# FRIENDSHIP COLLEGIATE ACADEMY ......EARLY HIGH SCHOOL

# 2020 - 2021 SY COURSE DESCRIPTIONS



Fines Arts Academy
Science, Technology
& Engineering
Health Academy
Advance Placement
Dual Enrollment



**Peggy Jones, Principal** 

4095 Minnesota Avenue NE Washington, DC 20019 202.396.5500 Main Office 202.396.8229 Fax



# Table of Content

### General Information

Mission Statement

School Administration

School Counseling Support

Special Education Coordinator

Director of Compliance

Overview

# Grading Information

Grading Scale

Grade Changes

Incomplete Grades

Report Cards

Progress Report

Promotion

### Classification of Students

Seniors Failing to Meet Graduation Requirements

Transfer Students

Transfer Credits from Middle School

NCAA Clearinghouse

### Student Schedules and Credit Recovery Options

Registration

Schedule Changes

Transcript Request

Summer School/Saturday School

Independent Study

Early Release

### Graduation Requirements

Carnegie Units/Credits

Class Rank

Community Service

Types of Diplomas

Graduation Requirement Checklist

# Table of Content

### Recording, Receiving and Storing Grades

Cumulative GPA

Grading

Credits

Transfer Credits

Reporting Student Achievement Individualize Learning Plan (ILP)

Honor Roll

### Honors & Student Privacy

Individual Learning Plan (ILP)

Honor Roll

Family Educational Rights and Privacy Act (FERPA)

### Student and Staff Support Team

School-Wide Tutorial

Student and Staff Support Team (SSST)

Homebound Instructional Services

### Pathway Structure

Freshman Academy

Pathways

- Arts & Communication
- Science, Technology, Engineering, and Mathematics (STEM)
- Early College

### English Department

Literary Genres

Honors Literary Genres

World Literature

Honors World Literature

American Literature

English Composition

Pre-AP English I

Reading Lab

African American Literature

Women's Literature

Contemporary Literature

Creative Writing

#### Math Department

Pre-AP Algebra I

Algebra I

Geometry

Algebra II

# Table of Content

### Math Department

Honors Algebra II

Pre-Calculus

Honors Pre-Calculus

Pre-AP Geometry

Statistics

Math Lab

Math 502 - Math Our World

#### Science Department

Biology/

Chemistry

Physics

Environmental Science

Pre-AP Biology

Pre AP Chemistry

### Social Studies

DC History

World History I

World History II

United States History

American Institution

Pre-AP World History & Geography

Protest in America

### Health, Physical Education and World Languages

Physical Education

Health Education

Spanish I

Spanish II

French I (On-Line)

Chinese (On-Line

#### Advanced Placement

AP Calculus

AP English Language and Composition

AP English Literature and Composition

AP Biology

AP Chemistry

AP Physics

AP Environmental Science

AP Human Geography

AP Macroeconomics

AP Psychology

```
AP US History
Advanced Placement
  AP Government and Politics
  AP World History
  AP Computer Science
  AP Music Theory
  AP Art
  AP Art History
  AP Studio Art
  AP Computer Science Principles
Dual Enrollment
  ASU HST 102: Europe and the Mediterranean: Ancient and Medieval
  ASU SOC 101: Introduction to Sociology
  HST 100 - Global History to 1500
  HST 101 - Global History to 1500
  SOC101 - Introductory Sociology
  EXW100 - Introduction Health and Wellness
  ENG 101 - First Year Composition
  ENG 500 - The Writing Process
  Math 502 - Math for Our World
  Math 510 - Pre Calculus
Early College
Arts & Communication Pathway
  Visual Arts
       Art I
       Art II
       Foundations of Visual Art
       Drawing
       Painting
       Pre-AP Visual Arts
  Instrumental Music
       Music Theory
       Band I
       Band II
      Jazz Music
       Beginning Band
       Concert Band I
       Concert Band II
       Concert Band III
       Piano Lab
```

Vocal Music Music I Digital Music

Music Theory

Vocal Lessons I, II, III, IV

Senior Recital

Pre-AP Music

Voice Class

Concert Choir

Foundation of Music

### Communications and Technology

Digital Graphics

Yearbook

Web Design

Digital Video Production

Broadcast Production I & II

Friendship News Network I & II

Introduction to TV Production and Writing 1

Introduction to TV Production and Writing 2

Produce A Television Talk Show 1:

Produce A Television Talk Show 2

Early College and Summer University Programs

### Science, Technology, Engineering, and Mathematics Pathway

Programming and Engineering Pathway

Principles of Information Technology

HTML/Web Design

Introduction to Computer Science

Introduction to Programming

Computer Science Principles

Intro to Robotics

Introduction to Engineering Design (IED)

Principles of Engineering (POE)

Digital Electronics (DE)

Cybersecurity

Aerospace Engineering

Computer Integrated Manufacturing

Engineering Design and Development

Robotics and Control Technologies

SmartLab – Introduction to Computer Science

#### Health Careers

Principles of Biomedical Sciences (PBS)

Health Careers Exploration

Medical Interventions (MI)

Foundations of Anatomy and Physiology I & II

Clinical Dentistry Rotations

Medical Interventions

Biomedical Interventions

Environmental Sustainability Human Body Systems Sports Medicine

Business Electives BUILD

### Dear Friendship Collegiate Academy Scholars and Parents:

The faculty, staff and administrators of the Friendship Collegiate Academy are committed to ensuring that each of our scholars have access to the resources needed to prepare them to not only enter a college or university but to persevere and successfully graduate. The Friendship Collegiate Academy is committed to providing customized educational experiences to foster a culture of rigorous task, innovation and discovery. Scholar's individual needs are addressed through an array of opportunities that promote the scholar's academic, social, and emotional development. Through a rigorous and relevant curriculum, the integration of technology, Academy Pathways, AP courses and dual enrollment courses, scholars will graduate from Friendship Public Charter Schools ready to compete in the global economy.

We believe that Individual Learning Plans (ILPs) prepares learners for their futures by providing learners with voice and choice in their educational class selection and respective career choices. We believe that our scholars learn at different rates and in different styles; we also know that technology changes the rules of how/ when we can learn. Through the many learning opportunities that we have created at the Collegiate Academy this school year (AP courses, dual enrollment, online courses, project based learning, and traditional classes) we have attempted to create learning pathways that align to the learning styles of our Collegiate scholars and that will truly prepare them for college.

Friendship Collegiate Academy (FCA) career pathway programs play a key role in offering our scholars access to educational opportunities throughout their high school year. The Academy Pathways connect and reinforce student learning to real world experiences. Our pathways foster an environment that raises learner awareness or possible post-secondary opportunities in higher education. It is our goal through the career pathways to prepare learners with skills that will be transferable to their post-secondary endeavors.

The mission of Friendship Public Charter School is to provide a world-class education that motivates students to achieve high academic standards, enjoy learning, and develop as ethical, literate, well-rounded, self-sufficient citizens who contribute actively to their communities. Our goal is to provide our scholars with rigorous coursework opportunities where ALL scholars will strive to achieve their fullest potential. This course selection book has been designed to help guide our scholars and their parents in creating a successful, effective pathway for high school success and beyond.

Sincerely,

Dr. Peggy Jones Principal

# General Information

### Mission

The mission of Friendship Public Charter Schools is to provide a world-class education that motivates students to achieve high academic standards, enjoy learning, and develop as ethical, literate, well-rounded and self-sufficient citizens who contribute actively to their communities.

# Administration 2020-2021 SY

Dr. Peggy Jones, Principal piones@friendshipschools.org

Jerome Young, 9th Grade Academy Director <u>iyoung@friendshipschools.org</u>

Lauren Johnson, 11th and 12th Grade Academy Director ljohnson@friendshipschools.org

Dr. Arsallah Shairzay
Dean of AP and Dual Enrollment Courses
ashairzay@friendshipschools.org

# **School Counseling Support Team**

Deja Mitchell, 9th and 10th Grade Counselor dmitchell@friendshipschools.org

Qiturah Washington, 11<sup>th</sup> and 12<sup>th</sup> Grade Counselor gwashington@friendshipschools.org

Dr. Calvin Green, SSST Counselor cgreen@friendshipschools.org

Jazzmine Ellis, Dean of Students jellis1@friendshipschools.org

Darryl Womack, Dean of Students <a href="mailto:dwomack@friendshipschoools.org">dwomack@friendshipschoools.org</a>

### **Special Education Coordinator**

Geneva Logan glogan@friendshipschools.org

### **Director of Compliance**

Adrienne Lester alester@friendshipschools.org

PUBLISHED FOR THE 2020-2021 School Year

### Overview

The "Framework for the Guidance

Department" envisions a school counseling program supporting *all* students in their educational, career, personal, and social development thus enabling them to become life-long learners and productive citizens in our communities and around the world.

The Role of the School Counselor is to:

- Counsel with students individually and in small groups
- Present developmental lessons in the classroom and in small groups
- Serve as a student advocate
- Consult with teachers, administrators, school support personnel, parents, and business/community agencies
- Participate in school meetings
- Work with parents in teaching effective parenting skills, creating a positive environment, and encouraging parent participation
- Provide staff development in identified areas of need and in orientation to the school counseling program
- Provide leadership in career development of all students
- Coordinate school activities pertaining to the school counseling program
- Facilitate the evaluation of the school counseling program.

Students and/or parents may make an appointment to see a counselor via an email, a phone call, or visiting the counselor's office before or after school. The Guidance Department can also schedule parent-teacher conferences with all of the student's instructors available to attend. If a parent wishes to meet with a single teacher, the parent should contact that teacher individually.

Conferences arranged through the Guidance Department will be scheduled in a timely manner. Students are requested to attend conferences with parents.

# Grading Information

# **Grading Scale**

All students are encouraged to maximize their learning opportunities by enrolling in rigorous courses that help them to reach their full academic potential. In deciding a course of study, it helps to understand exactly how course performance relates to GPA and class ranking. Equally important is the value of rich curricular experiences that allow students to position themselves for success beyond high school. Transcript grades are actual grades earned. The student's GPA is calculated using weighted grades.

Friendship Collegiate Academy uses the following grading scale to determine grades. NOTE: Advanced Placement and Honors Placement Courses are weighted differently. Advanced Placement courses receive an additional 1 GPA point. Honors courses receive an additional 5 GPA point.

In order to encourage and to reward students for completing upper level courses, grades for such courses are weighted according to the following scale:

# **Grading Information**

Percent	Letter Grade	Academic	Honors Weights	AP College Weights
98%-100%	A+	4.00	4.50	5.00
94%-97%	A	4.00	4.50	5.00
91%-93%	A-	3.66	4.16	4.66
88%-90%	B+	3.33	3.83	4.33
84%-87%	В	3.00	3.50	4.00
81%-83%	B-	2.66	3.16	3.66
78%-80%	C+	2.33	2.83	3.33
74%-77%	C	2.00	2.50	3.00
71%-73%	C-	1.,66	2.16	2.66
68%-70%	D+	1.33	1.83	2.33
64%-67%	D	1.00	1.50	2.00
61%-63%	D-	0.66	1.16	1.66
60% & Below	F	0.00	0.00	0.00

# **Grade Changes**

To submit grade changes, teachers **must** complete a *Grade Change Justification Form*. Forms are available with the Registrar. The form is to be filled out and signed by the teacher who is changing the grade as well as the Principal (or designee) and the Registrar. No grade changes will be honored unless the form is properly completed and signed. *Grade changes must be submitted within twenty-one (21) days of the following quarter or within 21 days of the end of the school year.* 

All grade changes are manually entered by the Registrar.

# **Incomplete Grades**

Students who have not completed requirements for a course due to an administratively, approved circumstance will receive an incomplete grade. To meet eligibility requirements, Friendship Collegiate Academy requires grades to be corrected within twenty-one (21) days after the end of each quarter. If a grade change form is not submitted, an automatic failing grade of "F" will apply. It is the student's responsibility to meet with the teacher to obtain the required assignments necessary to successfully complete the course.

# **Report Cards**

A formal report card will be issued in nine week intervals. Parents are given a school calendar of the dates for which these report cards are issued. The semester or final grade is the only grade that appears on the student's high school transcript and is the grade that determines whether or not the student passes and receives unit credit for the course. Each semester course passed earns unit credit toward graduation and is earned independently of other units or courses. Semester grades in the two separate semesters of the same course (i.e. first and second semesters of Algebra I) are each

# **Grading Information**

worth 40% of the final grade for the course, with the remaining 20% reflecting the final exam. The student does pass or fail each semester independently; only the final grade for the year is counted for two-semester courses. Semester grades are recorded on a student's transcript.

The transcript is the student's official record, not the grade report. Parents/guardians have an opportunity to meet and confer with the teachers of their children and to pick up their children's progress report at the midpoint of 1st, 2nd, 3rd and 4th marking periods. Report Cards will not be released without a parent/guardian conference to discuss the needs of the student. *It is mandatory for a parent/guardian to attend the Quarterly Learning Conference.* 

### **Progress Report**

A progress report is mailed to the parent at the mid-point of each quarter for a total of four times each academic year.

Weekly progress reports are available for students experiencing academic difficulty. The progress report is given to parents on a weekly basis to sign and return to the Guidance Counselor. Students utilizing this method of reporting are required to hand carry the report to their individual teachers. Students who are in danger of failing will be provided with academic intervention resources.

#### **Promotion**

The total number of units earned by a student at the beginning of the academic year determines grade level placement/classification for that year. Guidance counselors will review students' transcripts and reclassify students during the conclusion of the spring semester and Summer school for proper classification.

- Rising 10th Grade must have a minimum of 6 credits and have earned a credit (D or better) in all four content areas.
- Rising 11th Grade must have a minimum of 12 credits and have earned a credit (D or better) in all four content areas and at least one foreign language credit.
- Rising 12th Grade must have a minimum of 18 credits and have earned a credit in all four content areas and at least one foreign language credit.

Note: Students are permitted to recover class credit in

Summer School, Saturday School and APEX but not the grade (Pass or Fail). A student who fails to earn credit in all content classes (even after attempting to recover them in Saturday, Summer School, APEX) must repeat the grade and will be required to take the entire typical grade sequence of courses again, regardless of the performance in each course.

Promotion criteria for students with IEPs are the same as above. Prior to retaining a student with an IEP, the special education team (including relevant teachers and administrators from the school and from the Community Office) will convene to review each student's performance and progress toward meeting his/her IEP goals.

Students will be promoted when their educational growth shows they are prepared to successfully complete the next grade. It is not automatically assumed that students will pass from one grade to

# **Grading Information**

the next at the high school level: each student must earn promotion by demonstrating mastery of essential grade-level knowledge and skills.

Friendship believes it is in a student's interest to build a substantial academic foundation before advancing to higher academic levels. We have included a wide range of supports throughout the model to ensure that all students have an opportunity to access the rigorous curriculum.

This preparation may take more than four years, and our Intensive Support Pathway serves the purpose of providing more time when needed for college readiness. In this way, we combine high standards with flexibility, support, and student dignity. We intend to build a culture where mastery of concepts is paramount, and students are prepared for success in college.

# Classification of Students

### Seniors Failing to Meet Gradation Requirements

A student should complete graduation requirements in four years of high school attendance. Students who are able to complete graduation requirements over the summer can participate in the summer graduation.

In the event that additional time is required, an evaluation conference will be conducted at the beginning and the end of each additional semester with the parent(s), student, Director, and counselor. If it is determined that there has been little or no effort of advancing toward graduation, an alternative education plan will be suggested.

#### Transfer Students

A student transferring to Friendship Collegiate Public Charter Schools will be enrolled only with an official transcript or report card and upon completion of a comprehensive transcript audit conference with a Guidance Counselor.

In addition, the SIMS staff will contact the student's previous school to verify the accuracy before a student is officially admitted. Transfer students must complete 100 hours of community service in order to receive a diploma.

#### Transfer Credits From Middle School

A student will only receive high school credit for the course upon successful completion of the high school final exam and a grade of "C" or higher. The student will have the opportunity to take the school final exam. If the student correctly answers at least 70% of the questions on this exam, he or she will earn high school credit for the class. If not, the course must be retaken on the high school level.

# NCAA Clearinghouse

The NCAA Clearinghouse is an organization which determines a student-athlete's eligibility for athletic participation in his or her first year of college enrollment. The NCAA Clearinghouse evaluates the student's transcript to determine if a student is eligible to participate at a Division I or II college as a freshman student-athlete. Students must register and be cleared through the NCAA

# Classification of Students

Clearinghouse in order to play. The NCAA recommends that students register during their junior year with their Counselor or coach. Students need to request official transcripts to be sent to NCAA upon initial registration and again after graduation.

Students must have at least a 2.3 cumulative GPA in all core classes to be eligible.

### Registration

To aid in making decisions on course selections, students are provided registration guidelines, a course description manual, transcript, and their graduation requirement check list. Counselors and teachers may provide additional information about specific courses. Parents and students are encouraged to review the information to make careful decisions when selecting courses. The Guidance Department is open during the summer to assist students with schedule changes.

Schedule changes are made only for the following reasons:

- Duplicate Course
- Credit already received for the course during Summer School or Saturday School
- Course prerequisites are not met
- Incorrect course sequence
- Courses needed for graduation
- Pathway change

# Student Schedule & Credit Recovery Options

## Schedule Changes

Students requesting a *Schedule Change* should complete a *Schedule Change Form*, which can be obtained from the Guidance Counselor or an Advisory teacher.

Student schedule changes will be made on a <u>need basis only</u>. Schedule changes are not permitted beyond the sixth day of the semester. Schedule changes will only be honored under the following circumstances:

- Repeating a course
- Missing a class/Incomplete schedule
- Senior missing a graduation requirement

The above changes require the approval of the Director of Compliance and Principal.

Schedule change forms will be filed in the student's cumulative file along with copies of their previous and current schedules.

# Student Schedule & Credit Recovery Options

# **Transcript Request**

Students desiring a copy of their transcript should submit a complete *Transcript Request Form* to the Registrar in the Main Office. Please allow up to 48 - hours to process transcript requests. The Guidance Counselor will take responsibility for mailing or forwarding transcripts that are made directly from a particular college or university.

#### **CREDIT RECOVERY OPTIONS**

# Summer School/Saturday School

Friendship Collegiate Academy will offer summer classes and Saturday classes for those students who are in need of academic coursework, skill training, or remedial instruction. Students are required to make up graduation requirements and to keep up with their program of study by attending summer school and Saturday school.

The grade earned in Saturday/Summer School, as well as the failing grade in the course, will appear on the student's transcript. Both grades will be used in calculating the student's G.P.A.

Summer/Saturday School grading and attendance policies are governed by policies as outlined during the regular school year. Dress code is consistent with the regular school year policy.

Final grades for Saturday/Summer School will be entered into PowerSchool and filed in the student's file.

### **Independent Study**

Independent Study courses are available only for senior students. A student may not carry more than one Independent Study per semester and may not apply for more than three credits towards his/her graduation requirements.

The student must meet with the Parent(s), the Senior Counselor, Director of Compliance and the selected teacher.

An Independent Study Contract form must be completed and signed by the student, parent, teacher, Director, and Guidance Counselor for final approval. The contract must be finalized within three days of the start of the semester.

Independent study is the last option after Saturday School and Summer School possibilities have been exhausted.

#### Early Release

Early release is a privilege given to seniors who carry a 2.75 GPA **and** who have satisfied all of their core class graduation requirements. Only students who are participating in the Urban Alliance program or other approved internship programs will be granted the early release schedule.

# **Graduations Requirements**

A total of twenty-four (24) credits including four years in each of the Core Subject Area must be obtained in order for a student to receive a high school **diploma** from Friendship Collegiate Academy:

Course	Credits
English	4.0 (*4 different courses)
Math	4.0 (*4 different courses)
Science	4.0
Social Studies	4.0 (DC History is required)
World Language	2.0 (Same language)
Pathway Courses/Electives	3 (*4 different courses)
Health/PE	2
Music	0.5
Art	0.5
Total _	24.0

#### \*Applies to all transfer students

(Students entering Collegiate Academy after 9th Grade)

Mid-year graduation is not permitted. A student may instead participate in programs such as Dual enrollment or Urban Alliance.

#### Class Rank

The Class Rank is reported in a percentage format—using the semester percentage grades that are exported into POWERSCHOOL. Numerical and percentage information are provided to the students through the Guidance Counselor.

### **Community Service**

Friendship Collegiate Academy students must complete 100 hours of community service as a graduation requirement. All students, including transfer students are responsible for acquiring 100 community service hours. The goals of the community service program are as follows:

- Increase students' perception of self-worth
- Provide experiences for students to contribute to society
- Prepare students for the world of work
- Site places emphasis on quality service
- Links academics to real life applications
- Connects the classroom learning experience to career options through service.

# **Graduations Requirements**

The Guidance Department will periodically post community service learning opportunities.

Documented and verifiable hours are recorded on a student's transcript and are placed in the student's cumulative record along with grade reports each year.

# **Types of Diplomas**

- Standard Diploma is awarded to students who have successfully completed the minimum number
  of academic credits in four years or more than four years and up to 21 years of age.
- Certification of Completion with vocational training

# **Graduation Requirement Checklist**

Seniors must submit the following information as part of the graduation requirements.

- 1. Mandatory Courses
- Algebra I, Geometry, Algebra II
- Biology, 2 Science Labs
- World History I & II, DC History, US History,
- US Government (American Intuition)
- Physical Education/Health
- Music/Art
- Foreign Language
- 2. Mandatory Graduation Memorandum of Understanding (MOU) signed by the following:
- Student
- Parent
- Guidance Counselor
- 3. Two Acceptance Letters to a 2-or 4-year institution (provide copies of letters)
- 4. SAT and ACT Testing
- 5. Complete senior thesis paper
- 6. Complete Free Application for Federal Student Aid (FAFSA) and DC TAG
- 7. 100 hours of Community Service (provide site contract and timesheets)

# Recording Grades, Receiving Grades and Storing Grades

Friendship utilizes PowerSchool. PowerSchool is a fully integrated, web-based, cross-platform student information system. Electronic grade keeping is done in real time. Grades are reviewed weekly by the Director.

Progress reports, final quarter and final semester grades are entered into Power Teacher by the

# Recording Grades, Receiving Grades and Storing Grades

teacher. They are then reviewed by the Director. Upon review, report cards are then printed from PowerSchool. District Office will then roll over the grades into PowerSchool. The SIMS staff will store hard copies for up to five years in a designated binder located in the SIMS office.

Student records are stored in the Records Room located on the first floor. Key entry access is required. The Registrar, Director of Site Operations, and the Principal are the only staff members with keys.

# **Cumulative GPA**

The cumulative GPA will be inclusive of all final grades to date from the current year as well as all semesters from grade 9 and forward.

The cumulative GPA should be inclusive of all academic courses and any dual enrollment classes taken at another school, college, or university. No classes will be eliminated from the calculation. The cumulative GPA should be the GPA that is reported to colleges and universities upon request for the entrance criteria.

To calculate Grade Point Average (GPA), the letter grades are converted into grade points (See grading scale on page 2). The grade is then multiplied by the amount of credit that each class is worth (i.e. .5, 1, or 2) which is listed on the "CR" portion of the transcript. The grade points earned are then added together and divided by the number of total credits that were attempted that semester/year. The result is called the Grade Point Average (GPA)

### Grading

PowerSchool should convert the percentage grade from the grade book into the 4.0 point GPA scale. The Quarterly GPA should include all of the classes attended during the current quarter. It will be reported on the report card with 2 decimal places.

To determine the GPA of a student, add the sum of the actual letter grades, then divide by the total number of course taken.

Example:		
English	A	4.0
Math	B+	3.25
Social Studies	C-	1.75
Science	A	4.0
PE	B-	3.75
Elective	A	4.0
Pathway Course	В	3.0
•		23.75

23.75 divided by 7 = 3.39 (C+ average)

# **Credits**

Credit should be issued at the close of each school year unless designated as a semester long course. A student should receive credit for a class if his/her grade is a reflection of a passing mark according

# Recording Grades, Receiving Grades and Storing Grades

to the grading scale. If a student withdraws from Friendship Collegiate Academy before the close of a semester, Friendship Collegiate will generate a progress report that will go the student's next school. The progress report is a reflection of the student's work to date in each class. It will not reflect credit since it is not the end of the semester. Special situations or exceptions can be made by the Principal.

# Transfer Credits

Transferred credits and grades from other school systems shall be converted by the Registrar into appropriate FCA credits and are included in the computations.

Courses in subject areas not traditionally taught at FCA, such as religion or driver education, can be accepted as electives.

For transferred credits (non-FCA courses) to which marks such as "O" (Outstanding), "S" (Satisfactory), and "U" (Unsatisfactory) or numeric grades or percentages have been assigned, the school must secure or translate such marks to a scale of A, B, C, D, and F. These courses must be entered into PowerSchool separately.

# **Reporting Student Achievement**

Student Achievement is reported to parents and guardians throughout the semester in several different methods:

- **Report cards:** Issued on a quarterly basis, report cards show academic grades. Current school year report cards are filed in the Main Office.
- Quarterly Progress reports: Progress reports are sent to the parent(s) by mail for all students.
   Students who are in danger of failing will be provided with academic intervention resources as stated previously.
- Parent conferences: Teachers and parents may request additional conferences aside from QLCs to discuss student progress and/or concerns. Parent conferences are encouraged for students who are in danger of failing or dropping more than one letter grade during the grading period.
- Parent Portal: Parents have PowerSchool access log-ins to monitor student's academic progress. Parents have access to attendance, test scores, homework assignments and project grades.
- Informal methods: Teachers also may use a variety of methods to report achievement and learning skills to students and parents, such as telephone calls, e-mail, observation records, and feedback sheets.
- **Teacher feedback:** Teachers give feedback on class work and homework to ensure that students learn. This feedback may be oral, as in reviewing assignments and assessments in class; or it may be written, as in writing comments on assignments.

Teachers may provide feedback to individual students, small groups, or the entire class. Teachers will respond to parent contact within one (1) business day of initial contact.

# Recording Grades, Receiving Grades and Storing Grades

Parents are encouraged to talk to their child's teachers about specific questions concerning grades.

Grading and reporting procedures require teachers to inform students and parents in writing at the beginning of a year or semester, or when grading procedures change, about the following:

- Class or course expectations
- What is included in the grade?
- How grades are determined, including weights and proportions

This information should include details about course-specific processes for homework, reteaching/reassessment, and any other grading processes specific to the course. Friendship Collegiate Academy will communicate school-wide decisions about grading processes to students and parents before and during the school year through summer mailings, school newsletters, Web sites, and meetings.

While FCA is responsible for keeping parents informed of the educational progress of their children, it is also important for parents to take responsibility for staying informed about their child's performance by responding to teachers' phone calls or notes, understanding report cards, and discussing concerns with teachers and their Counselor.

At the end of each semester beginning in the student's freshman year, the Counselor will review a child's academic performance. With the goal of graduation, a student will have a conference with their Counselor at the conclusion of the third quarter of their junior year to complete a letter of understanding. to include a parent's signature. The counselor will meet with the senior student to complete a senior letter of understanding at the beginning of their fall semester.

# Honors & Student Privacy

### **Individualized Learning Plan (ILP)**

ILPs are a mapped academic plan and profile that reflects each student's unique set of interests, needs, learning goals, and graduation requirements. A Team, including the student, his/her family, the Guidance Counselor, Advisory teacher, will help to write an ILP, which includes authentic and challenging learning experiences that help each student succeed. As a Team, they are mutually responsible for helping the student with his/her personal curriculum; and they regularly review, evaluate, and update the ILP as the student

progresses. The process allows students to become active, responsible participants in their educational development and planning.

#### ILPs will be developed starting in the 9th grade with the class of 2021.

# **Honor Roll**

Students with outstanding academic achievement will be recognized quarterly and at the conclusion of each semester in various grade level and school-wide ceremonies.

# Honors & Student Privacy

Academic distinctions are Cum Laude, Magna Cum Laude, Summa Cum Laude, and Principal's Honors. All classes will be included in the calculation of a student's Honor Roll GPA.

Cum Laude 3.00 - 3.49
 Magna Cum 3.50 - 3.79
 Suma Cum 3.80 - 3.99
 Principal's List 4.00 +

### Family Educational Rights and Privacy Act (FERPA)

Friendship Collegiate Academy adheres to the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99). This is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."

- Friendship Collegiate Academy allows parents or eligible students to have the right to inspect and review the student's education records maintained by the school and provide copies in situations deemed necessary.
- Friendship Collegiate Academy's parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. Friendship Collegiate Academy requires written permission from the parent or eligible student in order to release any information from a student's education record. A Release of Student Records Form can be obtained in the Main Office or in the Registrar's Office.
- FERPA, however, allows Friendship Collegiate Academy to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
  - ✓ School officials with legitimate educational interest;
  - ✓ Other schools to which a student is transferring;
  - ✓ Specified officials for audit or evaluation purposes;
  - ✓ Appropriate parties in connection with financial aid to a student;
  - ✓ Organizations conducting certain studies for or on behalf of the school;
  - ✓ Accrediting organizations;
  - ✓ To comply with a judicial order or lawfully issued subpoena;
  - ✓ Appropriate officials in cases of health and safety emergencies; and

# Honors & Student Privacy

✓ State and local authorities, within a juvenile justice system, pursuant to specific State law.

The School's Registrar, Director of Site Operations, and the Principal are the only staff members who have key entry access to the records area.

### **School-Wide Tutorial**

-

School-wide tutorial sessions are held daily through June from 3:45 pm to 5:00 pm. The sessions are facilitated by the classroom teachers Monday through Thursday. The purpose of the tutorials is to provide homework assistance, skill enrichment, and remediation. The students who should attend are those who have a GPA average of 2.0 (C average) or below, those who did not master the objectives/standards during class, and those who are seeking challenges.

The activities that are being taught are re-teaching of the lesson, direct discussions, and one-on-one assistance. Student performance and progress is tracked daily.

# Student and Staff Support Team

# Student and Staff Support Team (SSST)

The purpose of SSST is to develop individual or group plans for those students identified as needing interventions or additional support. This process engages classroom teachers and parents and creates linkages to a consortium of service providers. SSST is intended to support student achievements, socialization skills, attendance and parental involvement. Guidance Staff, School Psychologists, Mental Health Clinicians, the School Nurse, and other professionals are available to serve students and their families through this process.

#### SSST Procedure (see appendix)

- 1. Referral Completed
- 2. Data Gathered
- 3. Parent Contact Letter Sent to attend meeting
- 4. Distribute meeting Request Form to Team members
- 5. Convene Pathway/Grade Level Meeting
  - ✓ Complete SSST Meeting Notes
  - ✓ Complete six-week Intervention Plan
  - ✓ Set next meeting date and time
  - ✓ Send reminder letters to Pathway/ Grade Level SSST members including parent
- 6. Follow-up initial Pathway/Grade Level
  - ✓ Send thank you letter to parent
- 7. Monitor implementation of Six Week Intervention Plan or ILP
  - ✓ Monitoring implementation notes from weeks 1-2
  - ✓ Monitoring implementation notes from weeks 3-4
  - ✓ Monitoring implementation notes from weeks 5-6
- 8. Convene ongoing/final SSST Meeting
  - ✓ Complete Ongoing/Final SSST meeting report form
  - ✓ Review documentation and evaluate success of six-week Intervention

✓ Select option, record on form, and follow through

### **Home Bound Instructional Services**

Purpose: To delineate the procedures for governing homebound and home-based instruction.

**General Statement of Policy:** It is the policy of Friendship Public Charter School to provide homebound or hospital-bound instruction at the District's expense for students who are prevented from attending their regular school for extended periods of time, due to care and treatment.

To ensure the student continues to make educational progress in their individual curriculum, a licensed instructor provides home or hospital-bound instruction as soon as practicable under the treatment conditions of the student.

#### **Definitions:**

**Adult:** responsible individual, age 21 or older, will be in the home during the periods of homebound instruction and that the responsible adult, if not parent or guardian, is acceptable to the homebound teacher.

**Homebound:** Student is prevented from attending the student's normal educational site and is in need of alternative educational instruction.

**IEP Team:** A special education student's IEP team comprised of, at minimum, the following individuals: Special Educator, General Educator, Parent, LEA Representative, Student if applicable, Psychologist, and Speech Pathologist, as appropriate: Occupational Therapist, Transitions Specialist (for students 16 and older) and other staff as needed (Reading Specialist, Student Support Team Chair.

**Homebound Instructor:** A certified teacher. Students eligible for services under the Individuals with Disabilities Education Act shall be served by appropriately certified personnel.

#### **Home Bound Instructional Services**

Student with an IEP or student with special needs: a student that has been evaluated as having one of the following conditions and who, as a result of the impairment, needs special education and related services:

- Autism
- Developmental Delay
- Emotional Disturbance
- Mental Retardation
- Multiple disabilities
- Orthopedic Impairment
- Other Health Impairment
  - ✓ Asthma
  - ✓ Attention Deficit Disorder or Attention Deficit Hyper Activity Disorder
  - ✓ Diabetes
  - ✓ Epilepsy

- ✓ A heart condition
- ✓ Hemophilia
- ✓ Lead poisoning
- ✓ Leukemia
- ✓ Nephritis
- ✓ Rheumatic fever; and
- ✓ Sickle Cell Anemia
- Specific Learning Disability
- Speech and Language Impairment
- Traumatic Brain Injury
- Deaf-Blindness
- Deafness- Hearing Impairment
- Visual Impairment-including blindness

# Home Bound Instructional Services Procedures Eligibility

Students eligible for homebound services must currently be enrolled in Friendship Public Charter School and who is:

- 1) Absent/prevented from attending for 3 consecutive weeks;
- 2) Predicted to be absent for 3 consecutive weeks according to the placing authority, such as a medical doctor, psychologist, psychiatrist, judge, or other court-appointed authority;

A student shall begin receiving home/hospital-bound instruction as soon as is practicable under treatment conditions to ensure that the student continues to make educational progress. Students receiving homebound instruction will be eligible for credit toward graduation, contingent on satisfactory completion of assignments, as determined by the instructors and/or the School Principal.

### **Approval Process**

Friendship Public Charter school shall provide hospital/home-bound instruction to students, including students with disabilities, who meet the following requirements.

- 1) Receipt of a medical referral form stating that the student will be absent a minimum of 3 consecutive weeks; or that the student has chronic periods of time during the school year.
- 2) A statement that the student is physically able to participate in instruction; and
- 3) A signature of a physician licensed by the appropriate state agency or board.

# Home Bound Instructional Services Special Education

If a student has an Individualized Education Plan (IEP), in addition to the items listed above, an IEP meeting must be held to reflect the change in placement, identify any IEP goals, and address the needs for accommodations and additional services. An IEP meeting must be held when the student returns to school.

### Alternate Instruction Option for Special Education Students

Home-bound instruction, coordinated through the Office of Special Education, may be considered by the IEP team as an alternate instructional option for special education students who have been suspended for more than 10 school days or expelled for disciplinary reasons. When the IEP team, in consultation with the Director of Special Education, determines that home instruction is appropriate, the IEP team will notify the Director of Student Support Services who will arrange home-based instruction based on the IEP.

### **Delivery of Services**

Home/Hospital Services are designed to assist the classroom teacher(s) in communicating with the student during the student's absence from the classroom. Services may be provided through:

- 1) Direct instruction with a teacher
- Use of electronic equipment such as video recording equipment, talking books, or voiceactivated tape recorders
- 3) Use of a telecommunication link with the school or computer programming.

**Note:** A responsible adult must be present in the home during teaching sessions. Arrangement may be made for teaching in a public library or other public space where adults are present. If instruction is provided in a public location where other adults are present, adult supervision may not be necessary.

#### Hours and Duration of Instruction

Students will receive 6 hours of instruction per week. The duration of this service will be determined by the doctor's recommendation for the student to return to school.

### Responsibility of Student's Home School

- Each school shall count present the student receiving home/hospital instruction if instruction is provided a minimum of 6 hours per week, excluding travel time.
- Home/hospital instruction will run consistent with the Friendship Public Charter School calendar
- The student's home school must provide books, assignments, and lesson materials for students receiving homebound instruction.

#### Homebound Instructor

- General Education Teacher Qualifications: Any certified teacher employed to provide general education services.
- Special Education Teacher Qualifications: A non-special education certified teacher or properly certified substitute unless the student's IEP requires that the services be provided by a special education teacher.

In the event that a home instructor is not available, students will be provided work packets. It is expected that an adult will pick up the packets, and upon completion, return the packets back to the School. The School will provide the student with appropriate feedback.

# Pathway Structure

### 1) The Freshman Academy

The Freshman Academy develops successful scholar identity based on rigorous and relevant academics, responsible behavior and positive relationships.

#### 2) Arts and Communication Careers Pathway

The Arts and Communication Careers Pathway prepares scholars to design, produce, exhibit, perform, write, and publish multimedia content including visual and performing arts and design, journalism, and entertainment services. Students in this Pathway students will be able to choose a concentration in one of two career pathways: Visual Arts & Production and Performing Arts.

### 3) Science, Technology, Engineering, and Mathematics Careers Pathway

The Science, Technology, Engineering, and Mathematics Careers Pathway inspires scholars to be

leaders in innovation and scientific development for a more sustainable future. Within the Pathway, students have many advanced learning opportunities. Students in this Pathway will be able to choose a concentration in one of the three career pathways: Health Science, Information Technology, Engineering or Environmental Science.

The Health Science Career Pathway is a STEM-focused pathway that introduces students to the varied careers in the health science industry. This pathway will focus on Biomedical Science. Each pathway is supported by Industry professionals and a citywide network of opportunities and real work experience. Students will be exposed to curriculum that will lead to internships, scholarships and college credit.

The Information Technology Pathway prepares students for careers in programming, database administration, web design and management, digital networks, and other areas in the expanding digital workplace. Students who choose this pathway will focus on computer software, or computer hardware. Each pathway is supported by Industry professionals and a citywide network of opportunities and real work experience. Students will be exposed to curriculum that will lead to internships, scholarships and college credit.

The Engineering Pathway prepares students for careers in Architectural and Civil Engineering, Aerospace Engineering, and/or Software Engineering. Students who choose this pathway will focus on Urban Engineering and Design, or Environmental Sustainability. Each pathway is supported by Industry professionals and a citywide network of opportunities and real work experience. Students will be exposed to curriculum that will lead to internships, scholarships and college credit.

#### 4) Early College Academic Pathway

The Early College Academic Pathway provides opportunities for students to earn both a high school diploma and up to two years of college credit toward an Associate's or Bachelor's degree.

#### 9th Grade Academy

The 9th Grade Academy is organized into three pathways:

- Intensive Support Pathway
- On-track Pathway
- Accelerated Pathway

The 9th Grade Academy consists of interdisciplinary teams of English, math, science, and social studies that only work with 9th grade students.

#### Vision

The 9th Grade Academy is committed to meeting the emotional, academic, and physical needs of all scholars by providing them with a nurturing and rigorous learning environment that ensures a smooth transition to high school and equips them with the necessary knowledge base and skills that enables them to excel throughout high school and beyond.

#### Goals

The goal of the 9th Grade Academy is to ensure scholars are prepared with the habits of mind and academic foundation to matriculate through high school and are ready to enter and successfully graduate from college.

### 9th Grade Summer Bridge

The Friendship Mandatory Summer Bridge is a four week structured summer program that provides intensive instruction in the essential math and English skills scholars will need to succeed in high school. The program also helps scholars and their families both understand the skills and habits of mind necessary to excel in their first year and begin taking the critical steps necessary for college matriculation and success.

#### **Intensive Support Pathway**

Friendship identifies scholars who are off-track to graduation or at risk of becoming off-track to graduate, and engages these scholars in the school program through a comprehensive intake process, and a Post-secondary educational pathway that leads to graduation. The program allows students to receive the prerequisite skills they need in reading and math.

### **Accelerated Pathways**

Scholars have an opportunity to enter the Pre-Early College Program in the summer after 8th grade. An initial summer session provides an intensive preparation for the accelerated high school course of study, orients students to the vision, mission and goals of the Early College, and allows specialized assessments to determine student academic and social needs. Scholars have the opportunity to take AP World History, Honors Literary Genres, Honors Algebra, Geometry, and BUILD classes.

### Arts & Communication Careers Pathway

The Arts and Communication Career Pathway is organized into two career pathways with various options for concentrations:

- Visual Arts & Production
  - Audio and Video Technology and Film
  - Graphic Design and Illustration
  - Web Design
- Performing Arts
  - Journalism and Broadcasting
  - Theatre Production
  - Drama/Dance/Music

Friendship high schools offer these career pathways for our creative students who see themselves designing, producing, exhibiting, performing, writing or publishing multimedia content,

#### Vision

Through rehearsals, performance opportunities, real-world projects, daily instruction, and community partnerships, students will become masters of their craft and contribute to our culture with creativity and intelligence.

#### Goals

Scholars in Fines Arts and Communication learn and practice skills that prepare them for four-year college and graduate program in communications, graphic art composition vocal performance, drama/theater, education, or music, radio, TV or film production.

- As a collaborative project, the Friendship pathways work together to put on a musical theater production worthy of being on Broadway.
- On-the-job internship as an actor, artist, dancer, graphic designer, set designer or musician.
- A credential in graphic design
- A two-year degree in drama, music, art, radio or TV broadcasting
- A four-year degree in communications, graphic art composition, vocal performance drama/theater, education, art, or music, radio, TV or film production.

# Science, Technology, Engineering, and Mathematics Careers Pathway

The Science, Technology, Engineering, and Mathematics Careers Pathway offers courses in Information Technology with an Engineering concentration and Health Science.

### Vision

The Information Technology & Engineering (AOIT-E) Pathway is designed to prepare students for careers in Computer & Software engineering, networking, programming, software development and database design.

To prepare students for a career in the medical industry through rigorous academic curriculum, career awareness, exploration, and preparation.

#### Goals

- All students are expected to participate in a paid internship and achieve industry certifications in either Microsoft, Adobe, or CISCO and/or be certified as a CompTIA, a Cisco Certified Network Associate, and/or a Microsoft Certified Systems Engineer.
- Scholars pursue a two-year college degree in pre-engineering, integrated mathematics, integrated technology or integrated science.
- Scholars pursue a four-year college degree in computer engineering, computer science, applied technology, information technology, systems management, etc. or other integrated subjects.
- Friendship scholars gain critical career knowledge through a series of work-based learning
  activities both inside and outside of the classroom. These include job shadowing events, mock
  interviews, résumé writing workshops, and an internship.
- After taking CTE classes in health science, scholars pursue a certificate as a dental assistant or nurse assistant (can be earned while still in high school).

Friendship's AOHS scholars are members of Health Occupational Students of America (HOSA), a national student organization, whose mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care to all people.

The Friendship Early College Academic Pathway (EC) is organized into two pathways:

- Dual Enrollment
- Advanced Placement

The Early College Academic Pathway provides scholars the opportunity to enhance their preparation for university study, maps a successful path toward college and creates meaningful connections between secondary and post-secondary education to ensure the completion of a baccalaureate degree. Studies show that students who acquire college credits while still in high school are more likely to graduate from high school and continue their formal education.

#### Vision

The EC Academic Pathway prepares underserved students for a quality university education by allowing students to earn college credit while in high school, and providing comprehensive support previously unavailable to first-generation college students.

#### Goals

- Make higher education more accessible, affordable, and attractive by bridging the gap between high school and college.
- Facilitate the transition of motivated students to higher education.
- Scholars earn an Associate's degree or two years of college credit toward a baccalaureate while in high school.
- Compress years to award a post secondary degree.
- Increase 11th and 12th grade enrollment in EC courses.

# **Literary Genres**

The Literary Genres course is designed to educate students on how to read and write in various modes and genres. The course explores novels, short stories, poems, autobiographical essays, and plays. Additionally, students will develop communication and analytical skills through formal and informal discussions, presentations, and performance. This course provides students with the analytical and composition skills they need to be successful in subsequent high school English courses. Students will also be exposed to interdisciplinary projects using integrated technology and media resources.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

### **Honors Literary Genres**

The Literary Genres course is designed to educate students on how to read and write in various modes and genres. The course explores novels, short stories, poems, autobiographical essays, and plays. Additionally, students will develop communication and analytical skills through formal and informal discussions, presentations, and performance. This course provides students with the analytical and composition skills they need to be successful in subsequent high school English courses. Students will also be exposed to interdisciplinary projects using integrated technology and media resources.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

#### **World Literature**

The World Literature course prepares students to read a wide variety of literature from around the world representing the history of human civilization from the most remote ancient cultures through the present day. Thus, students will read works from the Greco-Roman world to the literature of colonization and de-colonization, from Sumerian tales to the Renaissance and the Age of Reason. Class writing activities will include literary interpretation, Narrative and personal writing, persuasive and argumentative composition.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Perquisite: N/A

#### **Honors World Literature**

The World Literature course prepares students to read a wide variety of literature from around the world representing the history of human civilization from the most remote ancient cultures through the present day. Thus, students will read works from the Greco-Roman world to the literature of colonization and de-colonization, from Sumerian tales to the Renaissance and the Age of Reason. Class writing activities will include literary interpretation, Narrative and personal writing, persuasive and argumentative composition.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Perquisite: N/A

### **American Literature**

The American Literature course is designed to improve students' ability to critically and analytically read a variety of exemplary works by American authors. Selected novels and drama texts include, but are not limited to, *The Catcher in the Rye, To Kill A Mockingbird, A Streetcar Named Desire, and The Scarlet Letter.* Additionally, this course surveys other short—stories, poems, and plays by men and women from a variety of backgrounds that reflect the American experience. Students will increase and gain a deeper meaning and application in the following areas: reading comprehension, writing, thinking, speaking, listening, vocabulary, analytical and critical thinking.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

\_

# **English Composition**

The English Composition course will focus on developing effective reading, listening, speaking, and writing skills. Students will work on applying to college and scholarships, applying literary devices, understanding Shakespeare, and participating in choice reading activities. Students will participate in peer editing and rewriting activities. Graphic organizers will help guide writing. Students will spend time in the computer lab developing research skills, using MLA and APA format, and correctly formatting their essays. Students will study literary forms and write both creatively and analytically to expand their literal, interpretive, creative and critical thinking.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

#### Pre-AP English 1 (9th Grade)

Pre-AP English 1 focuses on the close reading, analytical writing, and language skills that have immediate relevance for students across their current courses and that are most essential for their future work in high school, college, and careers. Texts take center stage in the Pre-AP English 1 classroom, where students engage in close, critical reading of a wide range of materials. The course trains the reader to observe the small details within a text to arrive at a deeper understanding of the whole. It also trains the writer to focus on crafting complex sentences as the foundation for writing

to facilitate complex thinking and communicate ideas clearly. Pre-AP English 1 emphasizes the following instructional priorities:

- **Reading closely**: Students read closely and analyze a range of complex literary and informational texts.
- Valuing evidence: Students value textual evidence and incorporate it effectively in writing and speaking.

**Noticing language choices**: Students understand how writers and speakers use specific words and sentences to move the thoughts, emotions, and actions of readers and listeners.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: SAT Verbal Score > = 520 Note: 9th Grade Standing

#### Reading Lab

The Reading Lab is an intervention designed to support struggling readers who are one to three grades behind in reading. This course places an emphasis on reading skills and strategies to improve comprehension, fluency, and analysis. Students regularly engage in guided and independent reading across genres with a focus on informational text. Acknowledging the need for students to become confident, proficient test-takers, Reading Lab also embeds assessment literacy into the curriculum to teach students not only content and skills but the strategies to become successful test—takers. In addition to Reading Lab, 9th and 10th grade students take Literary Genres and World Literature respectively as a co-requisite. Any students enrolled in an intervention course will have an opportunity to complete core courses during Summer School, Saturday School or during the next school year to meet graduation requirements.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: N/A

#### African American Literature- Section 1

In this course students will explore the literary traditions of African American literature from Slavery through Reconstruction through poetry, short stories, essays, drama, journals, and other writer forms. Students will engage in a variety of learning through various audio/visual resources and multi-media technologies designed to cultivate an understanding of the themes of African American literature. Student are required to complete a culminating writing task and presentation. <u>Focal Authors</u>: Fredrick Douglas, Phillis Wheatley, John Boston, Hannah Valentine, Spotswood Rice, William W. Brown, David Walker, John Day, Frances Ellen, Watkins Harper, Henry "Box" Brown, Booker T. Washington, and W.E.B. DuBois.

Unit 1: North American Slave Narratives

<u>Unit 2</u>: Reconstruction

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Pre-AP/Literary Genres & World Literature

#### **African American Literature- Section 2**

In this course students will explore the literary traditions of African American literature through poetry, short stories, essays, drama, journals, and other writer forms. Students will engage in a variety of learning through various audio/visual resources and multi-media technologies designed to cultivate an understanding of the themes of African American literature. Student are required to complete a culminating writing task and presentation. *Focal Authors: Claude McKay, Zora Neale Hurston, Marita Bonner, Jean Toomer, Langston Hughes, Jessie Redman Fauset, Robert Hayden, Martin Luther King Jr. and Gwendolyn Brooks.* 

<u>Unit 3</u>: The Harlem Renaissance as an Assertion of Individualism <u>Unit 4</u>: Civil Rights as an Expression of Protest/Collective and Communal Identity

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Pre-AP/Literary Genres, World Literature, and African American Literature-Section 1

#### Women's Literature

In this course students will read compelling literature that focuses on the experiences of girls and women. Students will examine contemporary novels, short stories and poetry that express female voices from various cultures and social backgrounds. Students will participate in small group discussions, writing exercises and creative projects that relate to the themes presented in the literature. The course also examines current issues affecting women (and men) and provides opportunities for personal reflection and goal setting. Students will learn more about themselves as they hone their communication skills and explore female characters and authors. **Potential Focal Authors:** Sandra Cisnero, Julia Alvarez, Jamaica Kincaid, Buchi Emecheta, Chimamanda Ngozi Adichie, Laurie Halse Anderson, Amy Tan, Toni Morrison, Virgina Wolf, Ntozake Shange, Edwidge Danticate, Ann Frank, and Audre Lorde

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

#### **Contemporary Literature**

In this course students will examine the problems and challenges of various cultures through their study of novels, short stories, analytical essays, film and book reviews, even films. Throughout the year students will be working with such topics as responsibility, death/loss, abuse, addiction, violence, decision-making, prejudice, crime, teenage-adult relationships, and accepting differences in others through the building of a good self-image. A variety of activities, such as group work, discussion, presentations, library research, and written compositions will be incorporated. **Potential Texts**: The Kite Runner, The Road, Life of Pi, Angela's Ashes, and The Bluest Eye, Crank, Speak, The New Jim Crow, Extremely Loud and Incredibly Close, The Glass Castle, The Omnivores Dilemma

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: N/A

### **Creative Writing**

In this course students will create original forms of descriptive writing, poetry, drama and fiction. Vocabulary development, creative writing techniques, and skills are explored. Students submit their work to local and national magazines. Writings are presented orally and in written form.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

### Pre-AP English I

Pre-AP English I focuses on the close reading, analytical writing, and language skills that have immediate relevance for students across their current courses and that are most essential for their future work in high school, college, and careers.

Texts take center stage in the Pre-AP English I classroom, where students engage in close, critical reading of a wide range of materials. The course trains the reader to observe the small details within a text to arrive at a deeper understanding of the whole. It also trains the writer to focus on crafting complex sentences as the foundation for writing to facilitate complex thinking and communicate ideas clearly.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: NA

# Math Department

# Pre-AP Algebra I (9th Grade)

Pre-AP Algebra 1 focuses deeply on the concepts and skills that are most essential for college and career success, so mastery of linear relationships is a major focus of this course. Linear functions and linear equations are the basic building blocks of many advanced topics in math. Pre-AP Algebra 1 is streamlined to give students the time and space to thoroughly master these concepts and skills. The course emphasizes these essential practices for building math muscle and confidence: Building conceptual understanding; building procedural fluency; creating, analyzing, and using mathematical models; and crafting mathematical arguments. The Pre-AP Algebra 1 instructional resources focus on the following key instructional shifts:

- Emphasis on linear functions and linear equations: Students develop deep and robust understanding of linear relationships in procedural, conceptual, and applied settings.
- Focus on authentic applications: Students employ mathematics to model and explain authentic scenarios.

**Concentration on creating mathematical arguments:** Students use evidence to craft mathematical conjectures and prove or disprove them.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 9th Grade Standing

# <u>Algebra I</u>

This course is the foundation for the high school mathematics courses that follow. It is the bridge from the concrete to the abstract study of mathematics. Topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and quadratic functions and relations. Real world applications are presented within the course content and a function's approach is emphasized.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

#### Geometry

This course develops a structured mathematical system employing both deductive and inductive reasoning. It includes plane, spatial, coordinate, and transformational geometry. Algebraic methods are used to solve problems involving geometric principles.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra I

# Math Department

## Algebra II

This course extends the topics first seen in Algebra I and provides skills in algebraic operations. Additionally, linear and quadratic functions and relations, conic sections, exponential and logarithmic functions, graphing, and sequences and series will be explored.

\_

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra I

## Honors Algebra II

This course extends the topics first seen in Algebra I and provides advanced skills in algebraic operations. Additionally, linear and quadratic functions and relations, conic sections, exponential and logarithmic functions, graphing, and sequences and series will be explored.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra I

## **Pre-Calculus**

This course extends and integrates concepts from algebra and geometry. It includes the study of polynomial, rational, exponential, logarithmic and trigonometric functions, inverse and second degree relations and their graphs. Other topics include complex numbers, polar coordinates, vectors, sequences and series.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra I

#### **Honors Pre-Calculus**

This course extends and integrates concepts from algebra and geometry. It includes the study of polynomial, rational, exponential, logarithmic and trigonometric functions, inverse and second degree relations and their graphs. Other topics include complex numbers, polar coordinates, vectors, sequences and series. This course moves at an accelerated pace.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra I

#### **Statistics**

This mathematical course is an elective that includes the theory of probability, descriptions of statistical measurements, probability distributions, and statistical inferences.

Text: Eurka

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: Algebra I

# Math Department

#### Math Lab

A mandatory mathematics course for students scoring two or more grade levels below their current grade according to the Performance Series assessment. In this course, students will use manipulative, hands-on learning strategies, computer support program - PLATO learning, small group, and individual instruction to help students master the fundamental numeracy and algebra skills. The topics covered in this course are fractions, decimals, percent, integers, variables, exponents, numerical and algebraic expressions, and equations. Any students enrolled in an intervention course will have an opportunity to complete core courses during Summer School, Saturday School or during the next school year to meet graduation requirements.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: N/A

## MATH 502 Math for Our World

This course takes an integrated approach to the study of mathematics, combining mathematical concepts with applications in the real world. It addresses topics in mathematics necessary in a college education, providing the reasoning strategies needed for mathematical problem solving in the workplace, the media, and everyday life. The course serves as the foundation for higher-level math courses and provides the quantitative skills necessary to be adequately prepared for coursework in other academic areas. The overarching goal is to learn to interpret quantitative and statistical information that we encounter daily. Students will understand how real-world problems can be analyzed using the power and rigor of mathematical and statistical models. Topics include: problem solving, math of finance, geometry, basic probability, and beginning statistical concepts with an emphasis on real world applications and interpreting information. The use of Excel will be incorporated into the topics of this course.

PREREQUISITES: Acceptable scores on Accuplacer Arithmetic and Elementary Algebra assessments; or approved exemption based on previous high school transcripts: a grade of C or better in both Algebra and Geometry taken within the last five years; or SAT Math score of 500+ or ACT Math score of 18+ within five years of registration; or successful completion of the ALEKS Program Math Tutorial as determined by GSC Math faculty.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: N/A

## **Pre AP Geometry**

In Pre-AP Geometry, students develop reasoning skills through the justification of geometrical proofs. Using the practical side of geometry, students find applications in everyday situations and projects throughout the course. A greater emphasis will be placed on area, volume, and problem-solving techniques. The Pre-AP Geometry student is expected to use higher level thinking skills to prepare for other challenging Pre-AP and AP Math courses. Preparation for Geometry EOC will be an integral part of Pre-AP Geometry.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: N/A

# Science Department

## **Biology**

This course features the study of the fundamental processes of living organisms, with an emphasis on the role of molecular biology and biotechnology in our world.

Topics include: biochemistry, structure and function of cells, the cell cycle, reproduction, genetics, protein synthesis, evolution, cellular respiration and photosynthesis. Human anatomy and physiology are connected to these core topics, along with basic principles of ecology. Students learn biology by doing and construct meaning from their experiences. The laboratory program consists of quantitative experiments that stress experimental design, data collection, and graphical analysis.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

## **Chemistry**

The course is a semester introductory chemistry course. Topics include scientific method, physical and chemical properties, physical and chemical changes, periodic table, bonding types, conservation of matter, and chemical equilibrium and Le Chatelier's principles, stoichiometry, balancing equations, gas laws and much more. The emphasis is on learning chemical concepts using student-centered activities designed to bridge prior knowledge with chemical knowledge. The primary goal is to bring a level of chemical relevance to the issues of life that we face every day so that the knowledge attained can help students to understand the issues, analyze them and be able to apply the knowledge to the world of chemistry around them. The units of study include: Scientific Investigation & Inquiry, Properties of Matter, The Atom and Periodicity, Chemical Bonding, Conservation of Matter, Chemical Equilibrium, Chemical Thermodynamics, Solutions and Acids & Bases, Gas Properties, Nuclear Chemistry, Organic and Biochemistry. Students learn chemistry by doing and construct meaning from their experiences. They also learn how to find mathematical relationships between physical quantities of various matter applying graphical methods as needed. Basic algebra skills are used as a tool to understand these relationships and to solve problems.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisites/Conditions: N/A

## **Physics**

This introductory course in physics is designed to highlight aspects of the physical Nature of objects that can range from planetary and gravitational physics on a large scale to everyday thermodynamics. Topics include motion and forces, conservation of energy and momentum, mechanics of fluids, heat and thermodynamics, waves, electromagnetism, and nuclear processes. This course places emphasis on learning physics concepts using student centered activities designed to connect prior ordinary knowledge to a keen interest and knowledge of physical concepts. The students will be exposed to an inquiry based approach where they will be facilitated into the learning of the aforementioned topics. Students will learn physics by doing and obtain meaning from their in-class experiences. They will also learn how to find mathematical relationships within macroscopic physical properties and/or tendencies applying graphical methods as needed. An understanding of algebra, geometry,

# Science Department

and trigonometry are used to understand these relationships and to solve problems.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisites/Conditions: N/A

#### **Environmental Science**

Students will be involved in learning how science works in the world around them. Topics include the Nature of Science, Energy Flow, Resources, and Population Growth. Students also learn how to find mathematical relationships between physical quantities using graphical methods. Basic algebra skills are used as a tool to understand these relationships and to solve problems.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisites/Conditions: N/A

## Pre-AP Biology (9th Grade)

The Pre-AP Biology course emphasizes the integration of content with science practices—powerful reasoning tools that support students in analyzing the natural world around them. This ability is one of the hallmarks of scientific literacy, and it cultivates a more sustainable pathway to numerous college and career opportunities in science as well as numerous natural and social sciences. This course focuses deeply on the foundational biology knowledge and skills that matter most in preparing students for subsequent coursework in science. This course concentrates on the core areas of ecological systems, evolution, cellular systems, and genetics. Rather than understanding content topics in isolation, students will make meaningful connections between the structures, processes, and interactions that exist across biological systems—from cells to ecological communities. Pre-AP Biology instructional resources focus on the following key instructional shifts:

- Emphasis on analytical reading and writing: Students engage in analytical reading and writing to gain, retain, and apply scientific knowledge.
- Focus on applying mathematics: Students use mathematics to understand and express the quantitative aspects of biology, to record and interpret experimental data, and to solve problems as they arise.
- Attention to modeling: Students go beyond just labeling diagrams to modeling biological processes to demonstrate and revise understanding of key patterns, interactions, and relationships.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 9th Grade Standing

#### **Pre-AP Chemistry**

Pre-AP Chemistry will be one of the hardest courses you will take in high school. Many sophomores struggle with the course because it is the first time they have ever had to apply mathematics to real

# Science Department

world problem solving situations, including the practical use of Algebra. It is also a course that requires a great deal of abstract thinking, visualization in three dimensions, and the use of logic and critical thinking skills. The goal of Pre-AP Chemistry is to provide students with a foundation to understand the structure and properties of chemical substances and to make predictions in regards to the movement of energy in a system. This course is designed to give you the background and skills to prepare you for more advanced science classes, such as AP Chemistry, AP Environmental Science, and/or AP Biology. By nature, this course is lab-based with special emphasis on quantitative and qualitative methods of analysis. You are expected to be prepared to participate in completing the entrance question each day and participate in all class activities. This is a very easy course to fall behind in quickly if you are not prepared and do not keep up with the pace of the course.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: NA

# Social Studies Department

## **DC History**

This semester-long course provides students with a comprehensive examination of the basic concepts and principles of our local and federal system of government. Course study includes a focus on the foundations of government; an overview of the United States political system; study of the legislative, executive, and judicial branches of government; exploration of citizenship rights and responsibilities, examination of structure and functions of state and local governments; and study of global perspective on governmental relationships. The entire course is designed to instill in student with qualities of good citizenship that will enable them to put knowledge into action; and to provide students with the skills they need to participate fully in our democratic society.

Term: Semester Credit: .50 Prerequisite: N/A

## World History I

This course spans the Middle Ages to the Industrial Revolution. Students examine the development of global trade and interaction; the influence of geography on cultures and societies; early colonization and contact; and the transition and development of the modern world.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

## World History II

This course emphasizes the emergence of the modern era, beginning with the Industrial Revolution. The course is based on four major themes: human interactions; hemispheric interactions; crisis, progress, and change in the 20th century; and the challenges of the 21st century.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: World History I

## **United States History**

This course illustrates how the American political, economic and social system developed. Topics like Nationalism, sectionalism, Civil War, Reconstruction, Industrialism, and Immigration are examined to illustrate the development of these strands during the 19th century. Twentieth century content expands to include issues related to the development of foreign policy, the role of the United States as a world leader, and the domestic response to a diversified population and issues such as reform and civil rights.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

## American Institution

Course provides students with a comprehensive examination of the basic concepts and principles of our local and federal system of government. Course study includes a focus on the foundations of

# Social Studies Department

government; an overview of the United States political system; study of the legislative, executive, and judicial branches of government; exploration of citizenship rights and responsibilities, examination of structure and functions of state and local governments; and study of global perspective on government relationships. By examining local and National examples, students gain a greater understanding of how the institutional forces of government, media, market economics, and special interest affect their lives. The course prepares students to become active citizens, able to leverage their position inside the American Institution to shape the future. Course equivalent to AP US Government & Politics.

Term: Semester Credit: .50 Prerequisite: N/A

## Pre-AP World History and Geography (9th Grade)

Pre-AP World History and Geography focuses deeply on the concepts and skills that have maximum value for college, career, and civic life. The course is built around three enduring ideas to create an engaging and relevant social studies course:

- 1. **History is an interrelated story of the world.** The course explores the invisible structures and forces that shape and reflect the regions, communities, governments, economies, and cultures of humanity. These big ideas help students develop an organized and meaningful understanding of time and space.
- 2. **History and geography are inherently dynamic.** As historians and geographers uncover new evidence, current assumptions are challenged and previous arguments and narratives gain complexity, nuance, and context. This course teaches students how to examine sources and data, establish inferences, and ultimately build and critique arguments.

**Historians and geographers are investigators.** Learning in Pre-AP World History and Geography is designed to be a disciplinary apprenticeship where students participate in the process of discovery. Students will play the role of historian and geographer by practicing the detective skills and using the tools of each field of study.

Pre-AP World History and Geography emphasizes the following instructional priorities:

- Evaluating evidence: Students acquire knowledge by evaluating evidence from a wide range of primary and secondary sources.
- **Incorporating evidence:** Students demonstrate command of quantitative, qualitative, and spatial data by effectively incorporating them into written and oral arguments.
- Explaining historical and geographic relationships: Students explain relationships among
  events and people by marshaling evidence for causality, correlation, continuity, and change over
  time.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: 9th Grade Standing

# Social Studies Department

## Protest in America

This course is dedicated to exploring the history of protest in America. Even before the adoption of the US Constitution, America was founded on a system of oppression that, as current events painfully reveal, is very much alive today. Students will examine the many ways that Americans have fought to challenge and overturn oppression, the success and limitations of various forms of protest, and their own role in this struggle.

Term: Semester Credit: .50 Prerequisite: N/A

# Health, Physical Education and World Languages Department

## **Physical Education**

Students will explore a wide range of physical activities including individual, partner, team sports, and fitness. Students will maintain a personal record of participation in physical activity and analyze the benefits of exercise. They will develop their understanding of their physical and psychological preferences, and make decisions about the types of physical activities they most enjoy and want to pursue.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Health**

Students enrolled in Health Education will be required to create wellness programs for the school to promote overall physical activity and healthy living in the areas of nutrition, social and family health, alcohol, tobacco, and other drugs, teenage pregnancy, Sexually Transmitted Diseases, Communicable and Non-Communicable Diseases, and First AID/CPR.

Term:/Credits: Semester (.5)

Prerequisite: N/A

## Spanish I

In Spanish I, students cover a wide range of topics: greetings, food, clothes, numbers, sports, games, likes, dislikes, and travel. In addition to the core curriculum, level I students are introduced to art, literature, and history that relates to the countries of the studied culture. Students also learn basic grammar and vocabulary, beginning to develop listening, speaking, reading, and writing skills. Mastering a limited set of structural and lexical objectives used in common daily conversations, students learn how to pronounce in the target language as they will be prepared to travel to a Spanish-speaking country upon their successful completion.

Field trips, cinematic exposure, current event readings and food tastings are a few of the fun experiences in which we partake.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

#### Spanish II

In Spanish II, students cover topics hobbies, family life, town life, friends, the body, and celebrations. In addition to the core curriculum, level II students continue their studies in art, literature, and history. Students also master more complicated grammar and vocabulary, continuing to develop listening, speaking, reading, and writing skills. Mastering a larger set of structural and lexical objectives used in conversations, students master intonation and pronunciation as they will be prepared to live in a Spanish-speaking country upon their successful completion. Field trips,

# Health, Physical Education and World Languages Department

cinematic exposure, and food tastings are a few of the fun experiences in which we partake.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Spanish I

## Chinese (On-Line)

Chinese 1 A/B (EdOptions Academy Only) Students begin their introduction to Chinese with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. The course consists of 180 lesson days formatted in an intuitive calendar view, which can be divided into two 90-day semesters. The course represents an ideal blend of language learning pedagogy and online learning. As students begin the course, they construct their own Avatar that accumulates "Avatar bucks"—by performing well on course tasks—to use to purchase materials (clothing, gadgets, scenery, etc.) at the "Avatar store". Each week consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major Chinese-speaking countries. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: NA

#### French 1 A/B (On-Line)

These courses are based on a researched scope and sequence that covers the essential concepts of French. Class discussions provide an opportunity for discourse on specific topics in French. A key support tool is the Audio Recording Tool that enables students to learn a critical skill for French: listening and speaking. Beginning with learning personal greetings and continuing through practical communications exchanges, French 1B introduces students to the skills necessary to make the most of traveling to French-speaking countries.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: NA

#### AP Calculus AB

The purpose of this course is to develop students' understanding of the concepts of calculus and provide experience with its methods and applications. AP Calculus emphasizes a multi-representational approach to expressing concepts, results, and problems graphically, numerically, and verbally. AP Calculus begins with a detailed exploration of functions, graphs and limits with focus on analysis of graphs, limits of functions, asymptotic and unbounded behavior, and continuity as a property of functions. The primary aim of this course is on in-depth understanding of the theorems, concepts, techniques, computations and applications of derivatives and integrals.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Pre-Calculus

## AP English Language and Composition

This course is designed to create effective college readers and writers, to compel students to go beyond summary into the realm of analysis and critical reflection, a skill that will serve those taking standardized tests, including the AP Exam and the SAT. As a result of this course, students will gain a heightened awareness of the transactional Nature of reading and writing and an understanding that the best writing is produced when personal experience and close reading converge. To that end, we will practice a level of reading and writing that demands diligent and creative scholarship. By the end of this course, students will be able to construct and analyze argumentative, persuasive, Narrative, and analytical texts; identify patterns of organization, rhetorical strategies and devices to show how they contribute to the overall meaning and effectiveness of a work, incorporating this awareness into their own compositions. As readers, students will develop an arsenal of strategies to deconstruct the style, structure, and purpose of texts. As writers, students will use their knowledge of the rhetorical triangle and the rhetorical situation to create compelling pieces that persuade, inform, entertain, and engage diverse audiences.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 10th Grade Literature

## AP English Literature and Composition

The AP course in English Literature and Composition engages students in the practice of critical reading and writing for a variety of contexts and purposes. Students in this course come to an understanding of the intersecting practices of reading and writing - and the connection between the writer's purpose and the expectations of his audience. AP students also gain an awareness of language as the essential building blocks of meaning, the idea that grammar entails so much more than correctness, Namely, style, choice, voice, and tone. AP Literature and Composition students will come to understand the elements of literature as the author's device for creating meaning, for exploring larger physical and metaphysical considerations, and for creating the

world of the text. Students will also come to an understanding of the cultural, social, and political currents that inform the Anglo-American literary canon. As a result of this understanding, they will be able to identify literary movements and trends in text and context.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 10th Grade Literature

## AP Biology

First semester of a year-long course designed to be the equivalent of a college introductory biology course. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Topics include: the principles of biological chemistry; cytology; cellular energy transformations; heredity; molecular genetics; evolution; ecology; taxonomy and systematics; and the anatomy, physiology, and development of plants and animals. The laboratory program consists of quantitative experiments that stress experimental design, data collection, and graphical analysis. Upon successful completion of the entire yearlong course, students will be prepared for the AP examination in biology.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisites: N/A

# AP Chemistry

This course meets the requirements of a general chemistry taken in the first year of college. It provides students with in-depth understanding of the fundamentals in chemistry and will contribute to the development of the students' critical thinking skills. AP Chemistry primarily deals with the structure and state of matter, and the types of reactions. Structure of matter will cover atomic theory and structure, chemical bonding, and nuclear chemistry. The state of matter will include gases, liquid and solids, and solutions. Study of reactions in AP Chemistry includes acid-base, precipitation, and oxidation-reduction reactions, as well as stoichiometry, equilibrium, kinetics, and laws of thermodynamics. This course also places emphasis on the role of descriptive facts in chemistry in understanding its principles and concepts. Laboratory is an integral part of AP Chemistry and requires students to observe chemical reactions, record the data, calculate and interpret the results, then communicate those results.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisites: High school Chemistry and Algebra-2

## **AP Physics**

The goals of AP Physics are to gain the basic knowledge of the discipline of physics, to ask physical questions and to obtain solutions by use of qualitative and quantitative reasoning and by experimental investigation. One of the main focuses of AP Physics-B is on Newtonian mechanics and topics such as kinematics; Newton's laws of motion, work, energy, and power; circular motions and rotation; and oscillation and gravitation. Other topics of AP Physics –B are fluid mechanics and

thermal physics, an introduction to electricity and magnetism; wave and optics; and an overview of atomic and nuclear physics.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra 2 and High School Physics

## **AP** Environmental Science

The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the relationships of the Natural world, to identify and analyze environmental problems both Natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions. The AP Environmental Science course covers topics such as Earth's systems and resources, the ecosystem, issues of population, land and water use, energy resources and consumption, pollution, and global change.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: High School Biology

## AP Human Geography

The AP Human Geography course introduces students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of Earth's surface. This course covers topics on the Nature and importance of geography, the geographical analysis of population, cultural patterns and processes, political organization of space, agricultural and rural land use, industrialization and economic development, and cities and urban land use.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: N/A

#### AP Macroeconomics

The AP Macroeconomics course provides students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course begins with an introduction to basic economic concepts, an overview of how the economy works, and introduces measures of economic performance. Other major topics covered are National income and price determination, financial sector, inflation and unemployment, economic growth and productivity, and aspects of international trade and finance.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 11th or 12th Grade Standing; Course substitutes for High School Social Studies requirements.

## AP Psychology

This year-long course is designed to give the students a fundamental body of knowledge and skills in

the area of psychology. The course will involve an investigation of the major approaches to this study of psychology. It also will involve the use of research methods and statistical measurement to include inferential as well as descriptive statistics. Advanced Placement Psychology builds upon the foundation of the General Psychology course (or the psychology section of Introduction to Social/Behavioral Sciences) which is a prerequisite for this course. It also requires the student to use methods and skills acquired in math and science courses as well as computer application. Advanced placement courses are designed for students who wish to complete studies in secondary school that are equivalent to a one-semester college course in psychology. It is expected that upon completion of the course students will take and pass the College Board—advanced placement test.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: High School Biology; Course substitutes for High School Science requirements.

## **AP US History**

This course is designed to provide students with the analytic and factual knowledge necessary to deal critically with the problems and materials in US history. The AP United States History covers themes such as American diversity, identity, and culture; demographic changes and economic transformation; environment and globalization; politics, citizenship, and political reforms; religion; slavery and its legacy; and war and diplomacy. The chronological frame of this course begins with pre-Columbian societies covering early inhabitants of the Americas, and continues to the post-cold war era.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 10th Grade World History

#### **AP Government and Politics**

The study of modern politics in the United States requires students to examine the kind of government established by the constitution, paying particular attention to federalism and the separation of powers. The AP US Government and Politics gives students an analytical perspective on political beliefs and behaviors, political parties and interest groups, and the function and impact of mass media. It also covers institutions of National government, public policymaking, and civil rights and liberties.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 10th Grade World History

## **AP World History**

In this course students will gain greater understanding of the evolution of global processes and interactions of human societies. The chronological frame of the course begins from about 8000 BCE to the present and covers six themes. These themes are change and continuity; patterns and effects of interactions; systems and social structures; cultural, intellectual and religious developments; and changes in function and structure of states. The AP World History course covers five major

historical periods, Namely, 8000BCE to 600 CE; 600 CE to 1450; 1450-1750; 1750-1914; and 1914 to present. For each historical period, students will gain knowledge of major developments and explore the links between the six themes and major civilizations in Africa, the Americas, Asia, and Europe.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: 10th Grade Standing

## **AP Computer Science**

The goals of AP Computer Science are that students will be able design and implement computer-based solutions to problems in a variety of application areas; use and implement commonly- used algorithm and data structures to solve problems; and to code fluently in an object-oriented model using the programmatic language Java. Major topics covered in AP Computer Science are object-oriented program design, computer program implementation and analysis, standard data structures and algorithms, and computing in context.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra 1: Course substitutes for High School Science requirement:

## **AP Music Theory**

The goal of AP Music Theory is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. Students will learn aural, compositional, analytic, and performance skills. This course will cover musical terminology such as terms for intervals and rhythm, notational skills such as rhythms and meters, clefs and pitches, key signature's, scales, and mode, chords, and melodic transposition. Other topics include basic compositional skills, score analysis, and aural skills.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Music Theory

#### AP Art

This course enables students to further develop their knowledge and skills in visual arts. Students will use the creative process to explore a wide range of themes through studio work that may include drawing, painting, sculpting, and printmaking, as well as the creation of collage, multimedia works, and works using emerging technologies. Students will use the critical analysis process when evaluating their own work and the work of others. All students will maintain a sketchbook and create a portfolio of completed projects.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Art or Foundations of Visual Arts

## **AP Art History**

A.P. Art History is a college level class that may earn the student college credit upon passing the A.P. exam at the end of the class. A.P. Art History not only seeks to understand history through studying its works of art, but also to understand art by studying the context in which it was created. Student will study works of art document history. How does art change through time, as the society and culture change? What can art tell us about the people who lived and worked during the time period? Students will learn to recognize art and architecture, its creator, time period, and meaning.

Students will write about art using the vocabulary necessary, compare and contrast different works, and learn how artists borrow from one another. Students learn how to collect and organize pertinent information, cross reference it and write coherently about it using the proper vocabulary.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Foundations of Visual Art, Art Appreciation, Art I

#### **AP Studio Art**

This course focuses on studio activities in one or more of the visual arts, including drawing, painting, sculpture, photography, printmaking, collage, and/or multimedia art. Students will use the creative process to create art works that reflect a wide range of subjects and will evaluate works using the critical analysis process. Students will also explore works of art within a personal, contemporary, historical, and cultural context. AP Studio Art is designed for students who are seriously interested in college study and/or careers in art. The student will spend a yearlong quest of one subject or concentration focus with an in-depth approach through media exploration and technique. A minimum of 20 original works will be completed by April.

AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The portfolio, including slides and actual works will be evaluated at by a review panel of seven College Board members for scoring in early May. The portfolios may consist of a 2-D Design or Drawing concentration (corresponding to the most common college foundation courses) and must address three major concerns that are constants in the teaching of art: (1) a sense of quality in a student's work; (2) the student's concentration on a particular visual interest or problem; and (3) the student's need for breadth of experience in the formal, technical, and expressive means of the artist.

As in the introductory college course, students will need to work outside the classroom, as well as in it, and beyond scheduled periods. Critiques, a common structure in the college classroom, are important in AP as well.

Group and individual analysis enables both the students and the teacher to assess the strengths and

weaknesses in their own work and their peers' work. The student is expected to maintain a sketchbook, create original works, and be responsible for the rigorous self-direction that occurs with this class. Students will be prepared the first day of class with completed assignments.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

*Prerequisite*: Successful completion of Art I or Foundations of Visual Arts and Instructor Approval

Co-requisite: An Advanced Placement Course

## **AP Computer Science Principles**

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Algebra 1

Note: AP Computer Science Principles meets a High School Elective Course Requirement

# Dual Enrollment - Arizona State University

## ASU HST 102: Europe and the Mediterranean: Ancient and Medieval

This first year online history course will take students on a fascinating journey through the history of Europe and the Mediterranean from ancient times through 1500 AD. Students will learn about a number of cultures and periods, including: Egypt and Mesopotamia, Greece, Rome, Judaism, The Byzantine Empire, The Rise of Islam, Medieval Europe. Students will also learn:

- How to critically analyze the development and growth of people economically, socially, culturally, and politically
- How to critically analyze the development and growth of people economically, socially, culturally, and politically
- The changing political systems in Europe and how they impact Western society
- The evolving relations between Europe, the Mediterranean, and the larger world

Term: Semester High School Credits: 1.00 College Credits: 3.00 Prerequisite: N/A

## ASU SOC 101: Introduction to Sociology

In this online sociology class, students will learn how individuals both shape and are shaped by their communities. They will learn how individuals both actively impact and are shaped by their communities, and will explore the formation and persistence of societies that consist of diverse groups of people. Students will also gain valuable insight into the dynamics of group relationships, including how to effectively interact with others within a group. Finally, students will learn how the study of sociology applies to their daily life as well as the most pressing social events of our time. The topics you will study include: Society and culture, Socialization amongst people, Stratification and inequality within society, including gender roles, Deviance and social control, Social problems and social change, Significant social structures in the United States, including the education system, government, and family. Student will also learn:

- To significantly improve their ability to communicate in both a professional and personal environment
- To improve their ability to think critically and write effectively
- The basic ideas and theories of sociology
- A deeper empathy for people who are different than them
- How sociology applies to their everyday life

Term: Semester High School Credits: 1.00 College Credits: 3.00 Prerequisite: N/A

# Dual Enrollment - Arizona State University

## HST 100 - Global History to 1500

Surveys human origins; early civilizations in Africa and Eurasia; the ancient Mediterranean; the pre-Columbian Americas; the rise of Islam and Muslim empires; medieval Europe; the Indian subcontinent and imperial China, to 1500.

Term: Semester High School Credits: 1.00

College Credits: 3.00 Prerequisite: N/A

Note: HST100 meets the High School World History I requirements.

## HST 101 - Global History Since 1500

Surveys Africa, the Americas, and Eurasia; changes in communication, communities, demography, economics, environment, politics, religion, technology, warfare, and women.

Term: Semester High School Credits: 1.00

College Credits: 3.00 Prerequisite: N/A

Note: HST101 meets the High School World History II requirements.

## **SOC 101 – Introductory Sociology**

Fundamentals of sociology, organization of human groups and society, processes of interaction, and social change.

Term: Semester High School Credits: 1.00

College Credits: 3.00 Prerequisite: N/A

Note: SOC101 meets a High School elective course requirements.

## EXW 100 - Introduction to Health and Wellness

Current concepts in health, exercise, and wellness. Emphasizes personal health, theories, attitudes, beliefs, and behaviors.

Term: Semester High School Credits: 1.00

College Credits: 3.00 Prerequisite: N/A

Note: EXW100 meets the High School Health course requirements.

# Dual Enrollment - Arizona State University

## ENG 101 - First-Year Composition

Discovers, organizes and develops ideas in relation to the writer's purpose, subject and audience. Emphasizes modes of written discourse and effective use of rhetorical principles.

Term: Semester High School Credit: 1.00

College Credits: 3.00

*Prerequisite*: SAT Verbal Score > = 520

Note: ENG101 meets a High School English course requirements.

# Dual Enrollment - Granite State College

## ENG 500 – The Writing Process

This course approaches writing as a process. Strong writing involves a sequence of stages, including: prewriting, initial drafting, revision, and rewriting. The course develops written communication skills by emphasizing both the writing process and the final product. English 500 provides students with the opportunity to integrate critical thinking, reading, beginning research, and writing skills in order to create best practices for successful writing both in and outside of college.

Term: Semester High School Credits: 1.00

College Credits: 4.00 Prerequisite: 12th Grade

Note: ENG500 meets a High School English Course Requirements.

## MATH 502 – Math for Our World

This course takes an integrated approach to the study of mathematics, combining mathematical concepts with applications in the real world. It addresses topics in mathematics necessary in a college education, providing the reasoning strategies needed for mathematical problem solving in the workplace, the media, and everyday life. The course serves as the foundation for higher-level math courses and provides the quantitative skills necessary to be adequately prepared for coursework in other academic areas. The overarching goal is to learn to interpret quantitative and statistical information that we encounter daily. Students will understand how real-world problems can be analyzed using the power and rigor of mathematical and statistical models. Topics include: problem solving, math of finance, geometry, basic probability, and beginning statistical concepts with an emphasis on real world applications and interpreting information. The use of Excel will be incorporated into the topics of this course.

Term: Semester High School Credits: 1.00

College Credits: 4.00 Prerequisite: SAT Math Score >=500

Note: ENG502 meets a High School Math Course Requirements.

## MATH 510 - Pre-Calculus

This course is intended as a bridge course between algebra and calculus. The course focuses on strengthening the student's mathematical problem solving skills and developing a firm understanding of functions, their graphical representation, their behavior and their use to model real-life situations. Various classes of functions will be highlighted: polynomials, rational, exponential, logarithmic and trigonometric. Topics may also include: algebraic concepts, real number system, systems of equations and inequalities, complex numbers and polar coordinates.

Term: Semester High School Credits: 1.00 College Credits: 4.00

Prerequisite: Math 502 College Mathematics

Note: ENG510 meets a High School Math Course Requirements.

# Early College

	1	A Partners	hip of Frier					– University te College Bo		ict	of Columbia	
			Pathways					ss and Deg		nen	ıt	
Foci		College-Level Academics ● Writing and Research Skills ● Economic Literacy ● STEM Exposure ● National and Global Awareness								ll and Global		
								t.				
Curriculum Areas	Summer	9thC	Grade	Summer	10 <sup>th</sup> (	Grade	Summer	11th Grade		Summer	12th Grade	
English and Language Arts		Pre-AP English I	Pre-AP English I		*Honors World Literature *AP English Language & Composition	*Honors World Literature *AP English Language & Composition		*Honors American Literature *AP English Literature	*Honors American Literature *AP English Literature		Honors British Lit *AP English Lit *ENGL 101: Academic Writing (UMD) *ENGL 111: English Composition (UDC)	Honors British Lit *AP English Lit *ENGL 112: English Composition (UDC)
Social Studies and Humanities	Bridge	Pre-AP World History and Geography	Pre-AP World History and Geography		AP World History	AP World History		*US History *AP US Government & Politics *AP Comparative Government & Politics	*US History *AP US Government & Politics *AP Comparative Government & Politics		US History *AP US History *HIST 101: US History 1 (UDC) *AP Psychology *AP Macroeconomics *ECON 201: Macroeconomics (UDC)	*US history *AP US History *HIST 102: US History 2 (UDC) *AP Psychology (PSYC 201: Into to Psychology (UDC) *AP Microeconomic *ECON 202:
Natural and Laboratory Sciences	Summer Bridge	Pre-AP Biology	Pre-AP Biology	tical Thinking			dir	*Physics *AP Biology *AP Environmental Science	*Physics *AP Biology *AP Environmental Science	up	*Environmental Science *AP Biology *AP Environmental Science	Microeconomics  *Environmental Science  *AP Biology  *AP Environmental Science
Mathematics		Pre-AP Algebra I	Pre-AP Algebra I	ent in Writing and Critical Thinking	*Honors Geometry *Honors Algebra II *Pre-Calculus *Intro to Computer Science	*Honors Geometry *Honors Algebra II *Pre-Calculus *Intro to Computer Science	Summer Scholars Program and Internship	*Algebra II *Honors Pre- Calculus *AP Calculus AB *AP Computer Science	*Algebra II *Honors Pre- Calculus *AP Calculus AB *AP Computer Science	Program and Internship	*Pre-Calculus *AP Calculus AB *AP Calculus BC	Pre-Calculus *AP Calculus AB *AP Calculus BC *BIOE 100: Engineering Math (UMD)
World Languages				Summer Enrichment	*Spanish I	*Spanish II	er Scholars			er Scholars	*AP Spanish Language *AP French Language	*AP Spanish Language *AP French Language
Research				Summ			Summ	Research Seminar	Research Seminar	Summer	Research Project (Capstone)	Research Project (Capstone)s
Other College		PE/Health			Art/Music 9		3	15		6	24	
Program Participation		Up to 60 College Credits or Equivalent to an AA Degree										

Mandatory Credit Classes							
9th Grade	10th Grade	11th Grade	12th Grade				
Pre-AP Algebra I or	Geometry or	Algebra II or	Pre-Calculus or AP				
Algebra I	Algebra II	Pre-Calculus	Calculus or Statistics				
Pre-AP English I or	World Literature	American Literature	English Composition				
Literary Genres		or AP Language &					
		Composition					
Pre-AP World History	World History II or	US History, AP US	DC History/				
or World History I	AP World History	History or AP	American Institution				
		Government &					
		Politics					
Pre-AP Biology or	Chemistry	Anatomy II or	Environmental				
Biology	Anatomy I	AP Biology	Science or AP Biology				
			or AP Environmental				
			Science				
Foreign Language I	Foreign Language I	Foreign Language II					
One require	ment below	One Requirement below					
Other Requirements for Graduation							
Art (.5)							
Music (.5)							
Physical Education (.5)							
Health (.5)							

Arts and Communication Proposed Electives							
9th Grade	10 <sup>th</sup> Grade	11th Grade	12 <sup>th</sup>				
Pre-AP Art Studio	Band I, Drawing I,	Band II, Drawing II,	Band II, Drawing II,				
Pre-AP Music	Painting I, Modern	Painting II, Modern	Painting, Modern				
Pre-AP Dance	Dance I, Ballet,	Dance II, Ballet,	Dance II, Ballet,				
Pre-AP Visual Arts	Musical Theatre	Musical Theatre	Musical Theatre				

Visual Arts (All Visual Art classes can be supplemented as an Art credit.)

## **Pre-AP Visual and Performing Arts courses**

(Pre-AP Music, Pre-AP Dance, Pre-AP Visual Arts, Pre-AP Theatre)

The Pre-AP Arts courses are designed to be integrated into performance-focused courses in the four arts disciplines of dance, music, theatre, and visual arts. The courses focus on skills associated with ideation, experimentation, creation, revision, reflection, and analysis—the full range of processes and activities that artists engage in while producing their work. Rather than limiting arts instruction to a singular focus on a final performance or finished portfolio and the development of technical skills that ensure the quality of this presentation, the Pre-AP Arts courses allow room for these culminating events while also emphasizing the opportunities for choice-making that enhance students' abilities to think critically and creatively as artists.

Term:/Credits: Semester 1 (.5) Semester 2 (.5) Prerequisite: N/A

#### Art I

Objective of the course: This course is designed for students who are beginners in art but are willing to learn along with participating in performing in school events. The students will develop an awareness of the visual form in their environment and become familiar with the basic elements and principles of design through a variety of media, which will enable the students to develop an aesthetic awareness of design in everyday life. The first quarter will consist of learning how to draw. The second quarter will be applying the learned drawing skills while also learning how to paint.

Term:/Credits: Semester (.5)

*Prerequisite: N/A* 

#### Art II

Objective of the course: This course is designed for students that previously took the beginners Art 1 course and are now interested and ready to build upon previously learn skills. The course will be project based with some teacher guidance. Expectations for this course are to develop a portfolio with the hopes of becoming an AP Studio Art participant the following year. It is required to participate in performing in school events. The students will explore even deeper an awareness of the visual form in their environment and apply the basic elements and principles of design through a variety of media, which will enable the students to have a mature aesthetic awareness of design in everyday life.

Term:/Credits: Semester (.5)

Prerequisite: Art I

#### Foundations of Visual Art

Specifically designed to accommodate all non-academy students. This course is exploratory in nature, offering an overview of visual arts as a foundation for further study. Students will become familiar with the elements and principles of design and the expressive qualities of various materials by using a range of media, processes, techniques, and styles. Students will use the creative and critical analysis processes and will interpret art within a personal, contemporary, and historical context.

Term:/Credits: Semester (.5) Prerequisite: N/A

## **Drawing I**

Drawing is the first art class of majors. The course will cover the basic elements of drawing as a foundation for the other forms of visual arts. The course will explore multiple drawing tools and students will learn multiple techniques and styles.

Term:/Credits: Semester (.5) Prerequisite: Foundations of Art, Art I

## Painting I

Painting is the Natural next step after drawing class. Students will use oil, watercolor and acrylic paint on a variety of surfaces. Students will be expected to take their art work too the next level to include more in-depth color, use of light and creative exploration.

Term:/Credits: Semester (.5) Prerequisite: Foundations of Art, Art I

#### **AP Studio Art**

<u>Objective of the course:</u> Designed **only** for students that took the prerequisite courses listed above and have a solid portfolio for admittance (approved by Ms. Butler). This course requires schools to work outside of class time to complete and submit to the College Board. **This course is one for school year long.** 

The course promotes a sustained investigation of all three aspects of portfolio development—quality, concentration, and breadth—as outlined in the *AP Studio Art Course Description* or AP Studio Art poster throughout the duration of the course. (*Note*: The body of work submitted for the portfolio can include art created prior to and outside of the AP Studio Art course.)

The course enables students to develop mastery (i.e., "quality") in concept, composition, and execution of drawing, or 2-D design.

The course enables students to develop a body of work investigating a strong underlying visual

idea in drawing, 2-D or 2-D design that grows out of a coherent plan of action or investigation (i.e., a "concentration").

The course teaches students a variety of concepts and approaches in drawing, or 2-D design so that students are able to demonstrate a range of abilities and versatility with technique, problem-solving, and ideation (i.e., "breadth"). Such conceptual variety can be demonstrated through either the use of one or the use of several media.

The course emphasizes art making as an ongoing process that involves the student in informed and critical decision making.

The course includes group and individual student critiques and instructional conversations with the teacher, enabling students to learn to analyze and discuss their own artworks and those of their peers.

The course teaches students to understand artistic integrity as well as what constitutes plagiarism. If students produce work that makes use of photographs, published images, and/or other artists' works, the course teaches them how to develop their own work so that it moves beyond duplication.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: Art I, Drawing I, or Painting I

#### Pre-AP Visual Arts (9th Grade)

The Pre-AP Music course has two instructional modules. The first module deals with learning cycle and focuses on a different broad category of source material for works of art, including materials as source, art as source, and the everyday as source. The lesson sequence offers instructional guidance in facilitating processes of artistic research, analysis, experimentation, and iteration or revision in creating finished works based on these three categories of source material. Lessons are deliberately designed to allow students to consider and try several approaches to creating their work before making their final decisions as to how to proceed. Throughout the module, reflective writing prompts and peer-to-peer discussion will help students clarify their thinking about their work and consider alternate approaches. As this module may be implemented in a range of introductory-level high school art courses, the media and techniques employed in these lessons have been left relatively open. In the first learning cycle (material as source), students will create a three-dimensional sculpture from found materials. In the second and third learning cycles (art as source and the everyday as source), students will make 2D portrait-based work, using materials and processes to be determined by the teacher.

The second module deals with structures. This module will enable students to identify the types of structures and frameworks that artists routinely work within—making decisions about the material, process, form, content, and context of their work. In order to form an understanding of how artists

and designers work within constraints, students will engage in "constrained" art-making activities - working within an extremely limited time frame, for example, or with a limited range of materials—in order to understand the ways that deliberate use of such constraints can lead to interesting and creative outcomes. Students will discuss anchor works and identify particular constraints that are employed in the work of contemporary artists and designers, while also describing how these deliberate choices contribute to the meaning of a work. Finally, students will re-examine their own past assignments with an eye toward altering one or more aspects of this work in the creation of something new.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 9th Grade Standing

<u>Dance</u> (All Dance classes can be supplemented as a Physical Education credit.)

#### Ballet I

The study of classical ballet for the entering student with little or limited previous study and experience. Emphasis is placed on the fundamental basics of technique. Ballet 1 students are expected to achieve correct body placement and alignment. They will have built muscle strength and flexibility as well as increasing self-discipline and artistic expression.

Term:/Credits: Semester (.5)

Prerequisite: N/A

## **Ballet II**

The study of classical ballet for the entering student with extensive previous study and experience. Ballet 2 students are expected to work with emphasis on turnout, correct placement, and strong pointe work at the barrel, in the center, and moving across the floor with jumps and turns.

Term:/Credits: Semesters (.5)

Prerequisite: Ballet I

#### Ballet & Modern 1-4

Dancers learn and memorize complex movements in ballet and modern. Dancers are expected to be highly engaged in all levels of dance. Ballet is taught using the Checchetti method of ballet which is mainly spoken in French. Modern dances focus on both Horton and Dunham techniques. Dancers are expected to complete all courses in the numeric specific order. As students matriculate thought he program a higher intensity engagement is expected.

Term:/Credits: Semester (.5)

Prerequisite: N/A

## Modern Dance I

Introduction of fundamental exercises, techniques, and movement phrases of modern dance. Basic modern dance principles are introduced in axial and locomotor exercises. Modern dance innovators and their styles are discussed.

Term:/Credits: Semesters (.5)

Prerequisite: Ballet I

## Jazz I

Introduction to fundamental jazz techniques, exercises, walks, and movement phrases of the jazz style. Basic knowledge of changing jazz styles through the years.

Term:/Credits: Semesters (.5)

Prerequisite: Ballet I, Modern I

#### Choreography Workshop

The study of basic rhythmic, spatial, and dynamic materials used in the designing of dance. From short, simple works, the student choreographer will progress to larger pieces and produce a complete work for evaluation by the dance faculty and formal preparation during the end of the senior year.

Term:/Credits: Semesters (.5)

Prerequisite: Ballet I/II, Modern Dance, Jazz

<u>Instrumental Music</u> (All Instrumental Music classes can be supplemented as a Music credit.)

## **Music Theory**

Music Theory provides the written listening, and analytical skills needed to understand the organization and structure of music and to use this knowledge to compose original work. Students acquire skills in ear training, musical notation, interval recognition, chord structure, harmonic progression, and form. Examples are analyzed from music literature to see how music theory functions in music of all styles.

Term:/Credits: Semesters (.5)

Prerequisite: N/A

#### Band I

Open to students possessing beginner to intermediate skills on woodwind, brass, and percussion instruments, students in Concert Band I study and perform music on a beginner/intermediate level (Grades 1-2) with emphasis on developing technical ability, knowledge of phrasing, tone, balance rhythmic accuracy, and interpretation.

Term:/Credits: Semesters (.5)

Prerequisite: N/A

#### **Band II**

Open to students possessing intermediate skills on woodwind, brass, and percussion instruments, students in concert Band II study and perform music on an intermediate level (Grades 2-3). Students in Concert Band II continue to develop those skills introduced in Concert Band I.

Term:/Credits: Semesters (.5)

Prerequisite: Band I

## Jazz Band

Reflects traditional Big Band instrumentation (saxophone, trumpet, trombone and rhythm section). Students are exposed to the history of jazz, a variety of jazz styles, as well as the work of specific musicians with a distinct type of jazz. They will be expected to classify, analyze, critique and apply what they learn. This is a performance class; therefore, students are expected to attend all rehearsals, sectionals and performances.

Term:/Credits: Semesters (.5)

Prerequisite: Music Theory, Band I /II

## **Beginning Band**

Beginning Band is a full -year course open to students possessing no previous skills on woodwind, brass, and percussion instruments. Students in Beginning Band study and perform music on an novice (Grade.5-1) level with emphasis on developing technical ability, knowledge of phrasing, tone, balance, rhythmic accuracy, and interpretation. Beginning Band will perform at concerts and other special occasions. These performances are considered culminating experiences without equivalent substitutes.

Students accept the performance calendar as a condition of participation and as part of the course requirement.

Term:/Credits: Semester (.5)

Prerequisite: NA

# Fines Arts Careers Pathways

#### Concert Band I

Concert Band I- is a full -year course open to students possessing intermediate skills on woodwind, brass, and percussion instruments. Students in Concert Band study and perform music on a beginner/ intermediate level (Grades 1- 2) with emphasis on developing technical ability, knowledge of phrasing, tone, balance, rhythmic accuracy, and interpretation. Concert Band performs at concerts and other special occasions. These performances are considered culminating experiences without equivalent substitutes. Students accept the performance calendar as a condition of participation and as part of the course requirement.

Term:/Credits: Semester (.5)

Prerequisite: NA

#### **Concert Band II**

Concert Band II- is a full -year course open to students possessing intermediate skills on woodwind, brass, and percussion instruments. Students in Concert Band study and perform music on an intermediate level (Grades 2- 2 ½) with emphasis on developing technical ability, knowledge of phrasing, tone, balance, rhythmic accuracy, and interpretation. Concert Band performs at concerts and other special occasions. These performances are considered culminating experiences without equivalent substitutes. Students accept the performance calendar as a condition of participation and as part of the course requirement.

Term:/Credits: Semester (.5)

Prerequisite: Concert Band I

## **Concert Band III**

Concert Band III- is a full-year course open to students possessing intermediate skills on woodwind, brass, and percussion instruments. Students in Concert Band study and perform music on an intermediate level (Grades 2 ½ -3) with emphasis on developing technical ability, knowledge of phrasing, tone, balance, rhythmic accuracy, and interpretation. Concert Band performs at concerts and other special occasions. These performances are considered culminating experiences without equivalent substitutes. Students accept the performance calendar as a condition of participation and as part of the course requirement.

Term:/Credits: Semester (.5)

Prerequisite: Concert Band I and Concert Band II

#### **Pre-AP Dance**

The Pre-AP Dance course has two instructional modules. The first module highlights written texts as source material for works of dance. Throughout the five weeks of instruction, students will work individually and collaboratively to create two dance studies based on very short stories, considering the ways that dance can be used to interpret specific aspects of each narrative. Students will generate basic movement ideas around a main character, theme, or important moment of a story. These ideas may be rather concrete or literal at first, and then students will be guided in abstracting and iterating on these ideas by considering the ways that elements of time, space, and energy or dynamics can be best used to express their ideas. These guided experiments provide an accessible introduction to choreography for students who may have little experience in this area. Students will develop dance phrases individually or in pairs, and will eventually work collaboratively in small groups to put the components together into a dance study. In doing so, they will be guided in skills of collaboration and effectively giving and receiving peer-to-peer feedback.

The second instructional module deals with structures. This module guides students in the study of the characteristics of particular genres of dance namely, ballet and hip hop and in studying and practicing the fusion of the two. Deep analysis and ongoing reflection are as essential to this work as any skills of practice or performance in the genres being studied. Students will identify the key characteristics of each genre, practice movements unique to each genre, and then consider how these movements relate to their own strengths and preferences as dancers. Finally, they will build a short dance study reflecting their understanding of the key characteristics of ballet and hip hop, and experimenting with the fusion of the two.

Term:/Credits:

Semesters Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 9th Grade Standing

\_

# <u>Instrumental Music</u> (All Instrumental Music classes can be supplemented as a Music credit.)

#### Music I

This course aims to ignite a new excitement and curiosity in the world of music. This course will bridge the gap between the student and all the contributing factors that makes music what it has become. Music plays a pertinent role in our society and this course will provide students with the reasons why. Students will be required to apply the essential basic elements of music theory, read and compose original musical pieces, appreciate a wide range of musical repertoire as well as develop a subjective ear for music listening, understand and apply the different genres, forms, periods and composers of music.

Term:/Credits: Semester (.5)

Prerequisite: N/A

## **Digital Music**

This course serves to examine Digital music history from the late 60's to the present using various articles. We will examine the major music producers, music technology, music software, and events that have shaped the sound of music as we know it. Students will also have the opportunity to compose original music and contemporary tracks on school laptops using the music software Sebelius for the original compositions and Mixcraft for the contemporary tracks. Upon completion of this course, students will:

- 1) Demonstrate a large musical vocabulary.
- 2) Understand basic music theory
- 3) Sample various sounds and songs
- 4) Build and produce tracks using Mixcraft
- 5) Compose original songs using Sebelius

#### Senior Recital

Students will spend their time in this class perfecting their skills on the instrument(s) of their choice in preparation for their final performance which is a compilation of all they have learned and/or created over their course of studies.

Term:/Credits: Semester (.5)

Prerequisite: Music Theory, Band I, Band II, Jazz Band

## Vocal Lesson I

Emphasis is placed on improving the technique and skills of solo vocal singing. The teacher works with singers to prepare not only operatic roles, but also arias, song and oratorio literature. Elements of coaching include: pitch and tuning, rhythm, language and style, harmony and expression. Students also perform for one another and exchange constructive comments that are designed to improve vocal production and presentation.

Term:/Credits: Semester (.5)

Prerequisite: N/A

## **Vocal Lesson II**

This courses that progress from beginner to intermediate and advanced in skill, level and difficulty to repertoire. Students improve their proficiency levels in ear training music theory and performances. As they sing, they will be learning all types of repertoire from gospel to Broadway.

Term:/Credits: Semester (.5)

Prerequisite: Vocal Lesson I

#### Vocal Lesson III

This courses that progress from beginner to intermediate and advanced in skill, level and difficulty to repertoire. Students improve their proficiency levels in ear training music theory and performances. As they sing, they will be learning all types of repertoire from gospel to Broadway.

Term:/Credits: Semester (.5)

Prerequisite: Vocal Lesson I & II

#### **Vocal Lesson IV**

This courses that progress from beginner to intermediate and advanced in skill, level and difficulty to repertoire. Students improve their proficiency levels in ear training music theory and performances. As they sing, they will be learning all types of repertoire from gospel to Broadway.

Term:/Credits: Semester (.5)

Prerequisite: Vocal Lesson I, II & III

#### Piano Lab

This course is designed to teach piano to the student who has never had the opportunity to play, but has a desire to learn.

## **Course Objectives**

- Students will learn piano in a Lab setting
- Students will develop note reading, music notation, music theory and improvisational skills
- Students will play simple melodies
- Students will perform a recital twice a semester

Term:/Credits: Semester (.5)

Prerequisite: Pre-AP Music (9th Grade)

#### **Pre-AP Music**

The Pre-AP Music course has two instructional modules. The first module introduces students to programmatic music: instances where extra-musical sources—including images, stories, events, and pre-existing musical works— inspire musical creativity. The lesson sequence involves the extended study of an "anchor work" of programmatic music, which varies according to the type of ensemble (orchestra, band, or chorus) that is being taught. Students will initially apply their understanding of the programmatic intent of the piece by suggesting specific expressive choices that may be made in their ensemble's performance of the work. In addition to studying and performing this anchor work, students will be introduced to other programmatic examples, including Schubert's Der Erlkönig in order to analyze and describe the ways that composers and performers purposefully manipulate musical elements for a particular expressive purpose. Throughout the unit, students will be given opportunities to experiment with musical choices and ideas, offer and receive productive peer-to-peer feedback, and collaboratively refine their performance as an ensemble.

The second instructional module deals with structures. Although students in both instrumental and vocal ensembles work with scales as a musical structure, it is rare that students step away from the technical/performance experience of scales to explore more fully the concept of scale as a construct that provides the melodic underpinning for a great variety of musical styles—Western and non-Western, folk and classical, tonal and atonal. This module affords teachers and students a framework for such exploration. This module engages students in preliminary work on scales, a topic given much fuller coverage in AP Music Theory.

Term:/Credits: Semester 1 (.5) Semester 2 (.5)

Prerequisite: 9th Grade Standing

#### **Voice Class**

The primary goal of this course is to ignite a new found excitement and curiosity into the world of singing. This is a year-long course offered to current and aspiring singers in grades 10-12, regardless of their previous vocal experience. The core curriculum explores basic vocal technique, music theory, performance and history as it relates to Blues, Jazz, musical theatre, Gospel, Folk, R&B, Rock, Hip Hop, and other genres.

Term:/Credits: Semester (.5)

Prerequisite: NA

## **Concert Choir**

Course Overview

Friendship Collegiate Concert Choir is a year-long, upper-level performance opportunity offered to experienced music students who are accomplished in vocal performance. non-auditioned ensemble committed to the exploration and performance of exceptional choral literature. The main goal of this group is prepare each piece we perform extremely well emphasizing accurate pitches, diction, phrasing, musicality, balance, blend, vocal production, and correct period practices. In order to achieve this, students are expected to know their individual part completely. Initial rehearsals will focus on part learning, while subsequent rehearsals will address the other musical aspects listed above. When possible, students will have access to leaning tracks for their part so they can practice outside of rehearsal. Great satisfaction and enjoyment comes from rehearsing and performing music that has been well prepared.

- To develop and demonstrate healthy vocal techniques: posture, breathing, tone placement, diction, and expression;
- To develop and use a knowledge of music reading: pitch, rhythm, symbols, and vocabulary;
- To develop the skill of singing independently and cooperatively in a group;
- To develop an understanding of varied historical performance practices and to convey these styles in performance with appropriate historical practices;
- To develop competency in both presenting concerts and being constructively critical and selfevaluative about your own performing;
- To develop and broaden levels of musical thinking in order to promote life-long learning and long-term participation in the choral arts.

Term:/Credits: Semester (.5)

Prerequisite: NA

## Beginner Jazz

Beginner Jazz is a fun high energetic class that identify several styles of jazz dances and techniques. Influential movements are designed from profound artist dancers such as Jack Cole, Bob Fosse and Gus Giordano. This is a creative class that allows students freedom of movement as well as studying the history of Jazz dance. This class has a high level of rigor, focus and discipline. Student dancers must show a great deal of enthusiasm and motivation. Students in this level must take Ballet, and or Modern.

Term:/Credits: Semester (.5)

Prerequisite: NA

#### Foundations of Music

The primary goal of this course is to ignite a new excitement and curiosity into the world of music. It is important to bridge the gap between the student and all the contributing factors that made music what it is today. Music plays such a pertinent role I our society, it is important that we take the necessary steps to understand how and why.

Term:/Credits: Semester (.5)

Prerequisite: NA

#### **Musical Theatre**

Musical Theatre is a class that allows students to dance, sing and act. All three disciplines are studied with a high focus in theatre arts. Student artist are expected to have taking some form of music or vocal studies as well as dance. Students produce monologues, Broadway style movements and songs. Students research and create character analysis. Students are expected to perform in the annual school musicals. In most cases, students are prepared to audition for performing arts colleges with high acceptances.

Term:/Credits: Semester (.5)

Prerequisite: NA

#### **Technical Production**

Technical Theatre is a program that allows students hands on opportunity behind the scenes of a show, or large production. Our technical Theatre programs nurture students in costuming, make up, stage management, technical sound and stage lighting. Students practice daily as well as understand the origin and history of theatre arts.

Term:/Credits: Semester (.5)

Prerequisite: NA

#### **Digital Graphics**

This introductory course deals with controlling computer technology to produce an artistic image. Students will learn computer illustration techniques, image manipulation, digital camera use, graphic design visual literacy, and the principles and elements of art in composition. Historical movements in art will also be studied as they relate to student projects.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Yearbook

In this course students will gain skills in one or more of the following areas: page design, advanced publishing techniques, copy writing, editing and photography while producing a creative, innovative yearbook which records school memories and events. There is an emphasis on journalism skills in this class! Participants gain useful, real world skills in time management, marketing, teamwork, and design principles.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Web Design

Web Design is a hands-on introduction to designing, building, and launching websites. Students learn the basics of HTML coding, explore various web development tools, and get practice creating websites using Adobe Dreamweaver. They learn how to make their websites more effective by applying the principles of design as well as usability and accessibility criteria. Finally, students take a look at various career opportunities in web design.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Digital Video Production**

Digital Video Production provides a hands-on introduction to digital video production. It guides students through all phases of digital video production, from planning, executing, and managing a video shoot to editing footage. Students explore methods of sharing and broadcasting digital videos, including platform versions, CDs/DVDs, and web delivery. They also learn about publicizing a digital video, using techniques such as search engines to direct viewers to the production. Finally, students explore career opportunities in digital video production.

Term:/Credits: Semester (.5)

#### **Broadcast Production I**

The course covers a broad range of topics dealing with Broadcast Production. Students will be offered the various skills and techniques required in creating and producing a variety of electronic media programs. In Broadcasting Production, students will learn how to write a script, produce a show, manage a station, promote on air personalities, and record audio for the radio and television.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Broadcast Production II**

This advanced course allows for students to study of the problems and techniques of studio-based, multi-camera, real-time television production. The objective is to have the students prepare, produce, and direct programs for broadcast.

Term:/Credits: Semester (.5)

Prerequisite: Broadcast Production I

#### Friendship News Network I

Welcome to the fast-paced, adrenaline pumping world of broadcast television. Friendship News Network Students create fun and engaging projects to connect with students and staff on our daily broadcast. In addition, you will write scripts, shoot and edit video, interview students and teachers, and run broadcast production equipment. Your contributions will fill the segments on the morning show seen by our entire school each day.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Friendship News Network II

An advanced in depth development of the skills introduced in FNN I. Friendship News Network Students create fun and engaging projects to connect with students and staff on our daily broadcast. In addition, you will write scripts, shoot and edit video, interview students and teachers, and run broadcast production equipment. Your contributions will fill the segments on the morning show seen by our entire school each day.

Term:/Credits: Semester (.5)

Prerequisite: FNN I

#### Introduction to TV Production and Writing I

If you've ever thought about a career in television or photojournalism, then here's the place to start. In this course, you'll learn to produce videos and photography for school events—including FCA's award-winning football games, performances, and much more. In addition, you'll learn to write and produce school news, reviews, and opinion pieces for Collegiate online news site at codefnn.com/collegiate.

Term:/Credits: Semester (1)

Prerequisite: NA

#### Introduction to TV Production and Writing 2

In this course, you'll build on the skills you learned in the first semester while you produce state-of-the-art video news, photo essays, news stories, and more. You'll learn what it's like to work in a professional newsroom as you produce news projects as part of the Friendship News Network news team Prerequisite: Introduction to TV Writing and Production 1.

Term:/Credits: Semester (1)

Prerequisite: Introduction to TV Production and Writing II

#### **Produce A Television Talk Show 1**

Welcome to **KnightCast**, FNN's brand new fast-pacedonline television talk show for advanced students who are seriously interested in pursuing careers in TV journalism. As part of the KnightCast news crew, you'll learn everything it takes to produce a monthly online news program. Using state-of-the-art equipment and software, you'll be assigned a role that's in line with your interests including, producer, director, camera person, photographer, video editor, reporter, news anchor, or scriptwriter. Prerequisites: FNN Introduction to Television Production 1 & 2 and an invitation from the instructor.

Term:/Credits: Semester (1)

Prerequisite: NA

#### **Produce A Television Talk Show 2**

This is a continuation of Produce a Television Talk Show 1.

Term:/Credits: Semester (1)

Prerequisite: Produce A Television Talk Show I

#### **Independent Study for Advanced Students**

This course is for advanced students who would like to develop their own projects such as documentary filmmaking, or multimedia production. Grants may be available to help you fund your project. In order to be considered for Independent Study, you will be required to submit a proposal to FNN High School Coordinator, Flonora Merritt, fmerritt@friendshipschools.org.

Term:/Credits: Semester (1)

Prerequisite: NA

#### Early College and Summer University Programs

If you are serious about majoring in journalism or communications and have a good academic history at Collegiate, consider choosing an early college course during the school year or a summer program on a university campus for college credit. Contact FNN High School Coordinator, Flonora Merritt, fmerritt@friendshipschools.org for more information.

Term:/Credits: Semester (1)

Mandatory Credit Classes for ALL Majors (18+ credits)					
9th Grade	10th Grade	11th Grade	12th Grade		
Pre-AP Algebra I or	Geometry or	Algebra II or	Pre-Calculus or AP		
Algebra I	Algebra II	Pre-Calculus	Calculus or Statistics		
Pre-AP English I or	World Literature	American Literature	English Composition		
Literary Genres		or AP Language &			
		Composition			
Pre-AP World History	World History II or	US History, AP US	DC History/		
or World History I	AP World History	History or AP	American Institution		
		Government &			
		Politics			
Pre-AP Biology or	Chemistry	Anatomy II or	Environmental		
Biology	Anatomy I	AP Biology	Science or AP Biology		
			or AP Environmental		
			Science		
Foreign Language I	Foreign Language I	Foreign Language II			
One requirement below One Requirement below		ement below			
Other Requirements for Graduation					
Art (.5)					
Music (.5)					
Physical Education (.5)					
Health (.5)					

Year Offered	Computer Science Courses	IT Production Courses
10 <sup>th</sup> Grad	■ Computer Science Essential	Principles of Information
	-	Technology
		■ Web Design
11th Grade	■ Computer Science Principles	<ul> <li>Introduction to Computer</li> </ul>
	■ Computer Science A	Science
	Cyber Security	■ Mobile App
12 <sup>th</sup> Grade	■ AP Computer Science Principles	Digital Video Production
	■ Web Design	<ul><li>Robotics</li></ul>
	■ Computer Science and Software	
	Engineering	

#### **Principles of Information Technology**

This is the first course students take in the Pathway of Information Technology. It provides an overview of information technology and introduces students to the basics of hardware and software. Students examine hardware components including peripherals, connectors, and memory. Students explore common operating systems, software applications, and programming languages. Students learn about types of networks and network topology, and they set up an email client/server connection. Students also consider contemporary issues such as security, privacy, and technological inequality. Finally, students explore career opportunities in IT.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### HTML/Web Design

Students will use Nvu or Dreamweaver to learn HTML and set up links and formatting of pages. In the Digital Graphics element of the course, students will learn to manipulate balance, contrast, unity, emphasis and rhythm as well as advanced layering techniques. In the Web Design element, students will learn flow in design, formatting, data representation, HTML and basic scripting.

Term:/Credits: Semester (.5)

Prerequisite:

#### **Introduction to Computer Science**

This course is aimed at students with little or no programming experience. It aims to provide students with an understanding of the role computation can play in solving problems. It also aims to help students, regardless of their major, to feel justifiably confident of their ability to write small programs that allow them to accomplish useful goals.

Term:/Credits: Semester (.5)

Prerequisite:

#### **Computer Science Principles**

This course is designed to introduce students to the central ideas of computer science, to instill ideas and practices of computational thinking and to have students engage in activities that show how computing changes the world. This course is rigorous and rich in computational content and includes computational and critical thinking skills that engage students in the creative aspects of the computer science field.

Term:/Credits: Semester (.5)

#### **Introduction to Programming**

Introduction to Programming uses Python as a basis for learning general programming skills. Students learn programming principles by comparing Python to other programming languages. They use models as a way to quickly solve new problems using knowledge and techniques already learned. Students complete over 60 programs in the course, including both text and graphics/animation programs. In addition to programming, students learn program design, documentation, formal debugging, and testing. Finally, students examine career opportunities in programming.

Term:/Credits: Semester (.5)

#### Prerequisite:

#### Intro to Robotics

In this course, students take on the roles of mechanical engineers, computer scientists and electrical engineers. Students research dynamics, kinematics and sensors. Subjects such as motion planning and obstacle avoidance, velocity and acceleration, serial chain mechanisms, pneumatic actuators, and drive circuits are covered. Students put knowledge into practice through lab settings where robots are created with teams.

Term:/Credits: Semester (.5)

#### Prerequisite:

### Introduction to Engineering Design (IED)

Through hands-on projects, students are exposed to professional communication and collaboration methods, design ethics, and technical documentation. Students use Industry standard 3D solid modeling software to design and document their solutions to design problems and challenges. They, then, communicate their design solutions to peers and members of the professional community. Designed for 9th or 10th grade students, the major focus of IED is the design process and its application. This course will be offered to all 9<sup>th</sup> grade students.

Term:/Credits: Semester (.5)

#### **Engineering**

#### Principles of Engineering (POE)

This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, software control, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work, and communicate solutions. This course is designed for 10th or 11th grade Engineering pathway students.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Digital Electronics (DE)**

Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras, and high definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards, and technical documentation. This course is designed for 10th, 11th, or 12th grade students.

Term:/Credits: Semester (.5)

Prerequisite: N/A

- Cybersecurity

Whether seeking a career in the growing field of cybersecurity or learning to defend their own personal data or a company's data, students in Cybersecurity establish an ethical code of conduct while learning to defend data in today's complex cyberworld. Beta version available Fall 2018 and

full course release for 2019-20.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Introduction to Engineering Design

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects like designing a new toy or improving an existing product.

Term:/Credits: Semester (.5)

#### **Principles of Engineering**

Students explore a broad range of engineering topics including mechanisms, strength of structure and materials, and automation, and then they apply what they know to take on challenges like designing a self-powered car.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Aerospace Engineering

Students explore the physics of flight and bring what they're learning to life through hands-on projects like designing a glider and creating a program for an autonomous space rover.

#### Civil Engineering and Architecture

Students learn important aspects of building and site design and development, and then they apply what they know to design a commercial building.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Computer Integrated Manufacturing

Students discover and explore manufacturing processes, product design, robotics, and automation, and then they apply what they have learned to design solutions for real-world manufacturing problems.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Computer Science Principles**

Using Python® as a primary tool, students develop computational-thinking skills and tackle challenges like designing apps to solve real-world problems for clients.

Term:/Credits: Semester (.5)

Prerequisite: N/A

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

Students identify a real-world challenge and then research, design, and test a solution, ultimately presenting their unique solutions to a panel of engineers.

Term:/Credits: Semester (.5) Prerequisite: N/A

#### Robotics and Control Technologies

The objective of this course is to explain and apply the fundamentals of engineering to introduce the basic concepts related to robotics. In semester one, the course begins by describing the meaning, evolution, and impact of robotics. This course helps you identify career opportunities and develop 21 century skills using robotics. Students will learn how to program a virtual robot using block coding.

In Semester two, students will learn the importance of project management using the engineering design process. Students will build, program, test, and maintain various types of mobile robots. Students will apply what they have learned through a series of robotic demonstrations and competitions. Finally, throughout the course students will examine the current news, trends, and uses of robotic technologies in our community and world.

#### <u>SmartLab – Introduction to Computer Science</u>

In the SmartLab a variety of engineering technology themes are presented depending on the year. The focus this year is **computer science**. This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming (in Python) along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including AP Computer Science Principles and AP Computer Science A courses.

Term:/Credits: Semester (.5) Prerequisite: N/A

## STEM Careers Pathway – Health Careers

Health Careers students must maintain a 2.5 GPA in order to participate in extra-curricular activities. Students with a GPA lower than 2.5 will be placed on academic probation.

Mandatory Credit Classes					
9th Grade	10 <sup>th</sup> Grade	11th Grade	12th Grade		
Pre-AP Algebra I or	Geometry or	Algebra II or	Pre-Calculus or AP		
Algebra I	Algebra II	Pre-Calculus	Calculus or Statistics		
Pre-AP English I or	World Literature	American Literature	English Composition		
Literary Genres		or AP Language &			
		Composition			
Pre-AP World History	World History II or	US History, AP US	DC History/		
or World History I	AP World History	History or AP	American Institution		
		Government &			
		Politics			
Pre-AP Biology or	Chemistry	Anatomy II or	Environmental		
Biology	Anatomy I	AP Biology	Science or AP Biology		
			or AP Environmental		
			Science		
Foreign Language I	Foreign Language I	Foreign Language II			
One require	One requirement below		One Requirement below		
Other Requirements for Graduation					
Art (.5)					
Music (.5)					
Physical Education (.5)					
Health (.5)					

Health Careers Electives				
10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>		
Sport Medicine	Medical Interventions	Clinical Rotations (Sports Medicine)		
Principles of Biomedical Science	Anatomy & Physiology I	Anatomy & Physiology II		

## STEM Careers Pathway – Health Careers

#### Principles of the Biomedical Sciences (PBS)

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. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Health Careers Exploration**

Health Careers Exploration is a survey course designed to introduce students to a broad spectrum of health careers. The course covers careers from the five pathways: diagnostic services, therapeutic services, health informatics, support services, and biotechnology research and development. For each career they study, students examine the main tasks and challenges of professionals in that career, the treatments they administer, and the interaction those professionals have with other professionals. Students learn about the educational requirements and the employment and salary outlook for each career, and they evaluate how their own skills, abilities, and interests align with different careers. Where possible, students do authentic hands-on work that a professional would do, such as reviewing scans and MRIs, taking vital signs, treating a wound, and completing dental charts.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Medical Interventions (MI)**

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Foundations of Anatomy & Physiology I

Foundations of Anatomy and Physiology I is the first in a set of two semester-long lab courses that introduce students to basic anatomy and physiology. The first unit covers directional terminology and those aspects of chemistry and cellular biology that students must master in order to study

## STEM Careers Pathway - Health Careers

anatomy and physiology. It also teaches students how to use lab equipment safely. Then students learn about the following body systems: integumentary, skeletal, muscular, nervous, and endocrine, with separate lessons on the brain and the senses. Students make connections to their personal health and the prevention of disease for each body system studied. As they conduct research, complete wet labs, participate in a wide range of group activities, and take quizzes and exams, students develop the skills they need for college-level work and careers in the health professions.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### Foundations of Anatomy & Physiology II

Foundations of Anatomy and Physiology II is the second in a set of two semester-long lab courses that introduce students to basic anatomy and physiology. It builds on the knowledge and skills students developed during the first semester as it teaches students about the following body systems: cardiovascular, respiratory, lymphatic system and immunity, digestive, urinary, and reproductive. This course uses a wide range of assessment products in addition to quizzes and exams to evaluate students' mastery of the material. For their course project, students use models and demonstrations to illustrate an anatomical or physiological function of the human body that they learned about in A&P I and II.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Clinical Dentistry Rotations**

The Fundamental of Theoretical and Clinical Dentistry provide students an opportunity to get a "real" hands-on interactive understanding of dentistry. This clinical rotation provides students with inside and outside classroom learning experiences (shadowing events, site visits to Allied Health facilities, and introductions to all aspects of dental practice). Successful completion of the Clinical Rotation in Dentistry prepares students to take, pass and earn a certification from Precision Exam in Dental Assisting II, and III.

Term:/Credits: Semester (.5)

## STEM Careers Pathway and Health sss

#### **Sports Medicine**

The Introduction to Sports Medicine course is a two (2) semester course designed for students who are interested in fields such as athletic training, physical therapy, medicine, nursing, fitness, kinesiology, nutrition and other sports medicine related fields. This course has two teaching components both in the classroom and lab (AT room or Weight room), both will require a lot of hands on applications. The course focuses on the basic information and skills important in the recognition of care, prevention, and rehabilitation of athletic injuries.

Term:/Credits: Semester (.5)

Prerequisite: N/A

#### **Biomedical Innovation**

Students build on the knowledge and skills gained from previous courses to design their own innovative solutions for the most pressing health challenges of the 21st century.

Term:/Credits: Semester (.5)

Prerequisite: NA

#### **Environmental Sustainability**

Students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply, and renewable energy.

Term:/Credits: Semester (.5) (Science Credit)

Prerequisite: N/A

#### **Human Body Systems**

Through projects such as determining the identity of a skeleton using both forensic anthropology and DNA analysis, students examine the interactions of human body systems and apply what they know to solve real-world medical cases.

Term:/Credits: Semester (.5)

#### **BUILD**

BUILD's mission is to use entrepreneurship to excite and propel disengaged, students through high school to college success. In this introductory business course, students learn the basics of planning and launching their own successful business. Whether they want to start their own money-making business or create a non-profit to help others, this course helps students develop the core skills they need to be successful. They learn how to come up with new business ideas, write a business plan, attract investors, market their business, and manage expenses. The course culminates in a presentation where student teams present their business plans to venture capitalists to receive funding.

Term: Year Credit: 1.00