11-12		Year/1
AP Computer Science 1/2		11-12		Year/1
IB Computer Science	IB Group 4 (SL,HL)	11-12	AP Computer Science Principles or AP Computer Science A	2 Years/2
Principles of Biomedical Science		9-12		Year/1
Human Body Systems		10-12	Principles of Biomedical Sciences	Year/1
Medical Interventions		11-12	Human Body Systems	Year/1
Biomedical Innovation		12	Medical Interventions	Year/1
IB Sports, Exercise and Health	IB Group (SL)	11-12	Principles of Biomedical Sciences	2 Years/2
<b>Additional Elective Courses</b>				
Communications 1021 Introduction to Media Studies	Concurrent Enrollment	11-12	Accuplacer or Teacher Recommendation	Semester/.5
Communications 1011 Fundamentals of Communication	Concurrent Enrollment	11-12	Accuplacer or Teacher Recommendation	Semester/.5
Ethnic Studies	Concurrent Enrollment	11-12	Accuplacer or Teacher Recommendation	Semester/.5
Journalism		9-12		Year/1
Yearbook		9-12		Year/1
Introduction to Debate		9-12		Year/1

## COURSE DESCRIPTIONS

The following are descriptions of all Northfield courses by Credit Grouping.

### English

#### **CE ENG 121/122 – English Composition**

##### **Community College of Aurora**

Grade Level: 11-12 Credit: 10/1 Unit

Course Length: 1 year (one course each semester)

Prerequisites: SAT Reading and Writing: 470+, or Accuplacer Reading score 80+

Fees and Materials: Textbook and supplemental material as needed. Own transportation.

This course is designed to be a rigorous, expansive and thought-provoking course that provides students with the skills and knowledge they need to be fully prepared for the academic challenges of college. Students study literature, film, art and poetry and write analytically employing a variety of critical lenses. Each semester has specific goals in both the analysis of literature and the production of clear and effective academic essays. Students receive 3 college credits/semester through CCA. ENG 121 and 122 are Guaranteed Transfer course to all public colleges in Colorado.

#### **English 1**

Grade Level: 9 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: None

This required course focuses on the 9-10 Common Core State Standards, blending novels, short stories, poems, and drama with nonfiction texts in American Literature. Students engage in a variety of modes of reading, writing, language, speaking and listening, and collaboration through a series of formative and summative tasks that prepare them for ninth grade assessments and build towards International Baccalaureate courses in the 11<sup>th</sup> and 12<sup>th</sup> grades. Honors Option

#### **English 2**

Grade Level: 10 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: English 1

Fees and Materials: None

This required course continues to focus on the 9-10 Common Core State Standards with increased text complexity, blending novels, short stories, poems, and drama with nonfiction texts in World Literature. An additional area of focus is on authors

and perspectives from around the world blended with contemporary issues and ideas. Students engage in a variety of modes of reading, writing, language, speaking and listening, and collaboration through a series of formative and summative tasks that prepare them for tenth grade assessments and build towards International Baccalaureate courses in the 11<sup>th</sup> and 12<sup>th</sup> grades. Honors Option

#### **IB Language and Literature I & II (Non-Diploma)**

Grade Level: 11-12 Credit: 20/2 Units

Course Length: 2 years

Prerequisites: English 2

Fees and Materials: IB Textbook (optional) and supplemental book/materials as needed. Optional IB registration and testing fee.

The language A: language and literature course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices, and to encourage students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception. Helping students to focus closely on the language of studied texts and to become aware of the role of wider context in shaping meaning is central to the course. The study of literature in translation from other cultures is especially important to IB DP students because it contributes to a global perspective. Texts are chosen from a variety of sources, genres and media.

#### **IB Language and Literature I & II (HL-Diploma)**

Grade Level: 11-12 Credit: 20/2 Units

Course Length: 2 years

Prerequisites: English 2

Fees and Materials: IB Textbook and supplemental book/materials as needed. IB registration and testing fee.

Students completing this course will have a thorough knowledge of a range of texts and an understanding of other cultural perspectives. They will also have developed skills of analysis and the ability to support an argument in clearly expressed writing, sometimes at significant length. This course will enable them to succeed in a wide range of

university courses, particularly in literature but also in subjects such as philosophy, law and language. Texts studied are chosen from the prescribed literature in translation (PLT) list and the prescribed list of authors (PLA) or elsewhere. The PLT list is a wide-ranging list of works in translation, from a variety of languages, allowing teachers to select works in a language different from the language of the examination. The PLA lists authors from the language of the examination.

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## Math

### **CE Introductory Statistics (CCA)**

Grade Level: 11-12      Credit: .5/5 Unit

Course Length: Semester

Pre-requisites: Integrated Math 2

Fees and Materials – Textbook

Basic statistical concepts, summarizing data, probability concepts, distributions, confidence intervals, hypothesis testing. This course offers college credits.

### **Financial Algebra**

Grade Level: 12      Credit: 10/1 Unit

Course Length: Year

Prerequisites: None

Fees and Materials: None

This course explores various aspects of personal financial literacy including Personal Financial Identity, Income, Financial Institutions, Personal Budgets, Investments, and Careers in Finance through the lens of mathematics as called for by the Common Core State Standards and outlined in the Scope & Sequence.

### **Integrated Math 1**

Grade Level: 9      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: TI-84 Graphing Calculator

Integrated Math 1 is designed to combine some of the basic principles of Algebra, Geometry, and Statistics. Students will deepen and extend their understanding of linear relationships and be introduced to exponential functions, modeled through data. Students will use properties and theorems involving congruent figures to expand and broaden understanding of geometric knowledge. Students will experience mathematics as a coherent, useful, and logical subject that draws on their ability to make sense of problem situations, and will develop the ability to explore and solve mathematical problems, think critically, work

cooperatively with other students and communicate mathematical ideas clearly.

### **Integrated Math 2**

Grade Level: 9-10      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Integrated Math 1 or Placement test

Fees and Materials: TI-84 Graphing Calculator

Integrated Math 2 is designed to combine some of the intermediate principles of Algebra I, Geometry, Algebra 2 and Probability. Topics include Quadratic Functions, Similarity and Congruence, Circles, Basic Trigonometric Functions and Probability. The Common Core Standards for Mathematical Practices will be addressed throughout the course. Honors Option

### **Integrated Math III**

Grade Level: 11      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Integrated Math 2 or Placement test

Fees and Materials: TI-84 Graphing Calculator and graph paper

This course is designed to meet the expectations called for by the content and practice standards of the Common Core. Students will explore solving and interpreting solutions to equations, inequalities, and systems of equations (3 x3) and inequalities using a variety of tools; creating functions and/or recursive formulas to model situations; fitting a function to a given set of data; comparing the properties of functions each represented in a different way; understanding the effect of transformations on functions; interpreting key features of functions; collecting and analyzing data to use in drawing statistical conclusions about a population; and using a probability model to mathematically describe and interpret random processes. Functions may include linear, quadratic, exponential, polynomial, square root, cube root, piecewise-defined functions (including step and absolute value), rational, trigonometric, and logarithmic. Honors Option

### **IB Math Studies I/II (SL)**

Grade Level: 11-12      Credit: 20/2 Units

Course Length: 2 years

Prerequisites: Integrated Math 2 / Geometry

Fees and Materials: TI-84 Graphing Calculator, graph paper, and IB Textbook. Optional IB registration and testing fee for non-Diploma students.

The IB mathematical studies course focuses on important interconnected mathematical topics. The syllabus focuses on: placing more emphasis on student understanding of fundamental concepts

than on symbolic manipulation and complex manipulative skills; giving greater emphasis to developing students' mathematical reasoning rather than performing routine operations; solving mathematical problems embedded in a wide range of contexts; using the calculator effectively. There is an emphasis on applications of mathematics and statistical techniques. It is designed to offer students with varied mathematical backgrounds and abilities the opportunity to learn important concepts and techniques and to gain an understanding of a wide variety of mathematical topics, preparing them to solve problems in a variety of settings, develop more sophisticated mathematical reasoning and enhance their critical thinking.

### **IB Mathematics I/ II (SL)**

Grade Level: 11-12      Credit: 20/2 Unit

Course Length: 2 years

Prerequisites: Integrated Math 2 / Geometry

Fees and Materials: TI-84 Graphing Calculator, graph paper, and IB Textbook. Optional IB registration and testing fee for non-Diploma students.

The IB mathematics standard level (SL) course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigor required for mathematics HL. Students will apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context. The internally assessed exploration offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

### **IB Mathematics I/II (HL)**

Grade Level: 11-12      Credit: 20/2 Units

Course Length: 2 years

Prerequisites: Teacher Recommendation Only

Fees and Materials: TI-84 Graphing Calculator, graph paper, and IB Textbook. Optional IB registration and testing fee for non-Diploma students.

The IB higher level mathematics course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way, achieved by a carefully balanced approach. Students

apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. Development of each topic should feature justification and proof of results. Students should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. They are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments. The internally assessed exploration allows students to develop independence in mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas. This course will operate as an independent with scheduled teacher check pts to ensure on track progression. This class will not be teacher directed.

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## Science

### **Biology**

Grade Level: 9                      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: None

This course provides information students will use to differentiate living from nonliving things. The course presents the structure and function of living things, from simple cells to complex organisms composed of cells, tissues, organs, and systems. The following units will be covered first semester: Evolution: Patterns and Products of Change in Living Systems; Homeostasis: Maintaining Dynamic Equilibrium in Living Systems; and Energy, Matter and Organization: Relationships in Living Systems. For the second semester: Continuity: Reproduction and Inheritance in Living Systems, Development: Growth and Differentiation in Living Systems; and Ecology: Interaction and Interdependence in Living Systems. Honors Option

### **Earth Science**

Grade Level: 10-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: None

Introduces the student to the basics of Earth as part of a system in the universe and to the interacting systems on the planet itself. Beginning with astronomy, students will learn about the origin of our solar system, the Earth's moon and its phases. A

study of stars will include star formation, types of stars, and life cycle of stars with a focus on the Sun. Focus on the structure of planet Earth and the dynamic forces of plate tectonics that continue to change geography and affect our lives with volcanic eruptions and earthquakes. Additionally, renewable and non-renewable energy resources used by people and the effect our use has on the environment are examined. Global climate change is one possible effect and this leads to a study of oceanography. Ocean currents are studied and the profound influence that they exert on continental climates. The study of climate leads to a unit on weather, specifically the violent events of hurricanes, thunderstorms, and tornadoes. Throughout the course, inquiry activities and data analysis of charts and graphs provide the foundation for content knowledge. Honors Option

### **Chemistry**

Grade Level: 10-12      Credit: 10/1 Unit  
Course Length: 1 year  
Prerequisites: None  
Fees and Materials: \$10 Lab Fee

This course includes studies in basic metric measures, physical and chemical properties, symbols and formulas, atomic structure, mole theory, chemical equations, electron configurations, and the periodic table. It is the intent of this course not only to study the theories of chemistry, but also to demonstrate the applications of those theories through laboratory experience and relate those theories to everyday uses. Honors Option

### **Physics**

Grade Level: 11-12      Credit: 10/1  
Course Length: 1 year  
Prerequisite: None  
Fees and Material: None

In this physics course, students use hands-on, inquiry-based investigation in the context of real-world projects, such as designing roller coasters, and announcing sporting events. The first semester of this physics course focuses on the introduction of the basic concepts of measurement, graphing, vector analysis, dynamics, force analysis, energy, and heat through laboratory and mathematical analysis. The second semester studies basic concepts of wave characteristics, properties of sound and light, and characteristics of electricity and magnetism. Because mathematics is the language of physics, an adequate preparation in algebra and geometry is a prerequisite. Honors Option

### **IB Biology I and II (SL)**

Grade Level: 11-12      Credit: 20/2 Units  
Course Length: 2 years  
Prerequisites: Biology  
Fees and Materials: IB Textbook, \$30 lab fee and supplemental book/materials as needed. Optional IB registration and testing fee for non-Diploma students.

Students learn about cell theory, the chemistry of living things, plant structure and growth, and the difference between genes and alleles, among many other topics, to further their understanding of and learning about biology. Throughout this challenging course, students become aware of how scientists work and communicate with each other. Further, students enjoy multiple opportunities for scientific study and creative inquiry within a global context

### **IB Biology I and II (HL)**

Grade Level: 11-12      Credit: 20/2 Units  
Course Length: 2 years  
Prerequisites: Biology  
Fees and Materials: IB Textbook, \$30 lab fee and supplemental book/materials as needed. Optional IB registration and testing fee for non-Diploma students.

By studying biology in the DP students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the sciences. Teachers provide students with opportunities to design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers and evaluate and communicate their findings.

### **IB Chemistry I (SL)**

Grade Level: 11-12      Credit: 10/1 Units  
Course Length: 1 year  
Prerequisites: Chemistry  
Fees and Materials: IB Textbook, \$60 lab fee, supplemental book/materials as needed. Optional IB registration and testing fee for non-Diploma students.

The DP chemistry course allows students to develop a wide range of practical skills and to increase facility in the use of mathematics. It also allows students to develop interpersonal and information technology skills, which are essential to life in the 21st century. By studying chemistry students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach

through experimental work that characterizes the subject. Teachers provide students with opportunities to develop manipulative skills, design investigations, collect data, analyse results and evaluate and communicate their findings.

### **IB Environmental Systems & Societies (SL)**

Grade Level: 11-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: IB Textbook and supplemental material as needed. Optional IB registration and testing fee for non-Diploma students

Environmental systems and societies (ESS) is an interdisciplinary course offered only at standard level (SL). This course can fulfill either the individuals and societies or the sciences requirement. Alternatively, this course enables students to satisfy the requirements of both subjects groups simultaneously while studying one course. ESS is firmly grounded in both a scientific exploration of environmental systems in their structure and function, and in the exploration of cultural, economic, ethical, political and social interactions of societies with the environment. As a result of studying this course, students will become equipped with the ability to recognize and evaluate the impact of our complex system of societies on the natural world.

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## Social Studies

### **AP US History**

Grade Level: 10 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: AP Textbook and AP exam fee. Optional-*Cracking the AP U.S. History Exam, 2017 Edition: Proven Techniques to Help You Score a 5* - \$13.00.

This course focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.

### **AP World History**

Grade Level: 10 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: AP Textbook and AP exam fee.

AP World History focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, state-building, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions.

### **CE Ethnic Studies (CU Succeeds)**

Grade Level: 11-12 Credit: 5/.5

Course Length: 1 Semester

Pre-requisites: Accuplacer

Fees and Materials: Textbook

Multi-disciplinary survey of contemporary and historical research analysis of the diverse social economic, political, and cultural facets of African American, American Indian, Asian American, and Latino communities and cultures. This course offers college credits.

### **CE Political Science (CU Succeeds)**

Grade Level: 11-12 Credit 5/.5

Course Length: 1 Semester

Pre-requisites: Accuplacer

Fees and Materials: Textbook

General introduction to the American political system with emphasis upon citizen involvement, the relationships among the various levels and branches of government, formal and informal institutions, processes, and behavior.

### **Civics**

Grade Level: 11-12 Credit 5/.5

Course Length: 1 Semester

Pre-requisites: None

Fees and Materials: None

The semester course for Civics is designed to engage students in both the theory and practice of our government, politics and the ability for one to participate in the United States. Students will deepen their knowledge of, understanding of and ability to apply civics' concepts to their everyday lives.

## **Economics**

Grade Level: 11-12    Credit 5/.5

Course Length: 1 Semester

Pre-requisites: None

Fees and Materials: None

This one-semester course provides an understanding of major economic systems, examines economic decision-making, compares basic features of different economic systems, and emphasizes individual participation through the understanding of scarcity, choice, cost, and the role of labor and government. This is an elective course.

## **Global Politics**

Grade Level: 11-12    Credit 5/.5

Course Length: 1 Semester

Pre-requisites: None

Fees and Materials: None

The course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives.

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## **US History**

Grade Level: 10    Credit: 10/1 Unit

Course Length: 1 year

Pre-requisites: None

Fees and Materials: None

This course is designed to help students understand the events, issues, and personalities that shaped our history from Reconstruction to the end of World War I. The course looks at United States history from the multiple perspectives of this diverse and ethnically rich nation. Students will develop analytic skills in historical inquiry, problem solving, cause-and-effect synthesis, and evaluation of historic information. Students will also gain the skills and knowledge needed to understand various connections and interdependence of political, economic, technological, and philosophical aspects of United States' society.

## **IB History of the Americas I/II (HL)**

Grade Level: 11-12    Credit: 20/2 Units

Course Length: 2 years

Prerequisites: None

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

This course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual

knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources. There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance and perspectives.

## **IB Global Politics 1 (SL)**

Grade Level: 11-12    Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: IB Textbook (optional)

Optional IB registration and testing fee for non-Diploma students)

The study of global politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens. The course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives.

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## **IB Global Politics 1 (HL)**

Grade Level: 11-12    Credit: 20/2 Unit

Course Length: 2 year

Prerequisites: None

Fees and Materials: IB Textbook (optional)

Optional IB registration and testing fee for non-Diploma students)

The study of global politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens. The course explores fundamental political concepts such as power, equality, sustainability and peace in a range of contexts. It allows students to develop an understanding of the local, national, international and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives.

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## World Languages

### **French 1**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Pre-requisites: None

Fees and Materials: None

Students will be expected to demonstrate, through the use of authentic material, the skills of listening, speaking, reading and writing in everyday situations. These situations are defined by the core syllabus and the language specific syllabus.

### **French 2**

Grade Level: 9-12      Credits: 10/1 Unit

Course Length: 1 year

Pre-requisites: Placement Exam or French 1

Fees and Materials: None

French 2 continues to concentrate on the development of the language by improving the production of sounds and learned utterances, by expanding the understanding of what is heard, and by using basic but longer, more complicated speech patterns. Emphasis continues on proficiency-based development of listening and speaking skills. Language content continues to focus on meeting novice to intermediate-low survival needs. Students create with the language and get into, through, and out of real-life situations. Varied grammatical concepts within culturally appropriate settings are introduced.

### **French 3**

Grade Level: 9-12      Credits: 10/1 Unit

Course Length: 1 year

Prerequisites: Placement Exam or French 2

Fees and Materials: None

French 3 continues to emphasize the development of listening and speaking proficiency. There is increased emphasis on reading and writing for communication across a variety of topics. The study of grammar is more intensive with the continued practice of irregular verbs and the addition of higher level verb structures, including compound tenses and the subjunctive.

### **French 4**

Grade Level: 9-12      Credits: 10/1 Unit

Course Length: 1 year

Prerequisites: Placement Exam or French 3

Fees and Materials: None

French 4 continues to heighten the development of listening and speaking skills. There is an increased emphasis on reading and writing for communication across a variety of topics. The study of grammar focuses on review and refinement of

previously taught structures. A continued awareness of the richness of cultural differences is stressed.

### **IB French Ab Initio**

Grade Level: 9-12      Credit: 20/2 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

Develops students' writing, reading, listening and speaking abilities in French. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

### **IB French (SL)**

Grade Level: 11-12      Credits: 20/2 Unit

Course Length: 2 year

Pre-requisites: Placement Exam or French 2

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

IB French continues to heighten the development of reading, writing, listening and speaking skills. There is an increased emphasis on reading and writing for communication across a variety of topics. The study of grammar focuses on review and refinement of previously taught structures.

### **Mandarin Chinese 1**

Grade Level: 9-12      Credits: 10/1 Unit

Course Length: 1 year

Pre-requisites: None

Fees and Materials: None

Develops students' writing, reading, listening and speaking abilities in Mandarin. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

### **Mandarin Chinese 2**

Grade Level: 9-12      Credits: 10/1 Unit

Course Length: 1 year

Pre-requisites: Placement Exam or Mandarin 1

Fees and Materials: None

Mandarin Chinese 2 continues to concentrate on the development of the language by improving the production of sounds and learned utterances, by expanding the understanding of what is heard, and by using basic but longer, more complicated speech patterns. Emphasis continues on proficiency-based development of listening and speaking skills. Language content continues to focus on meeting novice to intermediate-low survival needs. Students

create with the language and get into, through, and out of real-life situations. Varied grammatical concepts within culturally appropriate settings are introduced.

### **Mandarin Chinese 3**

Grade Level: 9-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisites: Placement Exam or Mandarin 2

Fees and Materials: None

Mandarin 3 continues student's learning, expanding topics through various classroom activities based on the prior two years. Listening and speaking proficiency are stressed and there is an increased emphasis on reading and writing of different topics. These abilities are integrated to help students develop the Chinese language to next level of fluency. Students will be exploring related topics, contexts, conversations, and Chinese culture through texts, Internet or other media.

### **Mandarin Chinese 4**

Grade Level: 9-12 Credits: 10/1 Unit

Course Length: 1 year

Pre-requisites: Placement Exam or Mandarin 3

Fees and Materials: None

Chinese 4 continues to emphasize the development of listening and speaking proficiency. There is increased emphasis on reading and writing for communication across a variety of topics. The study of grammar is more intensive with additional practice of higher level verb structures. Complex sentence structures and connected discourse move to higher levels

### **IB Mandarin Chinese SL**

Grade Level: 11-12 Credits: 10/1 Unit

Course Length: 1 year

Pre-requisites: Placement Exam or Mandarin 2

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

IB Mandarin continues to heighten the development of reading, writing, listening and speaking skills. There is an increased emphasis on reading and writing for communication across a variety of topics. The study of grammar focuses on review and refinement of previously taught structures.

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### **Spanish 1**

Grade Level: 9-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: None

Develops students' writing, reading, listening

and speaking abilities in Spanish. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

### **Spanish 2**

Grade Level: 9-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisites: Placement Exam or Spanish 1

Fees and Materials: None

Spanish 2 continues to concentrate on the development of the language by improving the production of sounds and learned utterances, by expanding the understanding of what is heard, and by using basic but longer, more complicated speech patterns. Emphasis continues on proficiency-based development of listening and speaking skills. Language content continues to focus on meeting novice to intermediate-low survival needs. Students create with the language and get into, through, and out of real-life situations. Varied grammatical concepts within culturally appropriate settings are introduced.

### **Spanish 3**

Grade Level: 9-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisites: Placement Exam or Spanish 2

Fees and Materials: None

Spanish 3 continues to emphasize the development of listening and speaking proficiency. There is increased emphasis on reading and writing for communication across a variety of topics. The study of grammar is more intensive with the continued practice of irregular verbs and the addition of higher level verb structures, including compound tenses and the subjunctive.

### **Spanish 4**

Grade Level: 9-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisites: Placement Exam or Spanish 3

Fees and Materials: None

Spanish 4 continues to heighten the development of listening and speaking skills. There is an increased emphasis on reading and writing for communication across a variety of topics. The study of grammar focuses on review and refinement of previously taught structures. A continued awareness of the richness of cultural differences is stressed.

### **IB Spanish Ab Initio**

Grade Level: 9-12 Credit: 20/2 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: IB Textbook and supplemental

materials as needed. Optional IB registration and testing fee for non-Diploma students.

Develops students' writing, reading, listening and speaking abilities in Spanish. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

### **IB Spanish (SL)**

Grade Level: 11-12 Credits: 20/2 Unit

Course Length: 2 year

Prerequisites: Placement Exam or Spanish 2

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

IB Spanish continues to heighten the development of reading, writing, listening and speaking skills. There is an increased emphasis on reading and writing for communication across a variety of topics. The study of grammar focuses on review and refinement of previously taught structures.

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## Visual Art

### **AP Studio Art (Drawing)**

Grade Level: 11-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: 2 years of Art or teacher approval

Fees and Materials: \$40 plus the cost of any special materials as needed and AP Portfolio Examination fee.

The AP 2D Studio Drawing course is designed for students who are seriously interested in the practical experience of art and design. AP Studio art is not based on a written exam; instead, students submit a portfolio of 24 works for evaluation at the end of the school year to the AP College Board

### **Ceramics I Semester 1**

Grade Level: 9-12 Credit: 5/.5 Unit

Course Length: Semester

Prerequisites: Design

Fees and Materials: \$20

This course introduces students to shape, form, Design, and a variety of techniques as they relate to the medium of clay. Students will learn terminology and experiment with specific projects such as hand building, throwing, design, and glazing techniques. The design of both functional and sculptural ceramics will be addressed.

### **Ceramics I Semester 2**

Grade Level: 9-12 Credit: 5/.5 Unit

Course Length: Semester

Prerequisites: Design

Fees and Materials: \$20

This course reinforces previously learned concepts dealing with shape, form, and design as related to ceramics. Terminology is reviewed and expanded.

### **Ceramics II**

Grade Level: 11-12 Credit: 10/1 Unit

Course Length: Year

Prerequisites: Ceramics I

Fees and Materials: \$20 per semester

This course continues to explore the use of clay bodies and glazes in order to synthesize design, form, color, surface treatment, and firing procedures. Students will work with intricate fabrication techniques as they relate to larger, more complex forms. Students will be encouraged to build forms from a strong design base with emphasis on personal expression and intuition. Knowledge of ceramics terminology will expand. The assembly of a photo portfolio documenting personal best works is recommended at the advanced levels. Emphasis will be on individual projects.

### **Design 1 Semester 1**

Grade Level: 9-12 Credit: 5/.5 Unit

Course Length: Semester

Prerequisites: None

Fees and Materials: \$15 per semester

This course offers the basic and fundamentals of both two and three-dimensional studies. Research and planning are an integral part of this class. Beginning drawing and sculpture techniques will be explored to develop a strong visual understanding of the elements and principles of design. There will be the use of mixed mediums, different textiles, and materials in order to explore, develop, and build a portfolio throughout the semester. Art history as well as contemporary artists will be incorporated when relevant to projects.

### **Design 1 Semester 2**

Grade Level: 9-12 Credit: 5/.5 Unit

Course Length: Semester

Prerequisites: None

Fees and Materials: \$15 per semester

This course offers the basics and fundamentals of sculpture and 3 dimensional designs. Research and planning are an integral part of this class. Different sculptural techniques will be explored to develop a strong visual understanding of the elements and principles of art and design. There will be the use of mixed mediums, different textiles, and materials in order to explore, develop and build multiple 3

dimensional projects throughout the semester. Art history as well as contemporary artist will be incorporated when relevant to projects.

### **Design 2**

Grade Level: 10-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Design 1 or Teacher

Recommendation

Fees and Materials: \$30 per year

This course is a continuation of sculpture and 3 dimensional designs. Research and planning are an integral part of this class. Different sculptural techniques will be explored to develop a strong visual understanding of the elements and principles of art and design. There will be the use of mixed mediums, different textiles, and materials in order to explore, develop and build multiple 3 dimensional projects throughout the semester. Art history as well as contemporary artist will be incorporated when relevant to projects.

### **Digital Design**

Grade Level: 10-12 Credit: 5/5 Unit

Course Length: Semester

Prerequisites: None

Fees and Materials: \$20

This course is to develop or build the foundation of computer design using Adobe Photoshop. Students will learn computer illustration techniques, image manipulation, digital camera use, graphic design visual literacy, and the elements and principles of art in composition. Art historical movements will also be studied as they relate to student projects. Students will develop and e-portfolio containing their projects and personal career goals developed through guided practice and independent studies.

### **Drawing and Painting 1 Semester 1**

Grade Level: 9-12 Credit: 5/5 Unit

Course Length: Semester

Prerequisites: None

Fees and Materials: \$15 per semester

Drawing is an essential step for all visual arts. This course will emphasize value in terms of lights and darks which create line, structure, volume, and space. The exploration of color mixing and color schemes will be included. The elements and principles of art will be presented through exploratory drawing and painting using various media, such as ebony, color pencil, paint, ink, pastels, and art papers.

### **Drawing and Painting 1 Semester 2**

Grade Level: 9-12 Credit: 5/5 Unit

Course Length: Semester

Prerequisites: Drawing and Painting Sem 1

Fees and Materials: \$15 per semester

This course emphasizes in-depth exploration of texture, pattern, shape, balance and contrast in the development of finished compositions. Personal interpretation and emotional response to work will be encouraged. Students will critique and assemble a portfolio of best works.

### **Drawing and Painting 2**

Grade Level: 10-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Drawing and Painting 1

Fees and Materials: \$30 per year

This course is for students who have successfully completed Drawing and Painting I and want to improve on their artistic skills. Based upon the Visual Art Standards, students will be expected to produce a higher quality body of work with more emphasis on craftsmanship, aesthetic value and personal expression. The goal of this course is for students to create a quality body of work and explore their artistic skills using a variety of media for paint and drawing as the vehicle of expression and communication.

### **Photography**

Grade Level: 10-12 Credit: 5/5 Unit

Course Length: Semester

Prerequisites: Digital Design

Fees and Materials: \$20

This one semester elective course combines science and technology using camera and darkroom equipment, and the chemical processing of black-and-white film and prints to explore the characteristics of light and image formation. The structure and operation of the camera, enlarger, and lenses are related to image formation, exposure of light sensitive materials, and the production of a well composed print. The response of photographic emulsions to light is explored through manipulation of camera and darkroom equipment, chemical processing, and the characteristics of light sources.

### **IB Visual Arts (SL)**

Grade Level: 11-12 Credit: 20/2 Units

Course Length: 2 years

Pre-requisites: 2 years of art

Fees and Materials: IB Textbook, \$30 per year, plus the cost of any special materials as needed.

Optional IB registration and testing fee for non-Diploma students.

The IB Diploma Programme visual arts course

encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

### **IB Visual Arts (HL)**

Grade Level: 11-12      Credit: 20/2 Units

Course Length: 2 years

Pre-requisites: 2 years of art or Teacher Recommendation

Fees and Materials: IB Textbook, \$30 per year, plus the cost of any special materials as needed. Optional IB registration and testing fee for non-Diploma students.

The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

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## Music

### Instrumental Music

#### **Beginning Orchestra**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: \$30 per year, instrumental rental and performance attire.

In this course students will be introduced to the violin, viola, cello, and bass instruments. Students will learn about the basics of music reading, theory, as well as composition and performance skills on

string instruments. Repertoire includes a variety of genres, styles, historical periods and cultures. Students will continue to develop their music reading skills, knowledge of music theory as well as their compositional and performance skills on their instruments. They will prepare for 2-3 concerts throughout the year.

#### **Beginning and Intermediate Wind Band**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: \$30 per year, instrumental rental and performance attire.

In this course students will be introduced to the brass, woodwind, and percussion instruments. Students will learn about the basics of music reading, theory, as well as composition and performance skills on string instruments. Repertoire includes a variety of genres, styles, historical periods and cultures. Students will continue to develop their music reading skills, knowledge of music theory as well as their compositional and performance skills on their instruments. They will prepare for 2-3 concerts throughout the year.

#### **Chamber Strings**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Audition/Teacher Approval

Fees and Materials: \$30 per year, instrumental rental and performance attire.

This course will focus on performing, creating, and responding to a variety of literature and develop student musicianship skill and develop student musicianship skills to the high school proficiency level of (2.5 -3) by the end of the school year. They will prepare for 2-3 concerts throughout the year.

## Vocal Music

#### **Bella Voce**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None- **Female Only**

Fees and Materials: Performance attire

This course provides students with little or no previous music experience a chance to learn the fundamentals of singing in a large group setting. Through performance of a repertoire that includes a variety of genres, styles, historical periods and cultures at a proficiency level of (1) according to the Colorado Music Standards Music Appendix. Students will also learn about singing with correct

vocal production, as well as the basics of music reading, music theory, aesthetic valuation, and music composition. They will prepare for 2-3 concerts throughout the year., historical periods and cultures at a proficiency level of ( 2-3) according to the Colorado Music Standards Music Appendix. Students will also do deeper into the foundations of music theory and music composition. They will prepare for 2-3 concerts throughout the year.

### **Choir I**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: Performance attire

This course provides students with little or no previous music experience a chance to learn the fundamentals of singing in a large group setting. Through performance of a repertoire that includes a variety of genres, styles, historical periods and cultures at a proficiency level of (1) according to the Colorado Music Standards Music Appendix. Students will also learn about singing with correct vocal production, as well as the basics of music reading, music theory, aesthetic valuation, and music composition. They will prepare for 2-3 concerts throughout the year.

### **Choir II**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Choir I or Teacher Approval

Fees and Materials: Performance attire

This course will build upon the skills learned in Choir/Mixed Beginning S1 & S2. Students will learn more advanced vocal production techniques and perform repertoire that includes a variety of genres, styles, historical periods and cultures at a proficiency level of ( 2-3) according to the Colorado Music Standards Music Appendix. Students will also do deeper into the foundations of music theory and music composition. They will prepare for 2-3 concerts throughout the year.

### **Choir Men's**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None- **Male only**

Fees and Materials: Performance attire

This course provides students with little or no previous music experience a chance to learn the fundamentals of singing in a large group setting. Through performance of a repertoire that includes a variety of genres, styles, historical periods and cultures at a proficiency level of (1) according to the Colorado Music Standards Music Appendix.

Students will also learn about singing with correct vocal production, as well as the basics of music reading, music theory, aesthetic valuation, and music composition. They will prepare for 2-3 concerts throughout the year.

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## **Theatre**

### **Introduction to Theatre**

Grade Level: 9

Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: None

Introduction to Theatre encourages interest in the dramatic arts through historical context, acting, voice & diction, writing, and costume & set design. Students will learn the ins and outs of all aspects of theatre throughout the year through the lenses of performer, audience member, critic, and designer as they gain an appreciation for all aspects of mounting a performance.

### **Technical Theatre II**

Grade Level: 10-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: \$35

This year long course is meant to introduce the students to all aspects of Technical Theatre production with multiple hands-on opportunities and understanding of basic techniques. Students will participate in all phases of production including research, set construction, safety, lighting and sound design, costume design, make-up basics, and an introduction to business management. Advanced students will focus on building, designing and supporting each main stage production.

### **Theatre Arts II**

Grade Level: 10-12      Credit: 10/1 Unit

Course Length: 1 Year

Prerequisites: Introduction to Theatre or permission of instructor

Fees and Materials: None

Theatre Arts II continues to cultivate further interest in participation in theatre. The course emphasizes the history and development of the actor by analyzing script selections and approaches to the craft from key periods. This class offers a beginners guide to stage production and writing for the theatre with a culminating performance at the end of the year.

### **Theatre Production I**

Grade Level: 10-12 Credit: 10/1 Unit

Course Length: 1 Year

Prerequisites: Permission of instructor

Fees and Materials: None

This course focuses on setting up students for success in acting and directing techniques by applying and fine tuning skills through scene study. Advanced Theatre students study storytelling elements, various dramatic art forms, and genres of theatrical performance. As they progress, students will begin to analyze the fundamental elements of directing for the stage, and begin to develop their individual voice as a director. Students will prepare for two performances throughout the year. This course includes opportunities for both advanced actors and those interested in directing.

### **Technical Theatre II**

Grade Level: 10-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: \$35

This year long course is meant to introduce the students to all aspects of Technical Theatre production with multiple hands-on opportunities and understanding of basic techniques. Students will participate in all phases of production including research, set construction, safety, lighting and sound design, costume design, make-up basics, and an introduction to business management. Advanced students will focus on building, designing and supporting each main stage production.

### **IB Theatre Arts (SL)**

Grade Level: 11-12 Credit: 20/2 Units

Course Length: 2 years

Prerequisites: 2 years of Theatre Arts

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

Students research and examine the various contexts of at least one published play text and reflect on live theatre moments they have experienced as spectators. Students take part in the practical exploration of at least two contrasting published play texts and engage with the process of transforming a play text into action. Students direct at least one scene or section from one published play text which is presented to others. Students respond to at least one starting point and engage with the process of

transforming it collaboratively into an original piece of theatre. Students participate in at least one production of a collaboratively created piece of original theatre, created from a starting point, which is presented to others. Students reflect on their own personal approaches, interests and skills in theatre. They research and examine at least one starting point and the approaches employed by one appropriate professional theatre company, and consider how this might influence their own personal approaches.

### **IB Theatre Arts (HL)**

Grade Level: 11-12 Credit: 20/2 Units

Course Length: 2 years

Prerequisites: 2 years of Theatre Arts

Fees and Materials: Students will purchase the text and any special materials. Optional IB registration and testing fee for non-Diploma students)

Students research and examine the various contexts of at least one published play text and reflect on live theatre moments they have experienced as spectators. Students take part in the practical exploration of at least two contrasting published play texts and engage with the process of transforming a play text into action. Students direct at least one scene or section from one published play text which is presented to others. Students respond to at least one starting point and engage with the process of transforming it collaboratively into an original piece of theatre. Students participate in at least one production of a collaboratively created piece of original theatre, created from a starting point, which is presented to others. Students reflect on their own personal approaches, interests and skills in theatre. They research and examine at least one starting point and the approaches employed by one appropriate professional theatre company, and consider how this might influence their own personal approaches. At HL, students research and examine the various contexts of at least one theatre theorist. At HL, students practically explore at least one theatre theorist collaboratively and engage with the process of creating a piece of theatre based on their theory. At HL, students create, present and evaluate at least one theatre piece based on an aspect(s) of a theatre theorist's work they have explored.

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## **Physical Education**

### **Advanced Strength and Conditioning**

Grade Level: 10-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisite: None

Fee and Material: PE Uniform (\$20)

This course reviews the fundamentals of health

and skill related fitness components to provide for continued improvement and understanding of fitness principles. Students will learn to evaluate their strength training, muscular development goals and learn advanced concepts. It will incorporate the biomechanical and kinesiological factors which are important for understanding the function and proper techniques for execution of a wide variety of standard and advanced strength training and conditioning exercises. This class is developed for junior and senior students who want to engage in and study fitness at a more advanced level.

### **Fitness and Conditioning/Weight Training I**

Grade Level: 9-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisite: None

Fee and Material: PE Uniform (\$20)

This course engages students in individual programs to increase strength, cardiovascular endurance, flexibility, agility and coordination. Activities presented include calisthenics, aerobic activities, circuit training and weight training. (Note: activities can be adopted for students with limitations.)

### **Team Sports and Lifetime Activities I**

Grade Level: 9 Credits: 10/1 Unit

Course Length: 1 year

Prerequisite: None

Fee and Material: PE Uniform (\$20)

This course engages students in participation of activities, which give students a balance between those sports demanding teamwork, and those deemed to be potentially useful and enjoyable through life. Activities may include: in lifetime team and individual sports, team building activities, fitness, proper nutrition, and outdoor education. (Note: activities can be adopted for students with limitations.)

### **Team Sports and Lifetime Activities II**

Grade Level: 10-12 Credits: 10/1 Unit

Course Length: 1 year

Prerequisite: None

Fee and Material: PE Uniform (\$20)

This course engages students in participation of activities which give students a balance between those sports demanding teamwork, and those deemed to be potentially useful and enjoyable throughout life.

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## **Communications**

### **CE COMM 1011: Fundamentals of Communication**

#### **CU Succeeds**

Grade Level: 11-12 Credit: 5/.5 Unit (Elective)

Course Length: Semester

Prerequisites: Accuplacer

Fees and Materials: Textbook

This class introduces students to the principles of communication theory and practice, and focuses on notions of self-identity, public communication, and the politics of language. This is a Guaranteed Transfer List course for Colorado schools. Students earn 3 college credits.

### **CE COMM 1021: Introduction to Media Studies**

#### **CU Succeeds**

Grade Level: 11-12 Credit: 5/.5 Unit (Elective)

Course Length: Semester

Prerequisites: Accuplacer

Fees and Materials: Textbook

This class introduces students to the economy of the media, the analysis of media messages and new media technologies, and the ways popular culture influences our daily behavior. This is a Guaranteed Transfer List course for Colorado schools. Students earn 3 college credits.

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## **Engineering**

### **CTE Introduction to Engineering and Design**

Grade Level: 9-12 Credit: 10/1 Unit

Course Length: 1 Year

Prerequisites: None

Fees and Materials: \$20 per semester

Engineering/Design Honors is an introductory course, which develops student problem solving skills, with emphasis placed upon the concept of developing three dimensional solid models. Students will work from sketching simple geometric shapes to applying a solid modeling computer software package. They will learn a problem solving design process and how it is used in industry to manufacture a product. The Computer Aided Design System (CAD) will also be used to analyze and evaluate the product design. The techniques learned and the equipment used will simulate what engineers are currently doing. Various design applications will be explored with discussion of possible career opportunities. Must pass PLTW college credit exam.

### **CTE Principles of Engineering**

Grade Level: 10-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisite: Introduction to Engineering & Design

Fees and Materials: \$20 per year

Principles of Engineering Honors is a broad based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills; and they will explore various engineering systems and manufacturing processes. The main emphasis is to experience theory by hands on problem solving. Must pass PLTW college credit exam.

### **CTE Engineering 3**

Grade Level: 11-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisite: 2 years of Engineering

Fees and Materials: \$20 per year

This design technology course aims to develop internationally minded people whose enhanced understanding of design and the technological world can facilitate our shared guardianship of the planet and create a better world. Inquiry and problem-solving are at the heart of the subject. DP design technology requires the use of the design cycle as a tool, which provides the methodology used to structure the inquiry and analysis of problems, the development of feasible solutions, and the testing and evaluation of the solution. A solution can be defined as a model, prototype, product or system that students have developed independently. DP design technology achieves a high level of design literacy by enabling students to develop critical-thinking and design skills, which they can apply in a practical context. While designing may take various forms, it will involve the selective application of knowledge within an ethical framework.

### **CTE Engineering Design and Development**

Grade Level: 12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisite: 3 years of Engineering

Fees and Materials: \$20 per semester

The students in Engineering Design and Development will work in teams of two to four to design and construct the solution to an engineering problem, applying the principles developed in the four preceding courses. The problem may be selected from a database of engineering problems, be a recognized national challenge or be an original engineering problem identified by the team and approved by the teacher. A journal will be maintained; each team delivers progress reports. The

projects continue through two semesters. Must pass PLTW college credit exam

### **IB Design Technology (SL)**

Grade Level: 11-12      Credit: 10/1 Unit

Course Length: 2 years

Prerequisite: 3 years of Engineering

Fees and Materials: IB Textbook, \$30 per year and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

This design technology course aims to develop internationally minded people whose enhanced understanding of design and the technological world can facilitate our shared guardianship of the planet and create a better world. Inquiry and problem-solving are at the heart of the subject. DP design technology requires the use of the design cycle as a tool, which provides the methodology used to structure the inquiry and analysis of problems, the development of feasible solutions, and the testing and evaluation of the solution. A solution can be defined as a model, prototype, product or system that students have developed independently. DP design technology achieves a high level of design literacy by enabling students to develop critical-thinking and design skills, which they can apply in a practical context. While designing may take various forms, it will involve the selective application of knowledge within an ethical framework.

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## **Computer Science**

### **CTE Computer Science Essentials**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 Year

Prerequisite: None

Fees and Materials: None

Computer Science Essentials is a Project Lead The Way (PLTW) introductory Computer Science course in which students will use visual, block-based programming and seamlessly transition to text-based programming to create apps and develop websites, and learn how to make computers work together to put their design into practice. They will apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them. One of the programming languages currently taught is Python.

### **AP Computer Science Principles**

Grade Level: 10-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Recommended- CTE Exploring

## Computer Science or CTE Computer Science Essentials

Fees and Materials: Materials as needed, AP exam fee

This course is designed to meet the requirements of AP Computer Science Principles exam. Advanced Placement Computer Science Principles can help you understand how computing and technology influence the world around you. Learn how to creatively address real-world issues while using the same tools and processes that artists, writers, computer scientists, and engineers use to bring ideas to life. The syllabus includes the fundamentals of computing, including problem solving, working with data, understanding the Internet, cybersecurity, and programming. The programming language currently taught is JavaScript.

### **AP Computer Science 1/2**

Grade Level: 11-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: Integrated Math I

Fees and Materials: Materials as needed, AP exam fee

This course is designed to meet the requirements of AP Computer Science A. The development of computer programs to solve problems is a skill fundamental to the study of Computer Science. A large part of this course is built around the development of computer programs or parts of programs that correctly solve a given problem. The course also emphasizes the design issues that make programs understandable, adaptable, and, when appropriate, reusable. In addition, an understanding of the basic hardware and software components of computer systems and the responsible and ethical use of these systems are integral parts of the course. The programming language currently taught is Java.

### **IB Computer Science (SL/HL)**

Grade Level: 11-12 Credit: 20/2 Units

Course Length: 2 year (SL) / 2 year (HL)

Pre-requisites: AP Computer Science Principles or AP Computer Science A

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

The IB DP Computer Science Standard Level (SL) and Higher Level (HL) Core syllabus requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The HL syllabus extends the Core syllabus to include Abstract Data Structures, Resource Management and Control. Each course is underpinned by conceptual thinking, draws on a wide spectrum of

knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. Students study how Computer Science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved. During the course the student will develop computational solutions. This will involve the ability to:

- identify a problem or unanswered question
- design, prototype and test a proposed solution
- liaise with clients to evaluate the success of the proposed solution and make recommendations for future developments.

One of the programming languages currently taught is Java

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## Business

### **CTE Introduction to Business**

Grade Level: 9-12 Credit: 5/.5 Unit

Course Length: Semester

Prerequisite: None

Fees and Materials: None

This course focuses on the operation of the American business system. Covers: fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business, and social responsibilities.

### **CTE Entrepreneurship**

Grade Level: 9-12 Credit: 5/.5 Unit

Course Length: Semester

Prerequisite: None

Fees and Materials: None

This course provides the student with advanced information and knowledge integration into the planning, financing, formulation, and operation of a Small Business. In the selected business the student will utilize accepted management practices, and accounting principles in managing risk and cash flow.

### **IB Business Management (SL)**

Grade Level: 11-12 Credit: 10/1 Unit

Course Length: 1 year

Pre-requisites: CTE Business or Entrepreneurship

Fees and Materials: IB Textbook and supplemental fees as needed. Optional IB registration and testing fee for non-Diploma students.

The business management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations

from all sectors, as well as the sociocultural and economic contexts in which those organizations operate. The course covers the key characteristics of business organization and environment, and the business functions of human resource management, finance and accounts, marketing and operations management. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation and strategy), the course allows students to develop a holistic understanding of today's complex business environment.

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## Biomedical/Sports Medicine

### **CTE Principles of Biomedical Science**

Grade Level: 9-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: None

Fees and Materials: \$25 per year

In the introductory course of the PLTW Biomedical Science program students explore concepts of biology and medicine to determine factors that led to the death of a fictional person.

### **CTE Human Body Systems**

Grade Level: 10-12      Credit: 10/1 Unit

Course Length: 1 year

Pre-requisites: CTE Principles of Biomedical Science

Fees and Materials: \$25 per year

In this specialization course for Project Lead the Way (PLTW), students explore the human body systems of communication, power, and movement. To do this, students are taught the body's components, tissues, molecules and cells, as well as concepts of homeostasis and body system defenses

### **CTE Medical Interventions**

Grade Level: 11-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: CTE Principles of Biomedical Science or CTE Human Body Systems

Fees and Materials: \$25 per year

This is the third course in the Project Lead the Way Biomedical Pathway. Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease.

### **CTE Biomedical Innovation**

Grade Level: 11-12      Credit: 10/1 Unit

Course Length: 1 year

Prerequisites: CTE Medical Interventions or Human Body Systems

Fees and Materials: \$25 per year

In this specialization course for Project Lead

the Way (PLTW), students are taught concepts of human physiology, medical innovation, water contamination, public health issues, molecular biology, and forensic autopsy. Students complete an independent project as a culminating activity.

### **IB Sports, Exercise and Health (SL)**

Grade Level: 11-12      Credit: 20/2 Units

Course Length: 2 years

Pre-requisites: CTE Principles of Biomedical Science or CTE Human Body Systems

Fees and Materials: IB Textbook and supplemental materials as needed. Optional IB registration and testing fee for non-Diploma students.

The IB course in sports, exercise and health science standard level (SL) involves the study of the science that underpins physical performance. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Students cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance. Where relevant, the course will address issues of international dimensions and ethics by considering sport, exercise and health relative to the individual in a global context.

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## Other Electives

### **Introduction to Debate Sem 1**

Grade Level: 9-12      Credit: 5/.5

Course Length: semester

Prerequisite: None

Fees and Materials: None

This course introduces the basics in competitive debate. Students will learn all aspects of quality argumentation, as well as public speaking skills and research skills. Each student will be required to compete in two beginner tournaments in the fall, and are welcome to compete in more tournaments throughout the year.

### **Introduction to Debate Sem 2**

Grade Level: 9-12      Credit: 5/.5

Course Length: Semester

Prerequisite: None

Fees and Materials: None

This course builds on the basics in competitive debate. Students will continue to learn all aspects of quality argumentation, as well as public speaking skills and research skills. Each student will be required to compete in tournaments throughout the

semester.

### **Journalism / Newspaper Staff**

Grade Level: 10-12 Credit: 10/1 Unit

Course Length: 1 year

Prerequisite: Application and passion for writing/written expression

Fees and Materials: None

Newspaper is the production class designed to provide students with the opportunity to gain practical journalistic experience through a monthly public that is read by classmates, faculty, and the community. Students write news, feature, investigative, and editorial articles. In addition, students gain experience in desktop publishing, editing, advertising, photography, and various layout techniques. Students maintain a high level of ethical and journalistic standards.

### **Office Assistant**

Grade Level: 11-12 Credit: 2.5/.25 Unit

Course Length: 1 year

Prerequisite: On-track to graduate, plus 3.0 GPA

Fees and Materials: None

Students may apply to their Counselor to become an office assistant if they meet these criteria.

### **Student Government**

Grade Level: 9-12 Credit: 10/1 Unit

Course Length: 1 year (up to 8 semesters)

Prerequisite: Elected by student body

Fees and Materials: None

Teaches the philosophy and role of the Student Government in the school community, along with individual duties and responsibilities. Students develop an effective public relations program and organize and manage a wide variety of school activities. They participate in leadership conferences, the orientation of new students, and the evaluation of council objectives.

### **Teacher Assistant**

Grade Level: 11-12 Credit: 2.5/.25 Unit

Course Length: 1 year

Prerequisite: On-track to graduate, plus 3.0 GPA

Fees and Materials: None

Students may apply to their Counselor to become a teacher assistant if they meet these criteria.

### **Yearbook**

Grade Level: 9-12 Credit: 10/1 Unit (Elective)

Course Length: 1 year

Prerequisites: None

Fees and Materials: None

This course is designed to produce a bound publication which covers, with photos and copy, the academic high school year. In addition to learning all the skills necessary for production, students accept financial responsibility and work within a budget.

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## **IB Diploma Programme Specific Courses**

### **IB Theory of Knowledge (TOK) – (2 Years)**

Grade Level: 11-12 Credit: No DPS credit

Course Length – 2 years

Fees and Materials: Supplemental materials as needed

This course is about critical thinking and inquiring into the process of knowing. The course examines how we know what we claim to know. It does this by encouraging students to analyze knowledge claims and explore knowledge questions.

### **IB Creativity, Action and Service (CAS)**

Grade Level: 11-12 Credit: No DPS credit

Course Length – 2 years

Fees and Materials: Supplemental materials as needed

This is a self-directed course. Students are expected to work with NHS CAS Coordinator to complete all necessary hours.

### **IB Extended Essay (EE)**

Grade Level: 11-12 Credit: No DPS credit

Course Length – 2 years

This is a self-directed course. Students are expected to work with a Northfield teacher to complete the necessary components of the Extended Essay as required by IB.