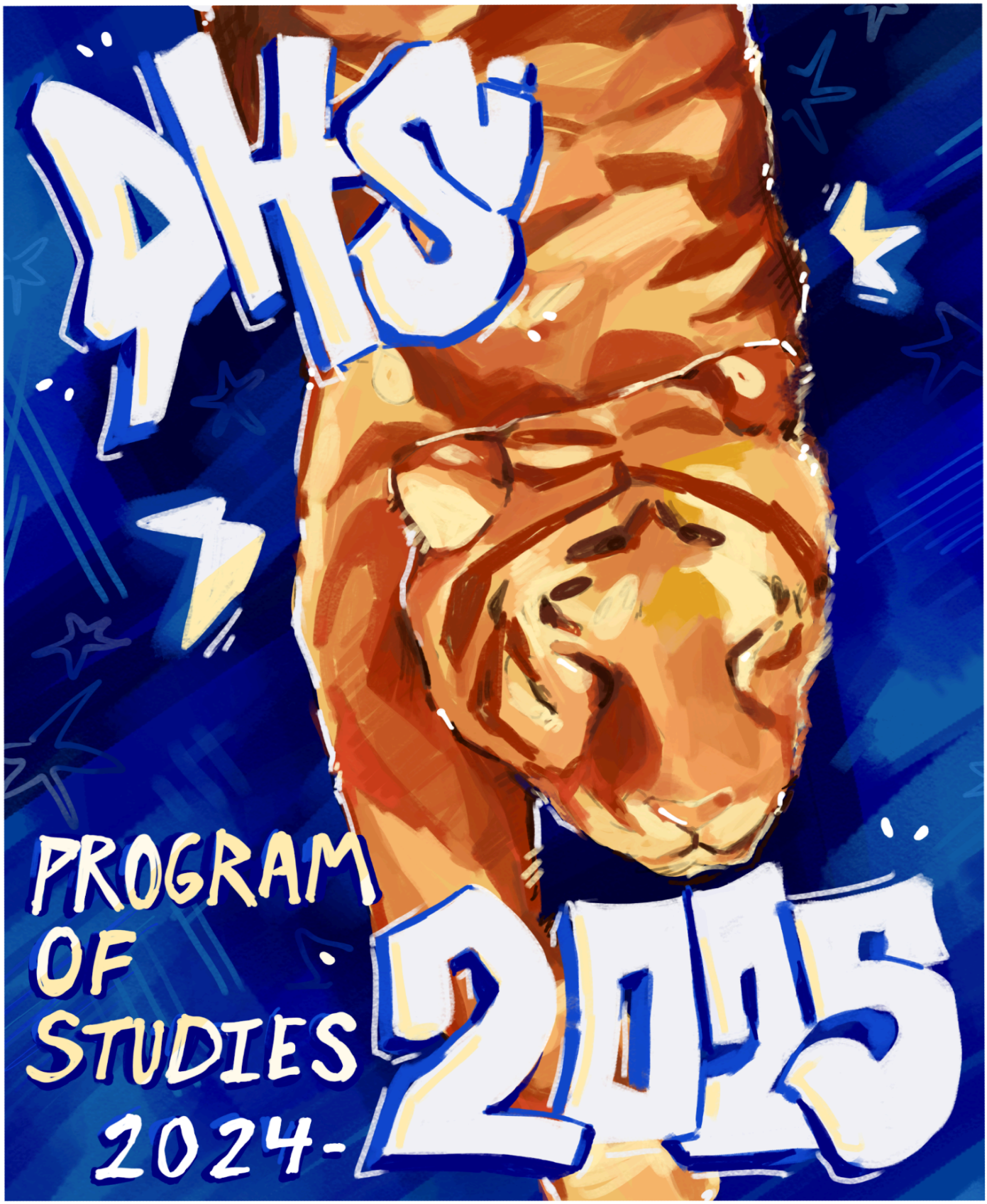



**Created by: Charlotte Loy**

Dear Students and Parents/Guardians,

On behalf of the Douglas High School faculty and administration, I am pleased to share with you the 2024-2025 Program of Studies. This book is designed to assist in making the best choices during the course selection process. We look forward to assisting both students and parents/guardians in making decisions to prepare you for life after Douglas High School.

I strongly encourage you to use this guide to see all the opportunities available to you while formulating a schedule that will meet your needs and future goals. There is information about new courses, college and career explorations, Pathways, graduation requirements, work study, as well as outside of the school opportunities such as Co-op classes and after-school music, drama, and color guard activities for which you can earn credits. Parents/guardians are encouraged to have conversations with their child about academic goals and course selection. Your active participation is an essential component in the successful development of your child. Please know that teacher recommendations and course selections can be viewed in the iPass Parent Portal.

Mrs. Carpenter and Mrs. O'Brien will help advise you on your future planning, both at Douglas High School and beyond. Work with your counselors on college and career planning, decision making, selection of your academic program, and personal and developmental matters. Contact with counselors may be established via phone, email, or through Mrs. Searl, the school counseling secretary at 508-476-4100 x42102.

We look forward to guiding you through your high school years so you may achieve your current and future goals.

Sincerely,

Robert Ringuette
Principal

Desi Vega
Assistant Principal

## Douglas High School Administration

33 Davis Street, Douglas, MA 01516
Telephone**:** 508-476-4100
Fax: 508-476-7310
Website**:** www.douglasps.net

Robert Ringuette, Principal
Desi Vega, Assistant Principal
Mary Sokol, Athletic Director

## Department Leaders

Kevin Riordan, Math
Emily Mayo & Emily Costa, English
Shaelyn Floria, World Language
Jon Waggenheim, Science & Engineering
Al DeNoncour, Art/Business/F&CS/Music/Info. Technology
Mary Sokol, PE/Health Coordinator
Denise Mulligan, Special Education

## Counseling Dept./Health Services

Jill Carpenter, Director of School Counseling
Kristen O'Brien, School Counselor
Lindsey Ryan, Adjustment Counselor
Jessica Hurley, School Psychologist
Melanie Gaucher, School Nurse

## Douglas Public School – District Administration

21 Davis Street, Douglas, MA 01516
508-476-7901
Paul Vieira, Superintendent of Schools
Cortney Keegan, Business Manager
Greg Rosenthal, Director of Student Support Services
Cindy Socha, Director of Curriculum
John Calabresi, Technology Director

## School Committee

Heather Morin, Chairperson
Monique Salvas, Vice Chairperson
Meagan Rodzan
Beth Bergstrom
Theresa Brooks

# Table of Contents

## District Mission Statement

Douglas School District provides diverse learning experiences that meet the academic, social, physical, and emotional needs of all students. We provide a safe, supportive, and challenging learning environment in which students may achieve academic success and personal growth. Decisions are made in the best interest of our students.

## Douglas High School Statement of Beliefs

The Douglas High School community believes in a learning environment that is safe, supportive, and intellectually challenging. We maintain high expectations for all students and emphasize the skills necessary to be college and career ready. We encourage students to be informed citizens and lifelong learners.

## 21st Century Learning Expectations

*The DHS student will:*

- Read critically and write effectively
- Speak confidently and logically
- Listen for understanding
- Demonstrate critical thinking; gather and analyze information to solve problems
- Develop skills necessary to lead a healthy and balanced physical and emotional life
- Engage in creative, expressive, and innovative learning through art, music, drama, and/or technology
- Demonstrate personal, social, and civic responsibility

## The Douglas High School Community Believes

- That all students have the ability to learn
- In providing a comprehensive, challenging, and engaging curriculum
- Learning is most effective when meaningful connections are made
- Students learn best when they are encouraged to think, work, and communicate effectively
- In exposing students to intellectual and cultural experiences
- In respect for diverse cultural and individual differences
- In equal opportunity to succeed academically and develop socially

## Core Values

**S**elf Reliance | **P**rogress | **I**nclusiveness | **R**espect | **I**ntegrity | **T**enacity

# 2024-2025 COURSE SELECTION

Dear Parent/Guardian:

We look forward to working with you and your students throughout the scheduling process. Our goal is to give each student the best schedule based on the requirements of the school and the student's individual needs. School counselors will be meeting with all students to review the course selection process.

Both you and your student should use the iPass online system to view course selections and teacher recommendations. In addition, we encourage you to use the Program of Studies which can be found on the School Counseling website to plan for courses to be taken next year. Courses need to be selected in the major areas of English, Math, Science, Social Studies and World Language in order to meet graduation requirements and college admission requirements. They should also choose courses that will help them reach their individual career goals and plans after graduation.

Students have already received teacher recommendations electronically in iPass as to the level that they feel your student should be in. These are only recommendations and you have the opportunity to agree or disagree with them by checking off the courses that suit your student. However, in the case of Honors and some AP courses, teacher recommendation is strongly encouraged in that specific area to be entered into that class. Also, parents/guardians and students can review comments teachers have made to help with any decisions.

Students are asked to select elective courses from areas such as music, art, industrial technology, family consumer science, business, or from the major course areas. **We want to make it clear that elective courses are not guaranteed**. We will do our best to place a student in their top elective choice. However, our main concern is to schedule the required courses necessary for graduation.

The course selections must be completed in iPass as soon as possible. Failure to do so will result in delays in the scheduling process and may result in your student not having a schedule or having one developed for them by the counseling office with no opportunity for their input or yours.

Schedule changes can be made through first quarter progress reports for full year courses or two weeks after the start date for half year courses. Changes will depend on the number in a class and our ability to make changes according to the master schedule. Only extenuating circumstances will be considered for any additional changes.

Please feel free to contact us with any questions or problems.

Jill Carpenter
Director of School Counseling
Counselor for 9th-12th L-Z

Kristen O'Brien
School Counselor 9th -12th A-K

# MassCore

What is MassCore?

MassCore is a state recommended, rigorous program of study geared to develop and prepare students for college and career options. The recommended program of studies includes:

| Length | Subjects |
|---|---|
| 4 years | English |
| 4 years | Math |
| 3 years | Lab-Based Science |
| 3 years | History/Social Science |
| 2 years | of the same World Language |
| 1 year | Fine Arts |
| 5 additional "core" courses | Career & Technical education, or any other subject areas |
| As required by law (4 courses) | Physical Education (MGL c. 71, s.3) |
| Additional learning opportunities including | • AP classes<br>• Dual Enrollment/Early College<br>• Senior project/capstone coursework<br>• Online courses for high school or college credit<br>• Service or work-based learning |

To learn more about MassCore visit the Department of Education website at https://www.doe.mass.edu/ccte/ccr/masscore/

# *Douglas Graduation Requirements*

All Douglas High School students are required to register for 35 credits each year. This is the equivalent to a total of seven full-year courses. Students are also required to earn a minimum of 124.5 credits for graduation.

| **Subject** | **Requirements** |
|---|---|
| English | 4 years (20 credits) |
| Math | 4 years (20 credits) |
| Social Studies | 4 years (20 credits)<br>*3 years (15 credits) starting with the class of 2026 |
| Science | 3 years (15 credits)<br>*All incoming Freshmen will take Biology |
| World Language | 2 years (10 credits)<br>*State universities/colleges require two years of the same foreign language for admission. |
| Physical Education | 4 years (half-year) (8.75 credits) |
| Health | 1 course (half-year) (2.5 credits) |
| Fine Arts | One full year or two half-year courses (5 credits) |
| Senior Capstone | 1 course (half-year) (1.25 credits) |

The following courses meet the Fine Arts requirement (must total 5 credits): Art electives, Music Performance, Night Band/Chorus/Color Guard, Ukulele Ensemble, TV Production, Music Technology & Audio Production, Music Theory, Spanish Music & Dance, Graphic Design, Drama & Stagecraft, and VHS courses as approved.

## Promotion Requirements

| **Promotion Grade 10** | **Promotion Grade 11** | **Promotion Grade 12** | **Graduation** |
|---|---|---|---|
| 25 credits | 60 credits | 92.5 credits | 124.5 credits |

## MCAS

All students must pass state MCAS tests in English Language Arts, Mathematics, and Science/Technology-Engineering to obtain a Douglas High School diploma. Students who do not meet the minimum requirements in each area will also be required to fulfill the requirements of an Educational Proficiency Plan.

## Community Service Requirement

All students are required to complete 15 total hours of community service for graduation. Community service requirements for the 2020-2021 school year were waived due to Covid-19.

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|---|---|---|---|
| 3 hours | 3 hours | 3 hours | 6 hours |

## Credit for Foreign Study

Students who are away for a term or year to participate in a student exchange program or otherwise study abroad, may receive credits toward high school graduation when (1) study plans are approved by the school administration in advance; and (2) the institution where the study occurred submits a record of the student's work. The principal and school counselor will evaluate the work and assign credit according to standards prevailing at Douglas High School.

## Massachusetts State Seal of Biliteracy

The Massachusetts State Seal of Biliteracy is an award provided through the Massachusetts Department of Education. It recognizes high school graduates who attain high functional and academic levels of proficiency in English and a world language through an endorsement seal on their transcripts and diploma. To receive the Massachusetts State Seal of Biliteracy a student must receive a qualifying score on the ELA MCAS and an approved world language assessment to document the student's proficiency in reading, writing, listening, and speaking.

The Massachusetts State Seal of Biliteracy also provides colleges and universities with a method to recognize and give credit to applicants for attainment of high level skills in languages. Currently several public and private institutions of higher learning in Massachusetts provide credits for prior learning and/or advanced course placement for students who have earned the Seal of Biliteracy. Those public institutions include: Bridgewater State University, Bunker Hill Community College, Cape Cod Community College, Massachusetts Bay Community College, Middlesex Community College, Mount Wachusett Community College, North Shore Community College, Northern Essex Community College, Quinsigamond Community College, Salem State University, and Worcester State University.

# *COLLEGE REQUIREMENTS*

### Course Requirements for Entering College Freshmen at Massachusetts State Universities

- English: 4 courses
- Mathematics: 4 courses (Algebra I & II, Geometry and Trigonometry or comparable coursework) students must take mathematics during the final year of high school
- Sciences: 3 courses (from Natural Science and/or Physical Science and /or Technology/Engineering) including 3 courses with laboratory work
- Social Studies: 2 courses (including 1 course in U.S. History)
- World Language: 2 courses (in a single language)
- Electives 2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences).

### Minimum GPA Requirement at Massachusetts State Universities

The minimum average GPA for freshman applicants, weighted for accelerated (Honors and Advanced Placement) courses, is 3.0 for both the state universities and the UMass campuses. Calculating the weighted GPA is conducted by admissions offices and does not reflect policies and practices of Douglas High School. This GPA is based on all academic courses completed and grades received for courses in which the student is currently enrolled. An applicant with a high school weighted GPA below 2.0 will not be admitted to a state university or Umass undergraduate campus.

### SAT/ACT Score Requirements for Massachusetts State Universities

All freshman applicants who meet the minimum average weighted GPA requirement of 3.0 and are within three years of their high school graduation should submit their SAT or ACT scores. Please note that some MA State Universities and UMASS campuses are now test optional. Please contact the admissions office at these institutions for further information.

### Massachusetts Community College Admissions Requirements

The Massachusetts Community Colleges are committed to an open admissions policy. Students who have earned their high school diploma have the opportunity to enroll in a degree or certificate program. Please note that admission to some programs is competitive or may require the completion of prerequisite courses.

### Scholastic Assessment Test (SAT)

The SAT is required by some institutions of higher learning. It is made up of three sections: reading, math and writing & language . The test is given seven times each year at test centers determined by the College Board. It is recommended that the SAT be taken during the spring of junior year and may be repeated in senior year.

### ACT

The ACT test is similar to a SAT test; however, it is more classroom based and consists of English, Math, and Science sections with Writing being optional but recommended. Most colleges accept the ACT's in place of SAT's. Check with individual colleges for more information.

# Course Selection

## Changing Classes

The add/drop period for classes ends with the first progress report for full year courses or two weeks after the start date for half year courses. Any changes to a student's schedule after the first progress report require a review with their school counselor, administration, teachers, student and parent/guardian and must be due to a compelling reason for the change. Changing or dropping VHS courses will only be allowed if it meets the guidelines set forth by Global Consortium, the company that regulates Virtual High School courses. The final decision regarding schedule changes will be with the principal.

## Course Availability

Administration and the school counseling office work together to schedule student's course choices to the best of their ability. However, course availability is subject to change due to staffing changes and/or budgetary issues, etc.

## Guidelines for Enrollment in Advanced Placement Classes

We encourage students to take the most challenging course load possible in order to promote college readiness.

- Students must successfully complete the appropriate pre-requisite course.
- Teacher recommendation is *strongly* suggested.
- Students are required to take the AP exam at their expense (*). The AP exam is the final exam for the course and is required to receive AP credit on the transcript. Failure to take the AP exam will result in the student receiving honors credit on their transcript and may result in a fee through the CollegeBoard.
- Students should be able to read, understand, and interpret college-level texts and be able to incorporate prior learning, textual analysis, attention to detail, and synthesis of ideas.
- Students should demonstrate exemplary work habits and time management skills and take personal responsibility for attendance and work requirements.
- Students must complete required summer work prior to the beginning of the school year.
- Students who wish to take more than 3 AP courses in one school year should discuss this with their counselor.

*Students with financial need should speak with their school counselor to make arrangements regarding testing fees.

All course recommendations are made assuming successful completion of the current courses and are based on past performance on mastering concepts and student effort.

# GRADING

**Douglas High School Grading**

- The passing grade at DHS is 65%.
- The minimum grade for first, second, and third terms is 45%.
- The minimum grade for fourth term is 0%.
- This system may keep a failing grade at DHS from being academically destructive where the student mathematically has no chance of achieving a passing grade for the year.
- The goal of the policy is to prevent a student from mathematically failing a course in the first few terms; it is not to reward poor academic performance, but to minimize the impact of the failing grade in order to allow a second chance at success.
- Senior Capstone and Senior PE are one semester courses. The minimum grade for the second quarter of these courses is 0%.
- VHS courses are exempted from the grading policy because the grading is not done through DHS. These courses are one semester long unless they are AP courses.

## GRADING SYSTEM

Report Card grades are numerical. The literal equivalents are:

| | | | |
|---|---|---|---|
| A+ | 96-100 | C+ | 77-79 |
| A | 93-95 | C | 73-76 |
| A- | 90-92 | C- | 70-72 |
| B+ | 86-89 | D+ | 67-69 |
| B | 83-85 | D | 65-66 |
| B- | 80-82 | F | 0-64 |

## Failure of a Course

Students failing a course or courses will be responsible for making up that course. If the failed course/courses cannot be put into the student's schedule, they will be responsible to make the course up in summer school or through an approved online credit recovery program. These options will be at the expense of the student. Failure to meet these requirements may result in the student not graduating on time.

## Summer School

Students may take up to two courses at an approved summer school to make up for a failing course grade. The summer school grade and the student's final grade from DHS will be averaged together and must be a 65 to receive credit.

- The minimum grade for a student to attend summer school is 55%.
- If a student receives the minimum grade in two of the first three quarters, that student will not be eligible to attend summer school.
- The course must be made up in the summer immediately following the failure.
- No credit will be given for work undertaken to improve a grade already considered passing. The course and grade will be recorded on the student's transcript.

## Class Rank

Class Rank is a cumulative computation of a student's academic standing in their class. It is a weighted ranking system in which both the levels and course grades are used to determine Grade Point Average (GPA) and class standing. Rank is calculated by multiplying the report card grade by the weight given to the level of the course which yields the weighted grade.

Level 1 college courses and electives receive a value of 1.0
Level 2 Honors courses receive a value of 1.05
Level 3 AP courses receive a value of 1.1

Class rank will not be calculated until the end of junior year. This class rank will be based on six semesters. Senior final class rank will be based on eight semesters.

Student's transcripts display the numeric grade equivalent as well as class rank, names of courses and grades for each completed course.

*Students must have attended Douglas High School their entire junior and senior years to be eligible for Valedictorian, Salutatorian, and Student Achiever status.

# BVExcel

BVExcel (Blackstone Valley Excellence in Course Enhanced Learning) is a collaborative model for Blackstone Valley School Districts to provide free non-traditional course offerings that will expose students to career options, build industry skills, and provide workforce opportunities that would be difficult to offer in isolation. BVExcel courses are offered each semester in the afternoons or evenings in the Blackstone Valley. Courses will be reflected on transcripts and students earn 2.5 credits for each course they complete. Please visit https://bvexcel.org/ for more information.

# Competency Designations

The DHS Competency Designations are designed to provide structured courses of study for students who have a particular focus. This is similar to a college major, where certain courses and activities are required to earn the Competency Designation on their transcript and diploma.

Our intent is to raise the academic achievement of our students, help students develop plans for their future college and career success, and add structure and rigor to their Senior Capstone, community service, internships, and work study. Nine Competency Designations will be available for the 2024-2025 school year:

Art Competency
Business Competency *
Child Development Competency
Criminal Justice Competency
Culinary Arts Competency
Global Competency*
Health Sciences Competency*
Social Studies Competency
STEM Competency *

*Also offered as a Competency Designation with Distinction.

To meet the requirements of a Competency Designation, a student must meet the following criteria:

- Students must meet with their School Counselor no later than the close of first semester senior year to declare their intent of graduating with a Competency Designation and to make sure they have met the requirements.
- Students need to have a grade of 80 or higher in each course required by their specific Competency.
- Students must complete a Senior Capstone project that relates directly to their Competency. The project must be approved by both the Senior Capstone instructor as well as their School Counselor.

- In addition, students must complete the following prior to graduation unless otherwise specified:
    - 12 hours of community service directly related to their Competency. This is in addition to the 15 hours required of all students for graduation. Completed documentation of community service hours should be turned into the School Counseling Department.
    - A 25 hour internship or work study experience related directly to their Competency .

| **Art Competency Designation** | | | | |
|---|---|---|---|---|
| The Art Competency is designed for students who have an interest in pursuing the visual arts. Students complete a diverse array of classes to develop their skills in the fine arts, culminating with a portfolio of their work suitable for application to a fine arts college program. | | | | |
| Required Courses | | | | |
| Art Foundations | Drawing & Painting I or Sculpture I | Drawing & Painting II or Sculpture II | Advanced Drawing & Painting or Advanced Sculpture | Portfolio Prep |
| Electives (12.5 credits)<br>Choose from any of the courses below: | | | | |
| Art electives (2.5 each) | Band (up to 5) | Chorus (up to 5) | Graphic Design (2.5) | |
| Spanish Music and Dance (2.5)<br>TV Production I or II (5) | | | | |

* Students may choose to replace the community service or internship/work study requirement with involvement in the Art Club for two years.

| **Business Competency Designation** | | | |
|---|---|---|---|
| The Business Competency provides instruction and opportunities in how to create, analyze, organize, market, and understand businesses. | | | |
| Required Courses | | | |
| Intro to Business | Creating Your Own Business | Marketing | Intro to Economics or AP Microeconomics |
| Electives (12.5 credits)<br>Choose from any of the courses below: | | | |

| | | | |
|---|---|---|---|
| Manufacturing I or II (5) | Intro to Psychology (2.5) | Intro to Sociology (2.5) | Marketing II (2.5) |
| Personal Finance Basics (2.5) | Personal Finance Investing (2.5) | Graphic Design (2.5) | AP Microeconomics (5) |
| AP Statistics (5) | AP Calculus (5) | AP Language and Composition (5) | PLTW Engineering Essentials (5) |
| PLTW Intro to Engineering Design (5) | PLTW Principles of Engineering (5) | PLTW Civil Engineering & Architecture (5) | PLTW Aerospace Engineering |
| School Store Intern (5) *cannot count as internship if used here | | | |
| Additional requirements for Distinction | | | |
| AP Statistics and AP Microeconomics | | | |

* Students may choose to replace the community service or internship/work study requirement with involvement in the DECA program for two years.

| **Child Development Competency Designation** | | | | |
|---|---|---|---|---|
| The Child Development Competency is designed to prepare students for further education and careers working in child care and early childhood education fields. | | | | |
| Required Courses | | | | |
| Childbirth and Development | Family Life | Honors Anatomy and Physiology | Intro to Psychology | Personal Finance Basics |

| **Criminal Justice Competency Designation** | | | | |
|---|---|---|---|---|
| The Criminal Justice Competency gears students to research methods for criminology, criminological theory and the psychology behind criminal behavior. | | | | |
| Required Courses | | | | |
| Criminal Justice | Forensics | Intro to Psychology | Intro to Sociology | Contemporary Affairs/American Government (5) |
| Electives (10 credits)<br>Choose from any of the courses below: | | | | |

| | | |
|---|---|---|
| Chemistry (5) | Spanish III or higher (5) | AP Statistics (5) |

| **Culinary Arts Competency Designation** | | | | |
|---|---|---|---|---|
| The Culinary Arts Competency is designed to prepare students for further education and careers working in the restaurant, food preparation, and nutrition fields. | | | | |
| Required Courses | | | | |
| Food and Nutrition: Kitchen Basics | Baking and Decorating | Cooking and Culinary Arts | Biology | Health |
| Electives (5 credits)<br>Choose from any of the courses below: | | | | |
| Personal Finance Basics (2.5) | Personal Finance Investing (2.5) | Intro to Business (2.5) | Creating Your Own Business (2.5) | |

| **Global Competency Designation** | | |
|---|---|---|
| The Global Competency allows students to explore other cultures and issues that affect the world as a global society. The Competency focuses on world language, political science, economics, and other cultures from around the world. | | |
| Required Courses | | |
| 3 years of Spanish | Contemporary Affairs/American Government | |
| Electives (10 credits)<br>Choose from any of the courses below: | | |
| Art electives (2.5 each) | Band (up to 5) | CP or AP Environmental Science (5) |
| Biology (5) | Chorus (up to 5) | AP Statistics (5) |
| Intro to Microeconomics (5) | AP Microeconomics (5) | Spanish electives (2.5) |
| Additional requirements for Distinction (10 credits) | | |
| AP Spanish (5) | AP Microeconomics (5) | |

* Students may choose to replace the community service or internship/work study requirement with meeting the requirements of the Award of the Massachusetts Seal of Biliteracy.
* International travel may be used for 5 credits with approval.

| **Health Sciences Competency Designation** | | |
|---|---|---|
| The Health Sciences Competency is designed to prepare students for college programs and careers in medical or veterinary fields. | | |
| Required Courses | | |
| 4 years of Math | Biology | Chemistry |
| Electives (15 credits)<br>Choose from any of the courses below: | | |
| AP Biology (5) | AP Calculus (5) | AP Chemistry (5) |
| Zoology (2.5) | Biomedical (5) | Forensics (2.5) |
| AP Statistics (5) | Honors Anatomy & Physiology (5) | |
| Additional requirements for Distinction | | |
| One AP Math course and four Sciences courses, one at at the AP level | | |

| **Social Studies Competency Designation** | | |
|---|---|---|
| The Social Studies Competency provides students a focus on historical content through world and national events combined with exposure to social, psychological and economic theories and how they impact world events. | | |
| Required Courses | | |
| Four years of Social Studies with one course taken at the AP level | | |
| Electives (10 credits)<br>Choose from any of the courses below: | | |
| Intro to Psychology (2.5) | Intro to Sociology (2.5) | Criminal Justice (2.5) |
| Intro to Microeconomics (2.5) | AP Microeconomics (5) | |

*Students may choose to replace the community service or internship/work study requirement with involvement in the History Club for two years.

| STEM Competency Competency Designation | | | |
|---|---|---|---|
| The STEM Competency is designed to prepare students for college programs and careers in Science, Technology, Engineering, or Math fields. | | | |
| Required Courses | | | |
| 4 years of Math | | 3 years of Science: Biology, Chemistry, Physics, or Environmental Science | |
| Electives (20 credits)<br>Choose from any of the courses below: | | | |
| AP Biology (5) | Honors Anatomy & Physiology (5) | Marine Biology (2.5) | Biomedical (2.5) |
| AP Chemistry (5) | AP Physics I and II (5) | AP Environmental Science (5) | Technology Engineering (5) |
| PLTW Engineering Essentials (5) | PLTW Introduction to Engineering Design (5) | PLTW Principles of Engineering (5) | PLTW Civil Engineering & Architecture (5) |
| PLTW Aerospace Engineering (5) | Manufacturing I and II (5) | Mechanical Drafting (2.5) | Architectural Drafting (2.5) |
| Zoology (2.5) | Forensics (2.5) | Meteorology (2.5) | Astronomy (2.5) |
| AP Statistics (5) | AP Calculus (5) | Robotics I and II (5) | Intro to Programming in Java (2.5) |
| Introduction to Python (2.5) | Advanced Programming in C++ (2.5) | AP Computer Science (5) | Graphic Design (2.5) |
| Music Technology & Audio Production (5) | TV Production I and II (5) | Office Suite (2.5) | |
| Additional requirements for Distinction | | | |
| One AP Math course and four Sciences courses, one at at the AP level | | | |

*Students may choose to replace the community service or internship/work study requirement with involvement in the Science Club for two years.

# *Innovation Pathways*

## Manufacturing

The **Manufacturing Innovation Pathway** at Douglas High School will align a series of courses and experiences which will allow students to achieve industry recognized credentials such as MACWIC Level I and II, and OSHA-10. Participation in this pathway can lead students to opportunities for meaningful careers in manufacturing upon the completion of needed post-secondary education and training.

Students will be required to take a series of courses through the Project Lead the Way (PLTW) curriculum, several core courses, and electives related to the field of manufacturing. Students will complete this pathway with a capstone project, internship, or both. Students will work closely with an advisor to ensure they are meeting all requirements of this program and will be recognized for their achievement at graduation.

You may learn more about Innovation Pathways at this DESE link:
https://sites.google.com/view/innovation-pathways/home?authuser=0

# *Courses by Department*

## ART

**Douglas High School Expectations for Student Learning Assessed by Art courses include:**

**The DHS student listens for Understanding.**
**The DHS student demonstrates critical thinking.**
**The DHS student develops skills necessary to lead a healthy and balanced physical and emotional life.**
**The DHS student engages in creative, expressive, and innovative learning through art, music, drama and/or technology.**

**Art Foundations** **#531**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
The Art Foundations course is a half year introductory curriculum incorporating basic elements and principles of design and a variety of two-dimensional and three-dimensional media. Materials include (but are not limited to) pencil, paint, colored pencil, pastel, and clay. Art history and appreciation is also introduced and occasional written work is assigned. A sketchbook is required for this course.

**Drawing & Painting I** **#532**
**Grade 9-12** **2.5 Credits**
*Prerequisite: Art Foundations*
The Drawing & Painting I course is a half year curriculum that builds on skills acquired in Art Foundations and emphasizes both technical and conceptual themes. Students are expected to problem-solve and think creatively through a variety of 2D media, including (but not limited to): pencil, charcoal, paint, colored pencil, oil and/or chalk pastel, and printmaking. Art history is continued, and occasional written work is assigned. A sketchbook is required for this course.

**Sculpture I** **#533**
**Grade 9-12** **2.5 Credits**
*Prerequisite: Art Foundations*
The Sculpture I course is a half year curriculum that builds on skills acquired in Art Foundations and emphasizes both technical and conceptual themes. Students are expected to problem-solve and think creatively through a variety of 3D media, including (but not limited to): clay, paper mache, plaster, wire, and recycled materials. Art history is continued, and occasional written work is assigned. A sketchbook is required for this course.

**Drawing & Painting II** **#534**
**Grade 10-12** **2.5 Credits**
*Prerequisite: Drawing & Painting I*
The Drawing & Painting II course is a half year curriculum that challenges students to expand on the elements and principles of design through the use of 2D media and techniques. Materials may include (but are not limited to) graphite, charcoal, ink, pastels, mixed media, printmaking, watercolor and acrylic. Emphasis will be placed on developing technical skills as well as creative expression; in each artwork, students will be expected to solve design problems while communicating their own creative voice. Students will also explore art history by viewing work of various cultures as well as contemporary artists. Digital collection of student work will be curated. A sketchbook is required for this course.

**Sculpture II** **#535**
**Grade 10-12** **2.5 Credits**
*Prerequisite: Sculpture I*
The Sculpture II course is a half year curriculum that challenges students to expand on the elements and principles of design through the use of 3D media and techniques. Materials may include (but are not limited to) textiles, clay, wood, found objects, plaster, paper mache, wire, and stone. Emphasis will be placed on developing technical skills as well as creative expression; in each artwork, students will be expected to solve design problems while communicating their own creative voice. Students will also explore art history by viewing work of various cultures as well as contemporary artists. Digital collection of student work will be curated. A sketchbook is required for this course.

**Advanced Drawing & Painting (H)** **#536**
**Grade 11-12** **2.5 Credits**
*Prerequisite: Drawing & Painting II*
The Advanced Drawing & Painting course continues to challenge students to push boundaries of the elements and principles of design through the use of two-dimensional media and techniques. Materials include (but are not limited to) graphite, charcoal, ink, pastels, mixed media, printmaking, watercolor and acrylic. This course emphasizes conceptual themes, and developing personal style/ point of view through visual expression to create a collection of work. In each artwork, students will be expected to solve design problems while communicating their own creative voice. Art history is continued, and written work is assigned. A digital collection of student work will be curated. A sketchbook is required for this course.

**Independent Art (H)** **#537**
**Grade 11-12** **2.5 Credits**
*Prerequisite: At least one Advanced Art level and approval of the instructor*
The Independent Art curriculum is exploratory in nature, balancing both independent and directed projects that use a wide range of media. Portfolio work is continued with students interested in furthering their art education after graduation. A portfolio is required in addition to regular course work. Written work is also assigned.

**Portfolio Prep (H)** **#538**
**Grade 11-12** **2.5 Credits**
*Prerequisite: At least one Advanced Art level and approval of the instructor.*
The Portfolio Preparation curriculum is designed for students interested in pursuing their art education after graduation. The course is exploratory in nature, emphasizing independent projects using a wide range of mediums. This course should ideally be taken either the 2nd half of junior year or the 1st half of senior year. Enrollment requires teacher consent. Written work is also assigned throughout the year. A sketchbook is required for this course.

# BUSINESS

**Douglas High School Expectations for Student Learning Assessed by Business courses include:**

**The DHS student listens for Understanding.**
**The DHS student demonstrates critical thinking.**
**The DHS student develops skills necessary to lead a healthy and balanced physical and emotional life.**
**The DHS student engages in creative, expressive, and innovative learning through art, music, drama and/or technology.**

**Introduction to Business** **#746**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Introduction to Business introduces business basics while focusing on preparing students to start and manage their own small business. Students will learn about core business functions such as marketing and accounting while also gaining an understanding of innovation, competition, production, human resources, economics, globalization, and social, environmental, and legal issues of business. Students will get hands-on experience by managing the school store.

**Creating Your Own Business** **#752**
**Grade 9-12** **2.5 Credits**
*Prerequisite: Introduction to Business*
The students will build on concepts from Into to Business while creating a business plan. This class builds toward a "Shark Tank" style final presentation. Students will get hands-on experience by managing the school store and making decisions using business data regarding product selection.

**Marketing I** **#747**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
This class introduces the student to the world of marketing. Through a variety of activities, the student learns about business and marketing basics. Students learn about global marketing concepts and marketing plans, as well as basic economics, free enterprise, and legal and ethical issues of business. Also, communication, interpersonal skills and management skills are introduced. This class is a prerequisite for Marketing II.

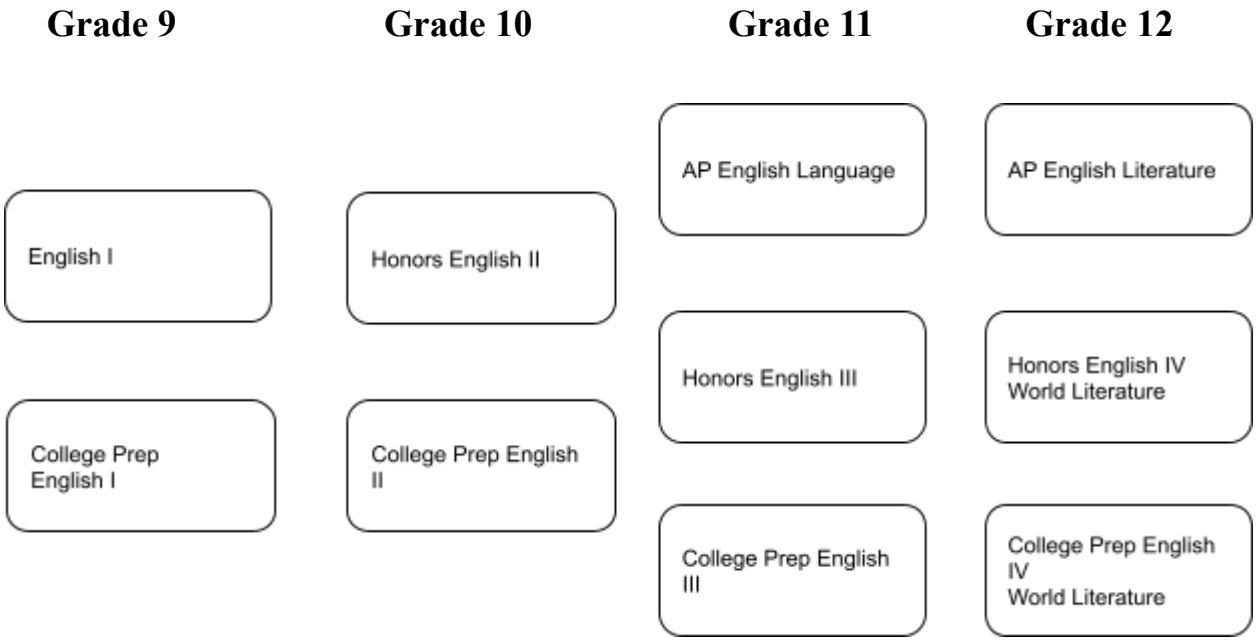
**Marketing II** **#748**
**Grade 9-12** **2.5 Credits**
*Prerequisite: Marketing I*
This class builds on marketing basics learned in Marketing I. Students explore more advanced marketing concepts in a project-intensive curriculum including sales strategies, promotion, advertising and visual merchandising. Students learn experientially through direct oversight of school store marketing activities.

**Personal Finance Basics** **#749**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Personal Finance presents a solid foundation for students on topics such as income, expenses, budgeting, career selections, credit cards, taxes and insurance. While focusing on the student's role as a citizen, student, family member, consumer, and active participant in the business world, this course informs students of their various financial responsibilities. Students learn strategies to choose rewarding careers and manage financial resources and use credit wisely.

**Personal Finance Investing** **#750**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Personal Finance Investing delves deeper into more advanced personal finance topics such as economics, banking, saving and investing. While building on skills acquired in Personal Financial Basics, students will be exposed to more advanced financial concepts such as financial instruments, capital markets, banking and the roles of government in the economy.

**Introduction to Economics** **#375**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Economics is the study of choices. How do individuals and nations choose to use limited resources to satisfy unlimited wants and needs? This course introduces students to economics concepts such as scarcity, opportunity cost, wants vs. needs, and basic microeconomic and macroeconomic concepts such as markets, factors of production and supply and demand.

# ENGLISH




***Education is not the filling of a bucket, but the lighting of a fire. -- W. B. Yeats***

The mission of the Douglas High School English department is two-fold: to help students learn to read and listen critically for information, understanding, and enjoyment, and to write and speak clearly, factually, and persuasively. We further seek to help students refine their research skills by using a variety of media, and to evaluate the quality of the information obtained. We expect our students to become critical thinkers and problem solvers, and to be able to distinguish fact from opinion, make reasoned inferences, construct logical arguments, identify stereotypes, and recognize bias. Finally, we seek to help students understand and appreciate the traditions, practices, and perspectives of other cultures in our ever-changing global society.

**Douglas High School Expectations for Student Learning Assessed by the English Department include:**

**The DHS student writes effectively.**
**The DHS student reads critically.**
**The DHS student speaks confidently and convincingly.**
**The DHS student listens for understanding.**

A summer reading assignment(s) is required of all students taking courses at the AP and honors levels.

**College English I** **#002**
**Grade 9** **5 Credits**

*Prerequisite: None*

This college-prep course is designed to provide freshmen with an intensive study of skills in the following areas: critical reading, writing for different purposes and audiences, public speaking, researching, vocabulary, and grammar/mechanics/usage. The curriculum includes literature such as the epic "The Odyssey," *Romeo and Juliet*, *The Giver*, classic and contemporary short stories, nonfiction pieces, and poetry. Writing for different purposes is emphasized and the research process is emphasized. The art of public speaking is practiced as well.

**Honors English I** **#003**
**Grade 9** **5 Credits**

*Prerequisites: Teacher recommendation and a 90 or higher in 8th grade language arts*

This course offers a more intensive study of critical thinking, reading, and writing skills needed for higher level Honors courses, Advanced Placement courses, and eventually college. Students taking this course have demonstrated advanced proficiency in reading and writing skills, a strong work ethic, and an ability to work independently. The focus is on the core ninth grade curriculum, but Honors students are responsible for a heavier reading load and generally more rigorous expectations in terms of reading, writing, and research. The curriculum includes literature such as the epic "The Odyssey," *Romeo and Juliet*, *The Giver*, *The House on Mango Street*, classic and contemporary short stories, nonfiction pieces, and poetry. Writing for different purposes is emphasized and the research process is emphasized. The art of public speaking is practiced as well. In order to ensure success in the course, it is suggested that students have a teacher recommendation and a 90 or higher in eighth grade language arts.

**College English II** **#005**
**Grade 10** **5 Credits**

*Prerequisite: College English I*

This college-prep course is designed to continue building students' skills in the areas of critical reading, writing for different purposes and audiences, public speaking, researching, vocabulary, and grammar/mechanics/usage that students began in College English I. The curriculum focuses on the elements of literature, using both classic and contemporary works such as *Of Mice and Men*, *To Kill a Mockingbird*, *Night*, and *The Pearl*. In addition, students will become more familiar with the elements of poetry. Students in College English II will continue to learn to write effectively and will write narrative, argument, text-based, and explanatory essays to further develop their writing skills and to prepare for the tenth grade ELA MCAS. The research process is reviewed and a research paper is required.

**Honors English II** **#006**
**Grade 10** **5 Credits**

*Prerequisite: Teacher recommendation and an 85 or higher in Honors English I or a 90 or higher in C. English I*

This honors level course encompasses all of the curriculum requirements of tenth grade College English as described above, but students will have the opportunity to continue a more challenging and rigorous analysis of literature while improving their critical reading and writing skills. This course offers a more intensive study of critical thinking, reading, and writing skills needed for higher level Honors courses, Advanced Placement courses, and eventually college. Students will be required to complete a research paper and will write narrative, argument, text-based, and explanatory essays to further develop their writing skills and to prepare for tenth grade ELA MCAS. In order to ensure success in the course, it is suggested that students have a teacher recommendation and either a 90 or higher in College/Honors English I or an 85 or higher in Honors English I.

**College English III** **#008**
**Grade 11** **5 Credits**

*Prerequisite: C. English II*

This college-prep course is designed to engage students in both supervised and independent reading and writing assignments through the study of both contemporary and classic American literature. Some of the major works may include *A Raisin in the Sun*, *Death of a Salesman*, *The Great Gatsby*, and *Macbeth*. Students will analyze various poems, essays, and short stories written by American authors, building on the various literary devices learned in their previous courses. Students may complete oral presentations and continue their vocabulary study. This course differs from Honors English III in its pace and outside reading and writing requirements.

**Honors English III** **#009**
**Grade 11** **5 Credits**

*Prerequisite: Teacher recommendation and an 85 or higher in Honors English II or a 90 or higher in College English II*

This honors level course encompasses all of the curriculum requirements of eleventh grade College English as described above. The curriculum focuses on American literature, both classic and contemporary, with emphasis on ideas regarding the American Dream, the individual versus society, and diversity. Choices may include *The Great Gatsby, The Scarlet Letter, Death of a Salesman,* and *The Things They Carried.* Students will analyze literature, drama, and poetry developing a better understanding of style, literary and poetic devices, and critical analysis. Students who enroll in this course must be highly motivated, independent, and responsible. Students need to demonstrate a willingness to work both independently and cooperatively and to consistently strive toward their personal best. Vocabulary, oral presentation, and SAT practice will be included. In order to ensure success in the course, it is suggested that students have a teacher recommendation and either a 90 or higher in College English II or an 85 or higher in Honors English II.

**AP English Language** **#010**
**Grade 11** **5 Credits**

*Prerequisite: It is recommended that a student have an 85 or higher in Honors English II or III or a 90 or higher in College English II or III*

This course is an introductory collegiate level course that satisfies the district graduation requirements for English III. In this rigorous course, students are required to complete extensive outside reading and writing. Students must be highly motivated, independent, and responsible. Students need to demonstrate a willingness to work cooperatively and to consistently strive toward their personal best. Daily participation is required. The curriculum focuses largely upon nonfiction short essays, both classic and contemporary. Choices of longer works may include *The Catcher in the Rye* and *The Great Gatsby.* Students will analyze fiction and nonfiction to develop a better understanding of style, rhetorical strategies, and critical analysis. Expository, analytical, creative, and persuasive writing will require revision, development of tone and style, and critical analysis. Essays of varying length and topics, projects, formal and informal presentations, and debating will be required. Vocabulary, AP exam preparation, frequent timed writing, and two to three summer reading assignments will be included. In order to ensure success in the course, it is suggested that students have a teacher recommendation and either a 90 or higher in College English II or III or an 85 or higher in Honors English II or III.

**College English IV-World Literature** **#012**
**Grade 12** **5 Credits**

*Prerequisite: College English III*

This college prep course is designed to engage students in both supervised and independent reading and writing assignments through the study of both contemporary and classic global literature and issues, argumentative and narrative writing, novels, and poetry. Some of the major works may include *Beowulf, Oedipus, Kite Runner,* and a Shakespearean drama. Students will be asked to conduct research, study vocabulary, deliver oral presentations, and complete analytical, persuasive, and personal writing assignments to prepare them for studies at the college level. This course differs from the Honors level in its pace and number of outside reading and writing assignments.

**Honors English IV-World Literature** **#013**
**Grade 12** **5 Credits**

*Prerequisite: Teacher recommendation and an 85 or higher in Honors English III or a 90 or higher in College English III*

This honors level course encompasses all of the curriculum requirements of twelfth grade College English as described above and also builds on the skills learned in eleventh grade Honors English. It is open to seniors who desire a rigorous course of study and are motivated and willing to complete various assignments in and out of the classroom to prepare them for a college setting. The focus is on British and World literature, satire, a Shakespeare play, narrative and argumentative writing. Some of the major works may include *Beowulf, The Stranger, Oedipus, 1984,* and a Shakespearean drama. The course requires outside reading and writing assignments, a research paper, frequent analytical responses, and a minimum of two summer reading assignments. In order to ensure success in the course, it is suggested that students have a teacher recommendation and either a 90 or higher in College English III or an 85 or higher in Honors English III or its equivalent.

**AP English Literature** **#014**
**Grade 12** **5 Credits**

*Prerequisite: It is recommended that a student have an 85 or higher in Honors English III or a 90 or higher in College English III*

AP English is designed for seniors desiring a challenging class organized in a freshman college-level format. In this rigorous course, students are required to complete extensive outside reading and writing. Students must be highly motivated, independent, and responsible. The content includes British, multicultural, contemporary, and American fiction, poetry, and drama. Requirements include daily reading and writing, composing analytical essays in and out of class, student-led daily discussions, and formal and informal presentations. The curriculum is aligned with the objectives set forth by the College Board to challenge students and to prepare them for the Advanced Placement Literature and Composition Examination, which students are required to take. Students are required to complete frequent timed writing pieces. Three summer reading assignments are also mandatory. In order to ensure success in the course, it is suggested that students have a teacher recommendation and either a 90 or higher in Honors English III or an 85 or higher in AP Language.

**Creative Communications** **#016**
**Grade 9-12** **2.5 Credits**

*Prerequisite: None*

This project based course is devoted to lessons on journalism, news, writing, creative writing, and possibly photojournalism. It will provide students with the opportunity to write outside of the structure of a typical English classroom. Students collaborate to produce a monthly school newspaper while practicing interviewing techniques, using Google Sites, writing non-fiction articles for a public audience, publishing to the Douglas High School website and editing. They will learn ways to avoid bias while telling the entire story in order to publish news worthy stories, reviews, editorials, etc,. This course will also provide creative writing opportunities for students interested in exploring the elements of style in order to develop original works in multiple genres. Students will have the opportunity to publish these original works in the school newspaper. In addition, students may be able to complete a photojournalistic assignment on a subject of their choosing. They will have to learn how to understand how to tell a story using photos, possibly learn some basic photo editing skills, and how to write captions. An ability to pay attention to deadlines is a must-students should be self motivated. In addition they need to work well both independently and in a larger group and be willing to give and take constructive criticism.

# FAMILY & CONSUMER SCIENCE

**Douglas High School Expectations for Student Learning Assessed by Family and Consumer Science courses include:**

**The DHS student listens for Understanding.**
**The DHS student demonstrates critical thinking.**
**The DHS student develops skills necessary to lead a healthy and balanced physical and emotional life.**
**The DHS student engages in creative, expressive, and innovative learning through art, music, drama and/or technology.**

**Food and Nutrition: Kitchen Basics** **#526**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Through this course, students will examine different culinary terms, kitchen equipment, proper food handling and preparation, and safety and sanitation skills. This course will give the beginning chef skills to become more confident in the kitchen. Hands on kitchen activities and demonstrations, research, videos and guest speakers are all incorporated in preparing food.

**Baking and Decorating** **#527**
**Grade 9-12** **2.5 Credits**
*Prerequisite: Food and Nutrition: Kitchen Basics*
This course focuses on advanced food preparation techniques while applying nutrition, food science, and test kitchen concepts using new technology. Students will develop skills in preparing a variety of food under baking, pastry making, and cake decorating. Skills in math, science, management and communication are reinforced in this course. Baking techniques will be emphasized.

**Cooking and Culinary Arts** **#528**
**Grade 9-12** **2.5 Credits**
*Prerequisite: Food and Nutrition: Kitchen Basics*
This course focuses on advanced food preparation techniques while applying nutrition, food science, and test kitchen concepts using new technology. Students will develop skills in preparing a variety of food under cooking and using different cooking techniques and cooking appliances. Skills in math, science, management and communication are reinforced in this course. Students will gain knowledge in not only how to cook and create meals, but also learn about food origin and preparation.

**Family Life** **#529**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Through this course, students gain knowledge about the significance of the family on individuals and society. They learn skills to help them support their family, balance work and family life, be an effective parent, and nurture the development of children. Topics covered include: family & society, family economics, decision making, personal development.

**Childbirth and Development** **#530**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Through this course, students gain knowledge about childbirth, as well as the growth and development of a newborn, infant, and child. They will gain skills to help them learn more about the birthing process and prenatal development. Topics covered include: prenatal development, the birthing process, childcare, child development, parenting.

# INFORMATION TECHNOLOGY

**Douglas High School Expectations for Student Learning Assessed by Information Technology courses include:**

**The DHS student listens for Understanding**
**The DHS student demonstrates critical thinking.**
**The DHS student develops skills necessary to lead a healthy and balanced physical and emotional life**
**The DHS student engages in creative, expressive, and innovative learning through art, music, drama and/or technology**

**Graphic Design** **#768**
**Grade 9-12** **2.5 Credits**
*Prerequisite: None*
Graphic Design is an introductory course designed to expose students to the areas of Graphic Design and Web Design using HTML & CSS, Photopea (Photoshop), and TinkerCAD. This course will help students examine the various areas in design and visual arts and allow students to develop, nurture and strengthen their creative and artistic talents. Students will be engaged in 2D and 3D modeling, crafting websites, modifying photographs, and developing a diverse portfolio. This hands-on program will help students develop and strengthen their creative, communication, research, problem-solving and conceptualization skills. This course will be project based and intertwined in the various areas of topics/content.

**Office Suite** **#775**
**Grade 9-12** **2.5 Credits**

*Prerequisite: None*

Students looking for training in MS Word, Excel, PowerPoint, and Access will explore topics needed in the workplace or for personal use. Students will learn how to format and edit documents and spreadsheets, create labels, use shortcuts to work efficiently, use mathematical formulas in Excel spreadsheets, create charts and graphs, manipulate databases to extract trends and statistics, and create powerful presentations with animations.

**Introduction to Python** **#756**
**Grade 9-12** **2.5 Credits**

*Prerequisite: None*

This course is designed to teach students to program using Python. Students will earn the fundamentals of the Python programming language, along with programming best practices. You'll learn to represent and store data using Python data types and variables, and use conditionals and loops to control the flow of your programs. You'll harness the power of complex data structures like lists, sets, and dictionaries to store collections of related data. Lastly, students will tackle real world problems in a collaborative environment using these structures and strategies to accomplish meaningful results.

**Introduction to Computer Programming in Java** **#757**
**Grade 9-12** **2.5 Credits**

*Prerequisite: None*

This course is designed to teach students to program computers using the Java programming language. Students will learn the basics of computer architecture and the binary numbering system leading into programming topics. This course will cover the use of the java compiler, java syntax, object-oriented programming concepts, and other topics intended to give students a broad background in the field of computer programming.

**Advanced Programming in C++ - (H)** **#705**
**Grade 10-12** **2.5 Credits**

*Prerequisite: Intro to Computer Programming in Java & Intro to Python*

This course will expand upon students' knowledge of advanced programming topics. The course will be administered using the Microsoft Visual C++ development environment. Topics covered in this class will include the use of built-in and user-defined functions, string manipulation, data structures, file handling, user-written classes, and single and multi-dimensional arrays.

**AP Computer Science A** **#740**
**Grade 10-12** **5 Credits**

*Prerequisite: Intro to Java*

AP Computer Science is a comprehensive programming course using the computer language JAVA. This course is an excellent foundation for students planning to study technical fields, engineering, physics and many other areas that require a computer science course in their curriculum. In addition, it is an excellent opportunity to develop sound problem solving and logical thinking skills. The emphasis of the course is to study object-oriented programming methodology, algorithm development, data structures, design and abstraction. Throughout the course students will develop solutions to programming problems in a variety of application areas as well as work with a large case study program that will demonstrate the concepts of computer programming. Students are required to take the AP Computer Science A exam.

**Robotics** **#736**
**Grade 9-12** **5 Credits**

*Prerequisite: None*

This course is intended to foster students' creativity as they apply to the field of robotics, helping them explore engineering, simple machines, torque, and power through a series of hands-on activities. This course is designed as an introductory coding class but will accommodate experienced programming students as well. The course will be based upon the following features:

* An introduction to the RobotC programming language and Arduino, which is an open-source electronics platform based on easy-to-use hardware and software.
* Multiple activities and open-ended challenges that task groups of two to four students with creating robots that draw, dance, herd golf balls, and more
* Extensive coverage of mechanisms and mechanical systems concepts
* Application of STEM knowledge and 21st-century skills
* Progressive series of activities that culminate with open-ended challenges
* High School correlations to Next Generation Science, Common Core Math and Language Arts, and ITEEA (International Technology and Engineering Educators Association) standards

**Robotics II Half-Year** **#736A**
**Grade 10-12** **2.5 Credits**

*Prerequisite: Successful completion of Robotics I and a recommendation from the Robotics I teacher.*

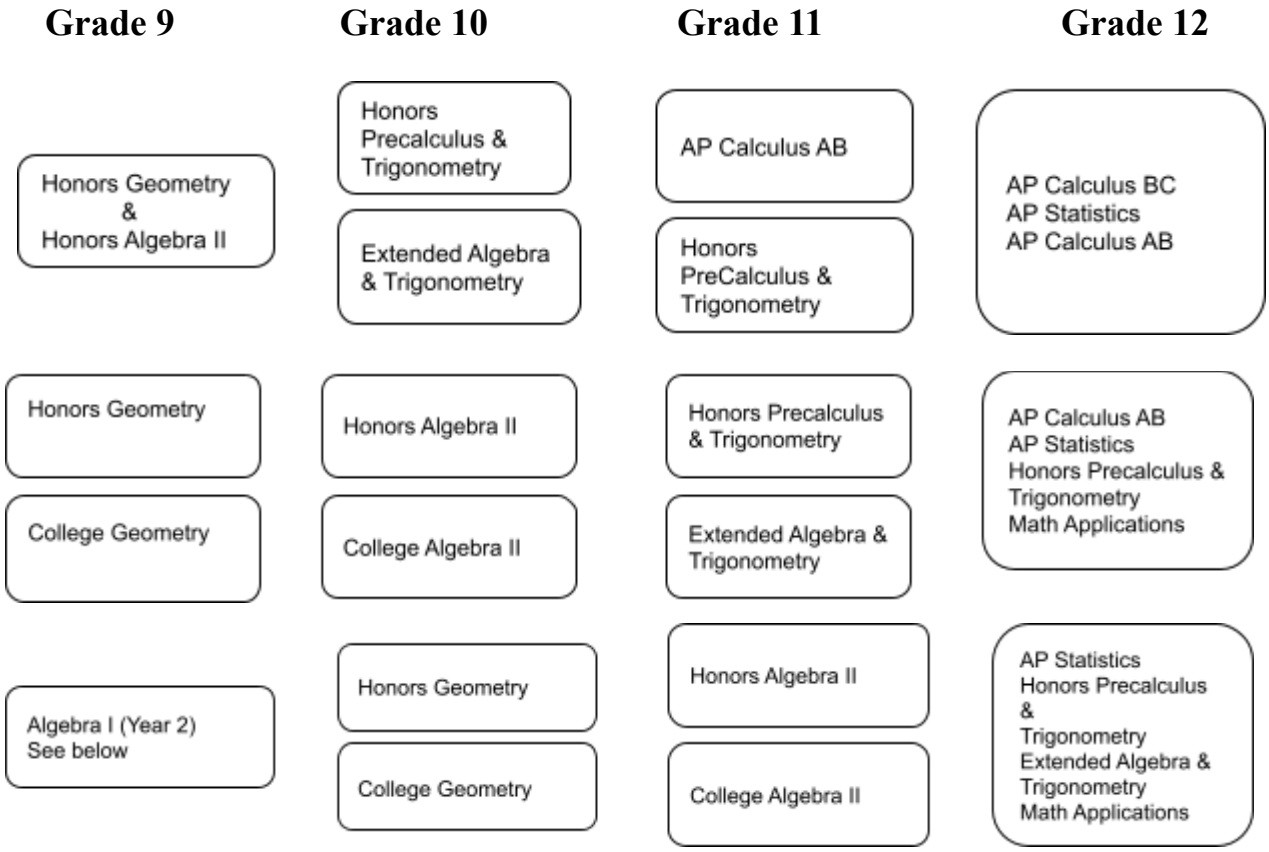
This course is for students who have completed Robotics I and would like to take Engineering to the next level. The Robotics II students will occasionally serve as teacher assistants to help the Robotics I students, but their primary workload will be on the design, construction, and coding of a competition robot that we will bring to the First Tech Challenge competitions. Robotics II students are strongly encouraged to attend at least two (2) Saturday competitions over the course of the year. There is some flexibility in the schedule based on the location of the competitions. Prerequisite: Successful completion of Robotics I and a recommendation from the Robotics I teacher

**TV Production I** **#617**
**Grade 9-12** **5 Credits**
*Prerequisite: None*
This course is designed for students who have a strong interest in learning about the video production process. Topics covered include camcorder operation, videography, and video project planning and production (including script writing, storyboard creation, and digital video editing). Students will work individually and as part of a production team to produce various class projects and our monthly news program Tiger TV.

**TV Production II** **#730**
**Grade 10-12** **5 Credits**
*Prerequisite: Successful completion of TV Production I*
This course is a continuation of the skills learned in TV Production I and has an emphasis on filming, editing and producing larger products. Students will work to video various school events, edit the footage and produce professional quality videos for use on our school's local cable channel.

**Music Technology & Audio Production** **#614**
**Grade 9-12** **5 Credits**
*Prerequisite: None*
The audio production component of this class will teach students about introductory and intermediate level audio production equipment and techniques. Students will learn about digital studio recording, live sound reinforcement, microphone and acoustic theory, mixing consoles and digital recording devices. Students in this class will serve as audio technicians for school events, and will be required to attend several evening performances each semester. In the music technology portion of the class students will learn about MIDI and a variety of music software packages used to compose, notate and arrange music. Projects include sequencing, commercial production and creating sound movie soundtracks. *Student limit: due to equipment and space restrictions enrollment in this class is limited to 12 students.*

# MATH




- Students who elect to take **Geometry and Algebra II in the same year** should be doing so only if they intend to take both AP Calculus and AP Statistics before graduation. Therefore, if students elect to double up, **both classes must be at the Honors level.**

** Students will not be allowed to take an Algebra I course and a Geometry course concurrently

**Recommended Calculators**

All students going into Algebra I and Geometry classes are required to have a scientific calculator. We strongly recommend students choose one of the Texas Instrument calculators listed:

**TI–30XS** **TI–30xa** **TI–30x II** **TI–34 II**

All students taking Algebra II, Trigonometry, Honors Precalculus, AP Statistics, or AP Calculus will need a graphing calculator. We strongly recommend the **TI 84-Plus.**

**Please Note**: Other graphing calculators contain features that are different from the Texas Instruments calculators listed above. It will be your responsibility to become familiar with your calculator if you choose one not listed above.

It is the primary goal of the mathematics department, through its curriculum, to provide a strong mathematics program that emphasizes problem solving, communicating, reasoning, making connections, and using representations. In addition, we seek to provide opportunities for the student to develop an appreciation for the power of mathematics to solve real-life problems.

The program of studies will provide direct instruction, guided practice, student-directed learning activities, and applications to current technology. All courses are aligned with the Massachusetts Mathematics Curriculum Frameworks.

**The Douglas High School Expectation for Student Learning Assessed by the Mathematics Department is:**

**The DHS student thinks critically and solves problems.**

**Algebra I (Year II)** **#102**
**Grade 9** **5 Credits**

*Prerequisite: Intro to Algebra I*

This course is a continuation of Intro to Algebra I. The course will begin with a quick review of equations, inequalities, linear systems, properties of exponents, and operations on polynomials. Students will then study concepts including factoring polynomials, graphing quadratic functions, solving quadratic equations, radical functions and equations, and data analysis. Students will be encouraged to think critically and solve problems.

**College Geometry** **#106**
**Grade 9-10** **5 Credits**

*Prerequisite: Algebra I, or Honors Algebra I*

This course is a study of the principles of plane and solid geometry. Topics include: angles, logic, relationships of lines and planes, triangles, polygons, circles, similarity, congruence, planar and space measurements, and proofs. This course emphasizes critical thinking and problem solving and is intended for students with solid algebra skills.

**Honors Geometry** **#107**
**Grade 9-10** **5 Credits**

*Prerequisite: Algebra I or Honors Algebra I; Teacher Recommendation strongly encouraged*

This course is an in-depth study of the principles of plane and solid geometry. Topics include: segment and angle properties and relationships, transformations, algebraic and geometric proof, parallel and perpendicular lines, triangle congruence, special segments in triangles, polygons, similarity, right triangle trigonometry, perimeter and area, surface area and volume, and circles. This is a fast-paced course that requires solid algebra, critical thinking, and problem solving skills.

**College Algebra II** **#108**
**Grade 10-12** **5 Credits**

*Prerequisite: Geometry or Honors Geometry*

This course is designed to further develop skills in algebraic concept knowledge. Topics include: properties of real numbers, radicals, exponents, relations and functions, linear equations and inequalities, graphing linear functions, absolute value equations and inequalities, solving linear systems of equations and inequalities, factoring, polynomial functions, and quadratic functions and equations, and complex numbers. Students will be encouraged to think critically and solve problems.

**Honors Algebra II** **#109**
**Grade 9-11** **5 Credits**

*Prerequisite: Geometry or Honors Geometry; Teacher recommendation strongly encouraged*

This is an accelerated course designed for students who are proficient in Algebra I and Geometry. Topics include: solving linear systems in two variables, functions, solve quadratic equations by completing the square, exponents, polynomials and factoring, rational expressions and equations, radicals, complex numbers, exponential and logarithmic functions, and sequences and series. This is a fast-paced course that requires solid algebra, critical thinking, and problem solving skills.

**College Extended Algebra & Trigonometry** **#149**
**Grade 10-12** **5 Credits**

*Prerequisite: Algebra II or Honors Algebra II*

This course is the study of nonlinear functions and trigonometry. The course will begin with an algebra extension into radical and rational expressions, equations, and inequalities. It will then move into right triangle measurements and ratios, useful for calculating indirect measurements. Trigonometry is often considered a "gateway" course because its content is necessary for further study in upper level mathematics and the sciences. Topics covered in this course include: nonlinear functions, right triangle properties, trigonometric functions, the unit circle, radian measure, trigonometric identities, trigonometric graphs, and advanced algebra. Students will be encouraged to think critically and solve problems.

**Math Applications** **#125**
**Grade 12** **5 Credits**

*Prerequisite: College Algebra II*

This course is designed for seniors to become college and career ready. This course focuses on interesting applications from previous math courses supported by up-to-date, real-world data. Students see how mathematics can be used to help them in the future. The first half of the year focuses on topics that will help students find success on standardized and college placement tests. The second half of the year focuses on personal finance and career planning. Topics covered include: set theory, number systems, order of operations, probability, personal finance, sales tax and discounts, income tax, simple and compound interest, investing, reading stock tables, retirement savings, purchasing vs renting/leasing, insurance, and credit cards.

**Honors Precalculus & Trigonometry** **#160**
**Grade 10-12** **5 Credits**

*Prerequisite: Algebra II or Honors Algebra II; Teacher Recommendation strongly encouraged*

This course is designed to prepare students for Calculus and other college mathematics classes. It provides an in-depth study of additional geometric and algebraic concepts as well as an introduction to trigonometry. Topics include sets, function and graph analysis, operations on functions, inverse functions, graphs of polynomials and rational functions, exponential and logarithmic functions and equations, radians, the unit circle, trigonometric functions and their graphs, trigonometric identities and equations, and the Laws of Sines and Cosines. This is a fast-paced course that requires solid algebra, critical thinking, and problem solving skills.

**AP Statistics** **#136**
**Grade 11-12** **5 Credits**

*Prerequisite: Honors Algebra II; Teacher Recommendation strongly encouraged*

This course is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) exploring data: describing patterns and departures from patterns, (2) sampling and experimentation: planning and conducting a study, (3) anticipating patterns: exploring random phenomena using probability and simulation, (4) statistical inference: estimating population parameters and testing hypotheses. Students who choose to take this course should have a solid background in algebra along with excellent critical thinking and problem solving skills. The curriculum is aligned with the objectives set forth by the College Board to prepare them for the AP Statistics Exam, which students are expected to take. This course is for advanced students who are able to work at an accelerated pace.

**AP Calculus AB** **#135**
**Grade 11-12** **5 Credits**

*Prerequisite: Honors Precalculus; Teacher Recommendation strongly encouraged*

This course is designed to provide an in-depth study of the concepts of Calculus and their applications. Topics include detailed study of limits, derivatives, and integrals. This is a fast-paced course where students are asked to use analytical, graphical, numerical, and verbal approaches and understand their connections within and between concepts. Students who choose to take this course should have a solid background in algebra and precalculus along with excellent critical thinking and problem-solving skills. The curriculum is aligned with the objectives set forth by the College Board to prepare them for the AP Calculus AB Exam, which students are expected to take. This course is for advanced students who are able to work at an accelerated pace.

**AP Calculus BC** **#158**
**Grade 12** **5 Credits**

*Prerequisite: AP Calculus AB; Teacher Recommendation strongly recommended*

This course is an extension of AP Calculus AB. Completion of Calculus AB and BC is approximately equivalent to Calculus I and II for colleges. Content from Calculus AB will be revisited and extended to different types of functions and equations. New topics will include parametric, polar, and vector functions as well as sequences and series. Students will continue to work with problems presented in multiple representations and make connections between them. The curriculum is aligned with the objectives set forth by the College Board to prepare them for the AP Calculus BC Exam, which students are expected to take. This course is for advanced students who are able to work at an accelerated pace.

**Honors Topics in Math** **#157**
**Grade 12** **5 Credits**

*Prerequisite: Honors Precalculus*

This course is designed for the Honors-level senior who does not want to take an AP math course. Topics will include descriptive statistics, data analysis, permutations and combinations, variance and standard deviation, normal probability distribution, z-scores, continuity, limits, derivatives, and more.

# MUSIC

**Douglas High School Expectations for Student Learning Assessed by Music courses include:**

**The DHS student listens for Understanding.**
**The DHS student demonstrates critical thinking.**
**The DHS student develops skills necessary to lead a healthy and balanced physical and emotional life.**
**The DHS student engages in creative, expressive, and innovative learning through art, music, drama and/or technology.**

**Music Performance** **#784**
**Grade 9-12** **5 Credits**

*Prerequisite: Membership in either evening band or evening chorus course*

This performance based class reinforces concepts and skills integral to music performance in the vocal and instrumental settings. Members of the class will work to develop technical facility on their instrument/voice and study the many aspects of solo and ensemble performance in a variety of musical settings and styles. Students will also work to increase their understanding of music theory, sight-reading and sight-singing. Members of the class are required to practice independently and participate in scheduled performances.

**Music Performance (Semester)** **#784A**
**Grade 9-12** **2.5 Credits**

*Prerequisite: Membership in either evening band or evening chorus course for the semester*

This performance based class reinforces concepts and skills integral to music performance in the vocal and instrumental settings. Members of the class will work to develop technical facility on their instrument/voice and study the many aspects of solo and ensemble performance in a variety of musical settings and styles. Students will also work to increase their understanding of music theory, sight-reading and sight-singing. Members of the class are required to practice independently and participate in scheduled performances.

**Ukulele Ensemble** **#783**
**Grade 9-12** **2.5 Credits**

*Prerequisite: None*

This semester-long course is designed for students with no musical experience, but is open to all students, regardless of musical experience. Students will learn the basics of ukulele playing techniques and how to use the uke as a melody and accompaniment instrument. The study of introductory level music reading and theory will be included. Ukuleles will be provided.

**Night Chorus** **#609**
**Grade 9-12** **2 Credits**

*Prerequisite: None*

Night Chorus attendance is required at all Tuesday evening rehearsals throughout the school year and at several performances and events. Chorus members are responsible for all assigned music literature. Credits earned in this course can be applied toward the arts graduation requirement.

*Course Requirements: Attendance at Tuesday evening rehearsals and all performances and events for the duration of the school year.*

**Night Chorus (Semester)** **#609A**
**Grade 9-12** **1 Credit**

*Prerequisite: None*

Night Chorus is also offered as a semester course. Attendance is required at all Tuesday evening rehearsals and at several performances and events. Chorus members are responsible for all assigned music literature. Credits earned in this course can be applied toward the arts graduation requirement.

*Course Requirements: Attendance at Tuesday evening rehearsals and all performances and events for the duration of the semester.*

**Night Band** **#611**
**Grade 9-12** **2 Credits**

*Prerequisite: None*

Night band attendance is required at all Thursday evening rehearsals throughout the school year and at several performances and events. Chorus members are responsible for all assigned music literature. Credits earned in this course can be applied toward the arts graduation requirement.

*Course Requirements: Attendance at Tuesday evening rehearsals and all performances and events for the duration of the school year.*

**Night Band (Semester)** **#611A**
**Grade 9-12** **1 Credit**

*Prerequisite: None*

Night band is also offered as a semester course. Attendance is required at all Thursday evening rehearsals and at several performances and events. Students are responsible for all assigned music literature. Credits earned in this course can be applied toward the arts graduation requirement.

*Course Requirements: Attendance at Thursday evening rehearsals and all performances and events for the duration of the semester.*

**Color Guard** **#610A**

**Grade 9-12** **2 Credits**

*Prerequisite: None*

The after school Color Guard Program is designed for students to participate in the marching band color guard. Students will learn basic marching skills for one guard specialty such as flag, rifle, and/or baton in preparation for performances and parades. *Course requirements: Attendance at all rehearsals (Monday and Thursday evenings 6p-8p) and all performance events for the entirety of the school year.*

**Music Theory I** **#760**
**Grade 9-12** **2.5 Credits**

*Prerequisite: Current enrollment in a band or chorus class*

In this semester-long course students will learn introductory to intermediate skills in music reading, writing, analysis and performance. A background in reading music is recommended, but not required. Students enrolled in music theory are required to participate in either high school chorus or high school band (as an instrumentalist). Credits earned in this course can be applied toward the arts graduation requirement.

**Music Theory II** **#761**
**Grade 10-12** **2.5 Credits**

*Prerequisite: Music Theory I or entrance exam, current enrollment in a band or chorus class*

In this semester-long course students will learn advanced skills in music reading, writing, analysis and performance. Successful completion of Music Theory I or earning a passing score on the course entrance exam is required to take the class. Students enrolled in music theory are required to participate in either high school chorus or high school band (as an instrumentalist). Credits earned in this course can be applied toward the arts graduation requirement.

**Music Technology & Audio Production** **#614**
**Grade 10-12** **5 Credits**

*Prerequisite: None*

The audio production component of this class will teach students about introductory and intermediate level audio production equipment and techniques. Students will learn about digital studio recording, live sound reinforcement, microphone and acoustic theory, mixing consoles and digital recording devices. Students in this class will serve as audio technicians for school events, and will be required to attend several evening performances each semester. In the music technology portion of the class students will learn about MIDI and a variety of music software packages used to compose, notate and arrange music. Projects include sequencing, commercial production and creating sound movie soundtracks. *Student limit: due to equipment and space restrictions enrollment in this class is limited to 12 students.* This course satisfies the technology graduation requirement.

# PHYSICAL EDUCATION and HEALTH

**The Douglas High School Expectations for Student Learning Assessed by the Health/P.E. Department are:**

**The DHS student develops skills necessary to lead a healthy and balanced physical and emotional life.**

The main focus of the Physical Education/Health courses is to teach students the information and skills they need to become health literate, maintain and improve health, prevent disease, and reduce health-related risk behaviors. The six categories of risk behaviors addressed are:

1. Behaviors that result in injuries
2. Tobacco use
3. Alcohol and other drug use
4. Sexual behaviors that result in HIV/STD infections and unintended pregnancies
5. Dietary patterns
6. Insufficient physical activity

**Physical Education I** **#500**
**Grade 9** **2.5 Credits**

The physical education curriculum is designed to develop physical fitness and neuromuscular skills, as well as to provide opportunities for social, emotional and intellectual growth. The physical education program includes, but is not limited to, basketball, touch football, indoor hockey, soccer, softball, volleyball, badminton, pickleball, weight training, and fitness walking. Grade 9 classes are focused on teaching skills and rules of all activities offered.

**Physical Education** **#555**
**Grade 10-11** **2.5 Credits**

Building on the physical fitness and neuromuscular skills developed in grade 9, students will engage in game playing and personal fitness and social-emotional growth. The physical education program includes, but is not limited to, basketball, touch football, indoor hockey, soccer, softball, volleyball, badminton, pickleball, weight training, and fitness walking.

**Physical Education** **#503**
**Grade 12** **1 Credit**

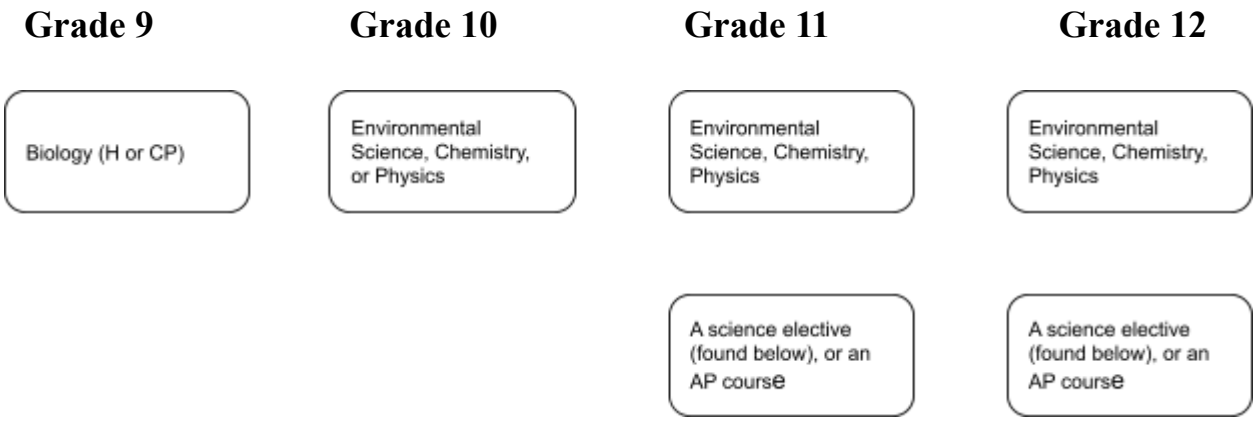
Physical Education for the seniors will be geared toward Lifetime Fitness and Lifetime Sport activities. Students will have the opportunity to engage in a variety of Lifetime Sport activities, traditional sport activities, as well as Fitness opportunities.

**Health** **#504**
**Grade 9-12** **2.5 Credits**

***Can be taken anytime between Freshmen to Senior year***

The Health program is a one-semester program associated with the physical education department that is student-centered and concept-oriented and stresses principles of thought and behavior that underlie zestful living throughout life, such as acceptance of self, harmonious association with others, and awareness of social responsibilities. It recognizes the individual personality as a complex interrelationship of physical, emotional, mental, social, and spiritual components.

# SCIENCE & ENGINEERING




## SCIENCE ELECTIVES

- **Meteorology (H or CP)**
- **Astronomy (H or CP)**
- **Physics (CP or H)**
- **Anatomy & Physiology (H)**
- **Biotechnology**
- **Biomedical**
- **Introduction to Engineering**
- **Manufacturing**
- **Manufacturing II**
- **Mechanical Drafting**
- **Architectural Drafting**
- **Environmental Science (H/CP)**
- **PLTW Engineering Essentials**
- **PLTW Introduction to Engineering Design**
- **PLTW Civil Engineering & Architecture (CED)**
- **PLTW Principles of Engineering (POE)**
- **PLTW Aerospace Engineering (AE)**
- **Forensic Science**
- **Zoology**
- **Marine Biology**

## ADVANCED PLACEMENT (AP) OPTIONS

- **Environmental Science**
- **Chemistry**
- **Physics I & II**
- **Biology**

AP science courses are different from other AP courses. One difference is that successful scores on AP Biology or Chemistry may result in two semester credits (depending on individual college AP policies). All AP Science courses have required summer work.

### WHO SHOULD TAKE WHAT COURSE OFFERINGS

| If a student wants to study | …they should take | … because … |
|---|---|---|
| Astronomy | AP Physics (1)<br>AP Calculus | An astronomer will use physics and calculus to describe the motion of celestial bodies. Chemistry is used to understand their compositions. |

| | | |
|---|---|---|
| Biology | AP Biology<br>AP Chemistry<br>AP Statistics<br>AP Environmental | A biologist will need to understand Biology and Chemistry; Environmental Science is nice, but the least important of the three. Statistics is used during biological studies. |
| Chemistry | AP Chemistry<br>AP Biology,<br>AP Physics (1)<br>AP Environmental | It depends on what kind of Chemistry the student wants to take. Chemistry is called the "Central Science" because it touches on Biology, Physics, Engineering, and Medicine. |
| Engineering | AP Physics<br>AP Calculus<br>AP Chemistry | High-level engineering will use calculus and will require a background in physics. Chemistry is used in many branches of engineering (Mechanical, Chemical, Biomedical, etc.) |
| Environmental Science | AP Environmental<br>AP Biology<br>AP Chemistry<br>AP Statistics | An environmental scientist will need to understand Biology, Chemistry, and how they fit together. Take what you can without overloading yourself. Statistics is used during studies. |
| Forensics | AP Chemistry<br>AP Biology<br>AP Physics (1) | A forensics expert will routinely use aspects of both Chemistry and Biology in their work. Physics is useful for understanding bullet trajectories, etc. |
| Physics | AP Physics I & II<br>AP Calculus | Once a physics student is past introductory levels, physics relies heavily on Calculus. AP Chemistry is not a bad idea, if the student wants to add depth. |

***Science is built up with facts, as a house is with stones.***
***But a collection of facts is no more a science than a heap of stones is a house.***
**– Henri Poincaré**

Students demonstrate their knowledge of scientific facts and concepts through various types of assessment found throughout the different courses of the science curriculum. Students are required to participate in cooperative learning activities, hands-on exercises, interactive online activities, oral presentations, and projects. Students write laboratory reports, term/research papers, and other forms of essays. Exams and quizzes are also used to assess knowledge in all scientific disciplines. Assessments vary for each course and their contribution to the final grade is specified by the course instructor at the start of the school year.

**The DHS Expectations for Student Learning assessed by the Science Department are:**

**The DHS student reads critically.**

**The DHS student demonstrates critical thinking.**

In order to better accommodate the needs of all students, we offer multiple options for progress through the science courses. This ordering of courses better prepares students for the MCAS Science tests and also allows more students to take advantage of newly offered Advanced Placement courses.

**College Prep Biology I** **#203**
**Grade 9** **5 Credits**

*Prerequisite: None*

The objective of this college-prep course is to acquaint students with the mysteries of life. An in-depth study of various biological concepts in cellular biology is undertaken, including life activities, cell structures and function, DNA molecules and their role in genetics, and updates of current findings. Representative organisms of the kingdoms are studied for an understanding of their morphology, physiology, taxonomy, life cycles, and interaction with man and his environment. Laboratory activities are conducted regularly and will emphasize lab procedure, safety, and reporting. The use of technology is incorporated in this class to enhance information gathering for research papers, projects, and review. This is an MCAS science course.

**Honors Biology I** **#204**
**Grade 9** **5 Credits**

*Prerequisite: Grade 8 science and teacher recommendation with a 90 average or higher.*

This course will cover the same subjects as described for college biology at an accelerated pace with a more in depth study of some of the topics as well as some of the topics from Environmental Science. In addition, the students will be expected to work independently on laboratory exercises, be asked to design some of their own laboratory investigations, and complete some assigned reading of scientific articles and books. Honors Biology will cover in one year all of the MCAS biology topics that are otherwise covered in two years in Environmental Science and College Prep Biology.

**College Prep Environmental Science** **#201**
**Grade 10-12**

*Prerequisite: Biology* **5 Credits**

This course will investigate the interconnectedness of humans and their environment, including many different aspects of biology and earth science. The course will study ecology, populations, water, air, land, mineral and energy resources, and our planet's health and future. It will examine natural and manmade hazards, and will then look at possible solutions to those hazards. It will give students an understanding of our role in the delicate balancing acts that take place on earth.

**Honors Environmental Science** **#218**
**Grade 10-12** **5 Credits**

*Prerequisite: Biology*

This course will investigate the interconnectedness of humans and their environment, including many different aspects of biology and earth science. The course will study ecology, populations, water, air, land, energy resources, and our planet's health and future. It will examine natural and manmade hazards,and will then look at possible solutions to those hazards. It will give students an understanding of our role in the delicate balancing acts that take place on earth.

**Honors Anatomy and Physiology** **#206**
**Grade 11-12 (10 if the student completed Honors Biology in grade 9)** **5 Credits**
*Prerequisite: Biology*
This is a full year course designed to prepare students interested in pursuing a medical career or those seeking to learn more about anatomy and physiology. In this course we will survey the remarkable array of body systems that comprise the human body and explore topics such as the relationship between structure and function, homeostasis, anatomical, and physiological disorders, medical diagnosis and treatment, modern and past imaging techniques, biochemistry, cytology, and histology. This course will include hands-on-activities, group work, projects, lectures, written reports and independent assignments as well as laboratory activities designed to reinforce concepts and principles presented in the course, including dissections.

**College Prep Chemistry I** **#208**
**Grade 10-12** **5 Credits**
*Prerequisite: Algebra 1 and Geometry (either prior or concurrent enrollment). It would be beneficial for students to previously have taken, or currently be enrolled in, Algebra II.*
This is a traditional approach to introductory chemistry. It includes a description of matter and energy relationships, basic nuclear chemistry, atomic structure, chemical bonding, properties of matter, chemical reactions, solutions, acids & bases, and gas laws. Mathematical applications are an integral part of this course. Laboratory exercises are performed to coincide with the course material. This course is designed to prepare the student who will take chemistry courses in college. This is a prerequisite to AP Chemistry II, AP Biology II, or AP Environmental Science.

**Honors Chemistry I** **#209**
**Grade 10-12** **5 Credits**
*Prerequisite: An 85 or higher in Biology and approval of the instructor. It would be beneficial for students to previously have taken, or currently be enrolled in Algebra II.*
This is a traditional approach to introductory chemistry at an accelerated pace. The course includes a description of matter and energy relationships, basic nuclear chemistry, atomic structure, chemical bonding, properties of matter, chemical reactions, solutions and acids & bases. Mathematical applications are an integral part of this course, and are heavily stressed. Laboratory exercises are regularly performed to coincide with the course material. This course is designed to challenge the student who plans on obtaining a major or a minor in science or engineering in college. This is the *recommended* prerequisite to AP Chemistry II, AP Biology II, or AP Environmental Science.

**College Prep Physics I** **#210**
**Grade 10-12** **5 Credits**

*Prerequisite: None*

College Prep Physics is a qualitative look at the scientific study of energy, matter, space, time, and of the relationships between them. The course is designed for students who desire to pursue a career path outside of the sciences. The major focus is on Newtonian Mechanics topics: Motion (position, velocity, and acceleration), Forces (friction, normal, and gravitation), Momentum (collisions), Energy (kinetic and potential), and Modern Physics topics: Thermodynamics (heat and temperature), Electricity (charge, current, and circuits) Waves (properties and types), Nuclear Physics.. Students will develop a conceptual understanding of these physics concepts, improve their ability to solve real world problems, and discover how Physics affects our daily lives. Use of technology and digital simulations, and numerous hands-on labs are utilized to improve understanding of the concepts learned.

**Honors Physics I** **#211**
**Grade 10-12** **5 Credits**

*Prerequisite: Honors Algebra II (with a B+ or higher).*

Honors Physics is an intensive look at the scientific study of energy, matter, space, time, and of the relationships between them. The course is designed for students who are adept at applying algebra and trigonometry skills to word problems. The major focus is on Newtonian Mechanics topics: Motion (position, velocity, and acceleration), Forces (friction, normal, propulsion, and gravitation), Momentum (collisions), and Energy (kinetic and potential). Students will develop workable algorithms for solving real world problems, improve their abilities to prove Physics concepts empirically, and will discover how Physics affects our daily lives. Significant use of technology and digital simulations is commonplace in Honors Physics. As a result of this course, students will be able to solve complex, multi-step problems covering a variety of real world topics, support their hypotheses by application of graphical representations of acquired data, and quantitatively identify occurrences of Physics in the world around them.

**Meteorology**
**College Prep** **#452**
**Honors** **#453**
**Grade 11-12** **2.5 Credits**

*Prerequisite: None*

For the meteorology portion of the course, students will analyze the structure, functions, dynamics and threats to the Earth's atmosphere. Topics covered will include the makeup and structure of the atmosphere, factors affecting weather, weather patterns, and seasonal effects on weather, climate types/distribution, and natural and manmade climate change. The course will consist of lectures, labs, projects, presentations, and daily analysis of the weather.

**Astronomy**
**College Prep** **#276**
**Honors** **#279**
**Grade 11-12** **2.5 Credits**
*Prerequisite: None*
For the astronomy portion of the course, students in this course will learn about the origins of the universe, how it is formed, and the objects it contains with an emphasis on our own solar system. A history of the science of discovering these topics-how we know what we know-will be studied. The honors students will have a more demanding workload.

**Biotechnology** **#292**
**Grade 11-12** **2.5 Credits**
*Prerequisite: Passed Biology and Chemistry*
This course will be a lab-intensive half-year course designed to combine molecular biology with practical applications that will explore the technological applications of life and living organisms. Students will begin by examining the chemical nature of life, the molecular basis of heredity, and the inheritance of traits according to the principles of genetics. Through the direct application of modern biotechnology lab skills such as; cultures, recombinant DNA technology, DNA fingerprinting, gene mapping, and gel electrophoresis, students will study plants and animals as they relate to the science of food and feeding our human population. Emphasis will be put on the Biotechnology industry as a 21st Century career opportunity as well as address social and ethical issues surrounding our ever-increasing biotechnology knowledge and research.

**Biomedical** **#293**
**Grade 11-12** **2.5 Credits**
*Prerequisite: Passed Biology & Chemistry and passed Anatomy or taking concurrently is recommended*
This course will be a lab-intensive half-year course designed to combine molecular biology with practical applications and explore the technological applications of sciences as they pertain to the medical field. Students will examine various topics like physiology, molecular biology, microbiology, chemistry, genetics, engineering and physics, and epidemiology and public health. Through the direct application of modern technology and lab skills, students will study plants and animals as they relate to the science of the medical field. Emphasis will be put on the Biomedical industry as a 21stCentury career opportunity as well as address social and ethical issues surrounding our ever-increasing biomedical knowledge and research.

**Forensics** **#294**
**Grade 11-12** **2.5 Credits**
*Prerequisite: Completion of Biology & Chemistry*
Forensic Science is the application of science (chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. This integrated science course is designed to explore the scientific and technological aspects of criminal investigations. Topics will include the study of DNA, glass, blood, fingerprinting, chemical residues, and evidence collection as it relates to forensic issues. Applications to court cases, literature, psychology, and criminology also will be examined.

**Zoology** **#296**
**Grade 10-12** **2.5 Credits**
*Prerequisite: Biology*
Zoology encompasses many areas of life sciences. Topics include basic concepts of general zoology including the origin of animal life, animal reproduction and development, classification of major phyla of animals and the major classes of vertebrates, structure, and function of animals, and basic concepts of animal behavior and ecology. Zoology is a half year course introducing students to the diverse animal kingdom. Through experimentation, laboratory investigation (including dissections), and library research, students will make a detailed examination of selected animal phyla.

**Marine Biology** **#297**
**Grade 10-12** **2.5 Credits**
*Prerequisite: Biology*
Marine Science builds on the physical science and life science concepts learned in previous science courses and applies that knowledge to the exploration of the living and nonliving environments of our bays and oceans. This half year course focuses on various aspects of physical oceanography: chemistry, plate tectonics, sediments, ocean and atmospheric circulation, waves, and tides. It will also focus on marine biology: plankton, algae, plants, animals, marine ecosystems, and ecology.

**AP Biology II** **#249**
**Grade 12** **5 Credits**
*Prerequisite: Biology I and Chemistry I*
AP Bio II is designed to be the equivalent of the general Biology course taken during the first year in college. This course focuses on eight major themes: Science as a Process, Evolution, Energy Transfer, Continuity and Change, Relationship of Structure to Function, Regulation, Interdependence in Nature and Science, Technology, and Society. The major topics that will be intertwined with these themes will be Molecules and Cells, Heredity and Evolution, and Organisms and Populations. AP Bio II is designed as an intensive lab course that will strengthen a student's scientific background through lab work, discussion, scientific literature appraisal, and the use of technology. The course is taught at an accelerated pace; to keep students on topic and on track, the instructor will be available one day after school each week for extra help. Students are required to take the AP Biology Exam.

**AP Physics (1)** **#227**
**Grade 11-12** **5 Credits**

*Prerequisite: Honors Physics or Principles of Engineering with at least a B+*

AP Physics (1) will challenge students. This course will provide a solid level of introduction to both classical as well as modern physics concepts. The goals of this course will be two-fold: students will be able to apply physics concepts to the world around them to problem-solve and prepare them for the AP Physics 1 exam. This non-calculus, college-level physics course will cover Newtonian Physics, all the way from Kinematics and Newton's Laws, to Angular Momentum, Torque and Fluids. Students will build on what they've already learned in everyday life as well as other classes, gain a deeper appreciation of the concepts of Physics and learn advanced algorithms for problem-solving. Numerous labs will help the student understand the concepts covered in the course, strengthen the student's academic independence, fortify their ability to write a college-level lab report, and deepen the student's comprehension of the scientific method. The course focuses on developing tangible understanding and problem-solving abilities using Advanced Algebra II and Trigonometry concepts. Students are required to take the AP Physics (1) exam.

**AP Physics (2)** **#227A**
**Grade 11-12** **5 Credits**

*Prerequisite: AP Physics 1 in the previous or same year.*

AP Physics (2) will challenge students. This non-calculus, college-level physics course will provide a solid level of introduction to thermodynamics, electricity and magnetism as well as modern physics concepts. The goals of this course will be two-fold: students will be able to apply physics concepts to the world around them to problem-solve and the course will prepare them for the AP Physics 2 exam. Students will be asked to build on what they've already learned in everyday life as well as other classes. As a direct result, the DHS AP Physics 2 student will gain a deeper appreciation of the concepts of Physics and learn advanced algorithms for problem-solving. Numerous labs will help the student understand the concepts covered in the course, strengthen the student's academic independence, fortify their ability to write a college-level lab report, and deepen the student's comprehension of the scientific method. The course focuses on developing tangible understanding and problem-solving abilities using Advanced Algebra II and Trigonometry concepts. Students are required to take the AP Physics (2) exam.

**AP Chemistry II** **#228**
**Grade 11** **5 Credits**

*Prerequisite: Chemistry I and Algebra II*

AP Chemistry is a second year course. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students in such a course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. The course will be fast-paced; to help the students keep up, the instructor will be available one afternoon a week for extra help; the day will be picked at the start of the year. Typical help sessions will last one hour. Students may be required to attend additional lab sessions throughout the school year.

**AP Environmental Science** **#269**
**Grade 11-12** **5 Credits**
*Prerequisite: Algebra II*
The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet, there are several major unifying constructs or themes that cut across the many topics included in the study of environmental science. These include the facts that Science is a process, Science is a method of learning more about the world, energy conversions underlie all ecological processes, the Earth itself is one interconnected system, humans alter natural systems, and human survival depends on developing practices that will achieve sustainable systems. Students are required to take the AP Environmental Exam at the end of the year.

**Technology Engineering** **#199**
**Grade 9-12** **5 Credits**
*Prerequisite: None*
This engineering class will focus on the strands of technology: construction, communication, manufacturing, transportation and power and energy. The student will get a basic introduction to drafting techniques and principles. The students will then be able to draw and identify the different drawings and their applications. The students will learn safe and proper tool and machine use in the shop and be required to pass a safety test for all machines. The student will learn basic electronic design theory using ohm's law. They will build simple circuits using prototype boards, resistors, and power supplies for series and parallel circuits. The class will break down the components of a computer and learn basic block programming. The class will use the engineering design process to research, sketch, complete scaled drawing, construct, test and evaluate different projects throughout the year like a: 3-dimensional block, trebuchet, construction of a sealed model house, concrete casting and molding, and a flashlight.

**Manufacturing** **#214**
**Grade 10-12** **5 Credits**
*Prerequisite: Science and Technology Engineering/Intro to Engineering or Drafting*
The students will learn to use the shop equipment safely and properly. The student will use the drafting and shop tools to design and build four wood projects. You will construct an end table from a set of plans and take measurements from a prototype and build either a magazine rack or wine rack. The other two projects will be a step stool and serving tray. This class will enable you to earn a MACWIC level 1 certification and will train you in the knowledge and critical skills needed to enter the manufacturing workforce after high school or would be a great addition to a college application or job resume. You can further your MACWIC certification using the Applied Manufacturing Technology Pathway which is an advanced manufacturing certification and credentialing system through several colleges/universities. Douglas High School presently is the only non-vocational school in Massachusetts that provides level one training. MACWIC credentials - http://www.macwic.org/training/credentials/

**Manufacturing II** **#235**
**Grade 11-12** **5 Credits**
*Prerequisite: Manufacturing*
The student will use drafting, blueprint reading, and shop tools to design and build wood projects. The student will need to research and/or produce drawing plans for the manufactured projects of their choosing.

**Project Lead The Way (PLTW)**
Engineering/Manufacturing Pathway (4 course concentration)
Project Lead The Way prepares students to be innovative and productive leaders in Science, Technology, Engineering, and mathematics (STEM) and to make meaningful, pioneering contributions to our world. Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning, and an engineering notebook to document their work. This curriculum is designed as a four-year high school pathway to create rigorous, relevant, and reality-based courses that offer high school science credit as well as college credit. The CAD programs and techniques learned are currently being used by engineers throughout the industry.

Foundation courses:
Engineering Essentials (ESS)
Introduction to Engineering Design (IED)
Principles of Engineering (POE)

Specialty courses:
Civil Engineering and Architecture (CEA)
Aerospace Engineering (AE)

**(Project Lead the Way) Engineering Essentials** **#779**
**Grade 9-12** **5 Credits**
*Prerequisite: None*
Engineering Essentials is a full-year course designed to be a high school student's first exposure to the Project Lead The Way Engineering program and is appropriate for students in grades 9-12. In Engineering Essentials, students explore the work of engineers and their role in the design and development of solutions to real-world problems. The course introduces students to engineering concepts that are applicable across multiple engineering disciplines and empowers them to build technical skills through the use of a variety of engineering tools, such as geographic information systems (GIS), 3-D solid modeling software, and prototyping equipment. Students learn and apply the engineering design process to develop mechanical, electronic, process, and logistical solutions to relevant problems across a variety of industry sectors, including health care, public service, and product development and manufacturing.

**(Project Lead the Way) Introduction to Engineering Design** **#782**
**Grade 9-12** **5 Credits**

*Prerequisite: None*

Introduction to Engineering Design (IED) is a high school engineering course in the PLTW Engineering Program. Through both individual and collaborative team activities, projects, and problems, students apply systems thinking and consider various aspects of engineering design including material selection, human-centered design, manufacturability, assemblability and sustainability. Students develop skills in technical representation and documentation especially through 3D computer modeling using a Computer Aided Design (CAD) application. As part of the design process, students produce precise 3D-printed engineering prototypes using an additive manufacturing process. Student-developed testing protocols drive decision-making and iterative design improvements.

**(Project Lead the Way) Civil Engineering and Architecture (CED)** **#800**
**Grade 9-12** **5 Credits**

*Prerequisite: None*

CEA is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, stormwater management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry. Students will analyze, design, and build computer models using Autodesk Revit as well as physical models of residential and commercial facilities.

**(Project Lead the Way) Principles of Engineering (POE)** **#801**
**Grade 10-12** **5 Credits**

*Prerequisite: None*

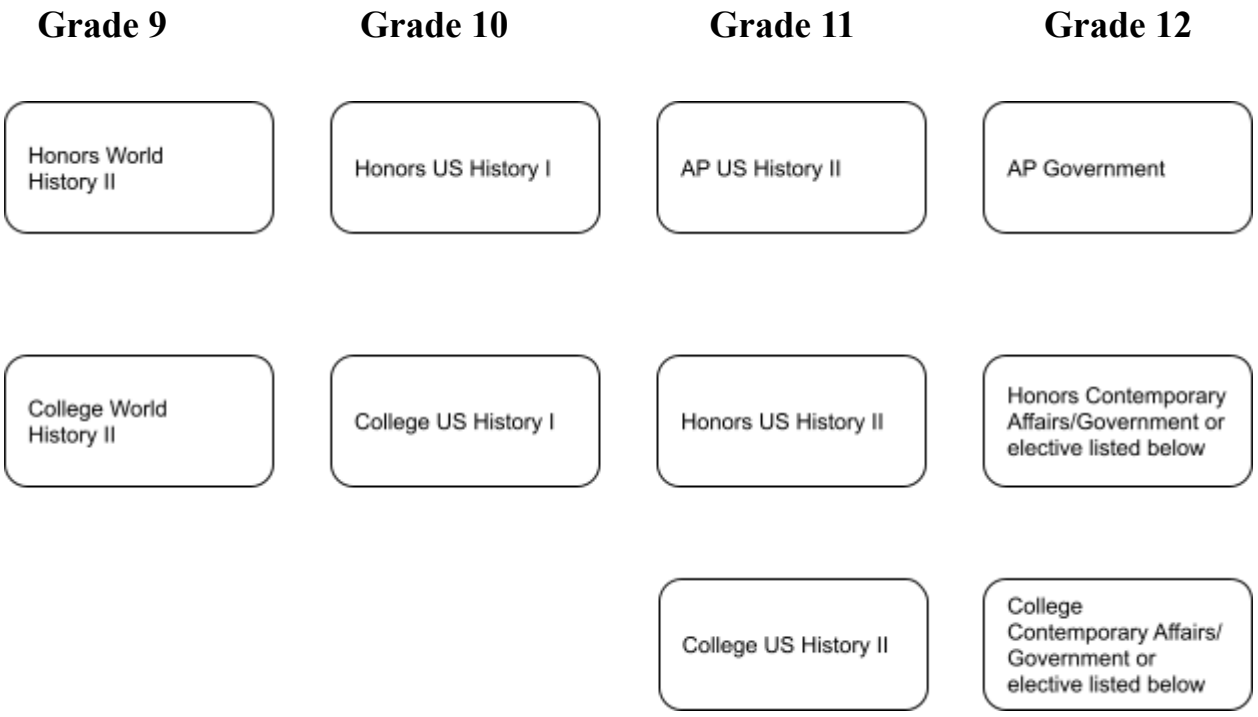
Principles of Engineering is a full-year course designed to be a high school student's second exposure to the PLTW Engineering program. This course introduces students to engineering concepts that are applicable to a variety of engineering disciplines and empowers them to develop technical skills through the use of engineering tools such as 3-D modeling software, hands-on prototyping equipment, programming software, and robotics hardware to bring their solutions to life. Students apply the engineering design process to solve real-world problems across a breadth of engineering fields such as mechanical, robotics, infrastructure, environmental sustainability, and product design and development.

**(PLTW) Aerospace Engineering (AE)** **#802**
**Grade 10-12** **5 Credits**

*Prerequisite: None*

Aerospace Engineering ignites students' learning in the fundamentals of atmospheric and space flight. Aerospace Engineering is one of the specialization courses in the PLTW Engineering program. The course deepens the skills and knowledge of an engineering student within the context of atmospheric and space flight. Students explore the fundamentals of flight in air and space as they bring the concepts to life by designing and testing components related to flight such as an airfoil, propulsion system, and a rocket. They learn orbital mechanics concepts and apply these by creating models using industry-standard software. They also apply aerospace concepts to alternative applications such as a wind turbine and parachute. Students simulate a progression of operations to explore a planet, including creating a map of the terrain with a model satellite and using the map to execute a mission using an autonomous robot.

# SOCIAL STUDIES




## ELECTIVES:

**Intro to Psychology**
**Intro to Sociology**
**Criminal Justice**
**Intro to Economics**
**AP Microeconomics**

***"We need history, not to tell us what happened or to explain the past, but to make the past alive so that it can explain us and make a future possible." Allan Bloom***

The purpose of the Douglas High School Social Studies department is to increase student competency in reading, writing, understanding, and listening for information from a variety of sources. We expect our students to use this knowledge to analyze our own society and others from both the past and the present. We seek to foster an appreciation of the practices, traditions, and viewpoints of both our own culture, and those of others. As citizens of the United States and members of the larger global society, we want our students to be engaged with current events and be able to find solutions to problems faced by others who came before.

**Douglas High School Expectations for Student Learning Assessed by the Social Studies Department are:**

**The DHS student writes effectively.**
**The DHS student reads critically.**
**The DHS student speaks confidently and convincingly.**

At the end of four years at Douglas High School, the student will be able to understand the common links between people today and people in the past. They will listen actively to others around them, including the media, to gain information about their place in history, how it developed and what can be done to solve problems facing us today. They will have covered the following areas:

A. United States History 1600-Present
B. World History Ancient Civilizations to the Present
C. American Government – United States, Massachusetts, Douglas.

**College World History II (Ancient Civilizations – Present)** **#301**
**Grade 9** **5 Credits**

*Prerequisite: World History I*

This survey course briefly reviews world events prior to 1700 C.E., and then continues at a more in depth understanding of 1700 C.E. through the present day. Topics include the major contributions of the many cultures and civilizations that have shaped the modern world. World history plays a major role in the understanding of our contemporary world. Through the learning of the social, political, technological, and economic contributions of different civilizations, students are encouraged to have a greater appreciation of these different cultures and peoples.

**Honors World History II (Ancient Civilizations – Present)** **#302**
**Grade 9** **5 Credits**

*Prerequisite: Teacher recommendation and a 90 or higher in College World History I*

This survey course briefly reviews the world prior to 1700 C.E., and engages students into a more in-depth discovery of world events since 1700 C.E. Students will critically explore the contributions of the many cultures and civilizations that have shaped the modern world. Students will also reflect on the major role that world history plays in understanding our contemporary world. Through the learning of the social, political, technological, and economic contributions of different civilizations, students are expected to have a greater appreciation of these different cultures and peoples. In the course of their studies, students will review primary documents, acknowledge truth and perspective, and advance their writing and communication skills.

**College United States History I (1500-1877)** **#304**
**Grade 10** **5 Credits**

*Prerequisite: World History II*

College U.S. History I covers major events and issues that took place in America from the colonial era of the early 1600s to the end of the Civil War in 1865. Students will analyze the significance of events and issues as they were happening, as well as the impact these events and issues have had in today's society. Writing, reading, researching, speaking, and critical thinking skills will be emphasized throughout the year. Students will develop these skills through the completion of research papers, essays, tests, oral presentations, document based questions, and note taking both inside and outside of the classroom.

**Honors United States History I (1500 – 1877)** **#305**
**Grade 10** **5 Credits**

*Prerequisite: Teacher recommendation and a 90 or higher in College World History II*

Honors U.S. History I covers major events and issues that took place in America from the colonial era of the early 1600s to the end of the Civil War in 1865. Students will analyze the significance of events and issues as they were happening, as well as the impact these events and issues have had in today's society. Writing, reading, researching, speaking, and critical thinking skills will be emphasized throughout the year. Students will develop these skills through the completion of research papers, essays, tests, oral presentations, document based questions, and note taking both inside and outside of the classroom.

**College United States History II (1877-1945)** **#307**
**Grade 11** **5 Credits**

*Prerequisite: College U.S. History I*

The course is required for all juniors and provides intense study of U.S. History from 1877 to 1945. This course Students are required to complete a research paper, projects, and quarterly book reviews. Students will participate in discussion, debates, and presentations to aid in their study of history. Students continue to develop their skills through the writing of essays and papers, the reading of supplemental historical documents, analyzing document based questions, and the analysis of how these events have impacted political, economic, and social development. Critical reading skills will be used to critique primary and secondary sources.

**Honors United States History II (1877-1945)** **#308**
**Grade 11** **5 Credits**

*Prerequisite:Grade of 90 or higher in College U.S. History I, and teacher recommendation*

This course continues with American history from Reconstruction to the end of World War II. The course will focus on investigating major concepts, controversies, and developments in American history focusing on the emergence of Modern America.. Students will engage in analysis, interpretation, and evaluation of historical events. Students will develop strong understandings of primary sources as well as demonstrate strong reading, writing, and communication skills..

**AP U.S. History** **#309**
**Grade 11** **5 Credits**
*Prerequisite: Completion of College or Honors World History II and College U.S. History I*
As described by The College Board, In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. Students are expected to take the AP U.S. History exam.

**College Contemporary Affairs/College American Government**
**College Prep** **#311**
*Prerequisite: College U.S. History II*
**Honors** **#312**
*Prerequisite: Grade 12, grade of 90 or higher in College U.S. History II, and teacher recommendation*
**Grade 12** **5 Credits**
*This course will be broken down into two half year courses. See below for specific breakdown

**Contemporary American Affairs (1945-Present)**
This course is required for all seniors and provides a study of U.S. History from WWII to the present day. The first half of the year will include an in-depth analysis of Post WWII events. Subjects will include but will not be limited to the Cold War, the Korean War, the Vietnam War, the Reagan Era, Desert Storm and 9/11.

**American Government**
This course emphasizes topics listed in the Massachusetts History-Social Science Frameworks. There will be five standards covered in the study of American Government: Authority, Responsibility and Power; The Founding Documents; Principles and Practices of American Government; Citizenship; and Forms of Government.

**AP American Government** **#313**
**Grade 12** **5 Credits**

*Prerequisite: Completion of World History II, U.S. History I, and U.S. History II.*

AP U.S. Government and Politics is an introductory college-level course in U.S. government and politics. The course will include an examination of the U.S. Constitution, the foundations of American democracy including the events, issues, and ideas leading up to the Constitutional Convention, the interactions among the branches of the U.S. government, civil liberties and civil rights in America, American political ideologies and beliefs, and political participation in America. Students will analyze these topics and be able to apply them to past and present day issues and events. Writing, reading, researching, speaking, and critical thinking skills will be emphasized throughout the year. Students will develop these skills through the completion of research papers, essays, tests, oral presentations, document based questions, and note taking both inside and outside of the classroom. The curriculum is aligned with the objectives set forth by the College Board to challenge students and to prepare them for the Advanced Placement Examination. Students are expected to take the AP U.S. Government exam.

**AP Microeconomics** **#314**
**Grade 11-12** **5 Credits**

*Prerequisite: U.S. History*

As described by The College Board, AP Microeconomics is a college-level course that introduces students to the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Students are expected to take the AP Microeconomic exam.

**Introduction to Economics** **#375**
**Grade 9-12** **2.5 Credits**

*Prerequisite: None*

Economics is the study of choices. How do individuals and nations choose to use limited resources to satisfy unlimited wants and needs? This course introduces students to economics concepts such as scarcity, opportunity cost, wants vs. needs, and basic microeconomic and macroeconomic concepts such as markets, factors of production and supply and demand.

**Introduction to Psychology** **#370**
**Grade 11-12** **2.5 Credits**

*Prerequisite: None*

Psychology focuses on the reasons and causes of human behavior. Topics covered, among others, include patterns of behavior, perceptions, motivation, learning, and memory. The goal of this course is to increase the students' understanding of some of the elements of behavior.

**Introduction to Sociology** **#371**
**Grade 11-12** **2.5 Credits**

*Prerequisite: None*

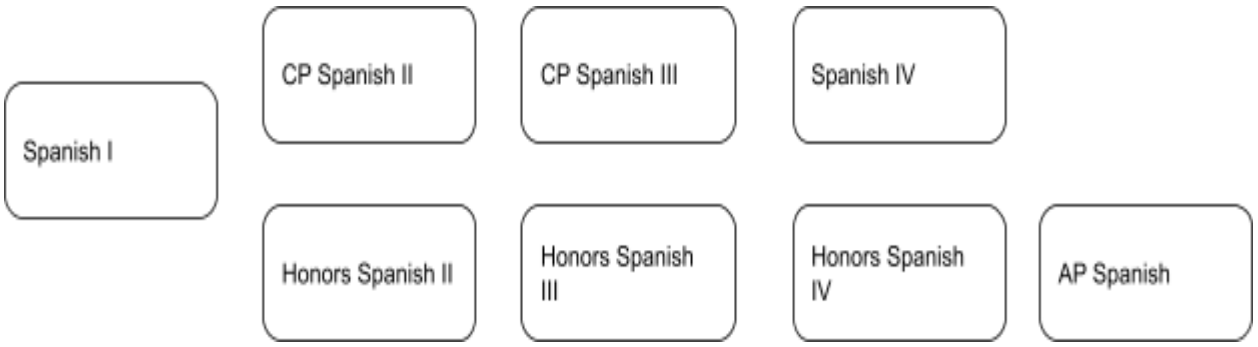
Sociology focuses on the study of humans and their lives in both informal and formal groups. This course emphasizes awareness of the rules, structures, and institutions that enable people to live together and deal with problems.

**Criminal Justice** **#372**
**Grade 11-12** **2.5 Credits**

*Prerequisite: None*

Criminal Justice introduces the student to the content area of Law. This course utilizes various studies of human experience both past and present. This course is designed to provide the student with an understanding of your rights and responsibilities, knowledge of everyday legal problems and the ability to analyze, evaluate and in some situations resolve legal disputes. Presentation of the classification of law, an investigation of individual laws and case studies will be the focus of this course. Areas of attention will include rights of the individual, family law, state law, federal court system and the ongoing issues around law enforcement and penal institutions.

# WORLD LANGUAGE




**Electives:**
**Geography and History of the Spanish-Speaking World**
**Spanish Legends & Film**
**Spanish Music and Dance**

*Massachusetts state colleges and universities require a **minimum** of two years of the same foreign language for admission.

Course advancement is based on successful completion of the previous courses, grades earned and teacher recommendation. Students wishing to move from the CP track to the Honors track should consult with the World Language Department, as gaps in the curriculum might warrant the need for independent study over the summer.

World Language is a two-year requirement to graduate from Douglas High School. Students can be exempt from this requirement if at least one of the following applies to them:

- Student had a psychoeducational evaluation in the last three years and have been found to have a specific diagnosis of a learning disability and an inability to succeed in a world language.
- Student has had an evaluation in the last 3 years and has been found to have a communication disorder.
- Student has been diagnosed with a cognitive or autism spectrum disorder.

**Massachusetts Seal of Biliteracy:**
Mass Department of Education award provided by state approved districts that recognizes high school graduates who attain high functional and academic levels of proficiency in English and a world language through an endorsement seal on their transcripts and diploma. To receive the Massachusetts Seal of Biliteracy a student must receive a qualifying score on the ELA MCAS and an approved world language assessment.

**The Massachusetts Foreign Languages Curriculum Framework** will prepare students of all ages and all levels of proficiency to use the target language in order to:

- Communicate with speakers/signers of the target language, especially those in their schools and communities;
- Explore and celebrate the products, practices, and perspectives of multiple cultures;
- Compare their own languages and cultures with those of the target communities;
- Expand their academic knowledge of other disciplines;
- Serve and lead in their academic, local, and global communities;
- Become lifelong beneficiaries of the opportunities that proficiency in multiple languages can offer them; and
- Become agents of change that promote equity, global awareness, and multicultural understanding

The World Language department strives to expand student knowledge of diverse cultures and peoples while promoting a greater understanding of others and ourselves through the study of language. Emphasis at all levels is on reading, writing, speaking and listening in the target language.

**Spanish I** **#409**
**Grade 9-12** **5 Credits**
*Prerequisite: None*
Spanish I introduces students to the Spanish language with the emphasis on listening and speaking skills. Vocabulary acquisition, reading and writing skills are also developed. Strategies for learning a second language are taught. Basic grammar patterns are stressed in the written component of the language study.

**Spanish II** **#411**
**Grade 9-12** **5 Credits**
*Prerequisite: Spanish I*
This course is a continuation of Spanish I with a complete review of the first year, as well as further introduction of new concepts and vocabulary. Activities will be designed to help students apply these news concepts to increase their oral and written proficiency of Spanish. Spanish culture will be incorporated into the course throughout the year.

**Spanish II Honors** **#412**
**Grade 9-12** **5 Credits**
*Prerequisite: A 90 or better in Grade 8 Spanish or 85 or better in Spanish I Honors and/ teacher recommendation is suggested.*
This course is for students who have successfully completed Spanish I. The course will emphasize conversation as well as written work and will focus on the acquisition of vocabulary and a further introduction of new grammatical structures and tenses. The reading of short stories and the application of the spoken language will be emphasized. Activities will be designed to increase verbal, reading, and listening comprehension skills. This course will continue to broaden the student's knowledge of Spanish-speaking countries and their cultures. Spanish will be the language of choice and the use of English will be held to a minimum.

**Spanish III** **#413**
**Grade 10-12** **5 Credits**

*Prerequisite: Spanish II*

This course is open to those students who have successfully completed Spanish II. It is designed to advance and refine the students' ability to communicate in the target language. All four language skills are emphasized: understanding the spoken word, speaking, reading, and writing. Following a basic review of the previous level, students are presented with a variety of reading, speaking, and listening exercises that are suitable for this level. Some literature is introduced and compositions are assigned. The language will continue to be studied within the context of the contemporary Hispanic world and its culture.

**Honors Spanish III** **#414**
**Grade 10-12** **5 Credits**

*Prerequisite: A "90" or better in Spanish II or "85" or better in Spanish II Honors and/or teacher recommendation is suggested.*

This course is for students who have successfully completed Spanish II and plan to advance past level III in language learning. The course will advance and refine the students' ability to communicate in the target language. All four language skills are emphasized: understanding the spoken word, speaking, reading and writing. Some literature is introduced and compositions are assigned. Projects that incorporate the cultural and grammatical aspects of the language can be anticipated. The language will be studied within the context of the contemporary Hispanic world and its culture. This course will help to prepare students who plan to continue their study of language to Spanish IV and beyond.

**Spanish IV** **#415**
**Grade 11-12** **5 Credits**

*Prerequisite: Spanish III*

This course is for those students who wish to increase their proficiency in Spanish after having successfully completed the first three levels. It includes a review of basic concepts as well as an introduction to more complex grammatical structures, vocabulary and idiomatic expressions. Emphasis is placed on expression (both in writing and in oral presentations) and on comprehension (both of printed and auditory sources). Students will learn about Spanish history and culture through readings by various Hispanic authors.

**Honors Spanish IV** **#416**
**Grade 11-12** **5 Credits**

*Prerequisite: Teacher recommendation and a suggested 90 or better in Spanish III or 85 or better in Spanish III Honors*

This course is for those students who wish to reach the proficiency level adequate for placement in the AP Spanish Language course. It includes a brief review of basic concepts as well as the study of more complex grammatical structures, vocabulary, and idiomatic expressions. Emphasis is placed on expression (both in writing and in oral presentations) and on comprehension (both of printed and auditory sources). Students will also challenge themselves by completing authentic communicative activities in preparation for the AP Spanish Language course. Students will learn about Spanish history and culture through readings by various Hispanic authors.

**AP Spanish Language** **#417**
**Grade 11-12** **5 Credits**

*Prerequisite: Teacher recommendation and a suggested 90 or better in Spanish IV or 85 or better in Spanish IV Honors, or Spanish III Honors*

This course emphasizes the fundamentals of Spanish structure applied in both written and oral communication. Activities will be designed to practice, refine, and consolidate all language skills: listening, speaking, reading, and writing. Curriculum will expand vocabulary, stimulate discussion, and broaden students' understanding of the Hispanic world while increasing their ease in communication in Spanish. AP Spanish language is intended for students who wish to develop proficiency and integrate their language skills, using authentic materials and sources. Students who enroll should already have a basic knowledge of the language and cultures of Spanish-speaking peoples and should have attained a reasonable proficiency in using the language. AP Spanish will be conducted almost entirely in Spanish. The AP Spanish language course provides students with a learning experience equivalent to that of a third-year college course in Spanish language. This course should develop students' reading, writing, listening, and speaking skills at this level. Students enrolling in AP Spanish language are typically in their fourth or fifth year of language study, or have had equivalent experience with the language.

**Geography and History of the Spanish-Speaking World** **#445**
**Grade 10-12** **2.5 Credits**

*Prerequisite: Spanish I & II*

This course will be offered to students who have previously taken Spanish I and II but would like to explore the Spanish culture more in depth. This cross-curricular course will be offered as an elective and will focus on the history and geography of Latin America as well as indigenous cultures (Aztec, Incas, Maya). This course will also incorporate popular hispanic dishes from around the world and will utilize the kitchen at least once per quarter. This course will introduce new vocabulary and will be taught in the target language.

**Spanish Legends & Film** **#446**
**Grade 10-12** **2.5 Credits**

*Prerequisite: Spanish I & II*

This course would be offered to students who have previously taken and passed Spanish I and Spanish II and are interested in exploring cultures through cultural legends and films. Students will read various legends from Spanish-speaking cultures and further their understanding through films and discussions. This course is an opportunity for students to dive deeper into cultural topics that they were introduced to in Spanish I and II. This course will mainly be taught in the target language so students should feel confident in reading and listening to Spanish. *Some films in this course may be rated R. Parental approval will be required*.

**Spanish Music & Dance** **#447**
**Grade 10-12** **2.5 Credits**

*Prerequisite: Spanish I & II*

This course will be offered to students who have previously taken Spanish I and II but would like to explore the Spanish culture more in depth. Students will learn and discuss how music and dance has influenced and helped shape Latin American culture. Students will listen to and analyze music while learning the basic steps of popular dances. Students will be able to demonstrate their knowledge through artistic expression in the target culture by identifying, learning, and performing dances.

# ADDITIONAL ELECTIVES

**Virtual High School**
**Grades 11 & 12**
VHS (Virtual High School) offers an extensive selection of unique, *on-line* courses available to students with specialized areas of interest and/or unusual scheduling conflicts. The on-line learning environment helps students master course content as well as develop communication, collaboration and creative problem solving skills. To be successful at VHS, students should be capable of demonstrating strong independent work habits. Students interested in a VHS course should speak to the VHS Site Coordinator and their school counselor. Additional information, including a list of offerings as well as detailed course descriptions, can be found at vhslearning.org. Note: Internet access at home is highly recommended, but not required. ***Cannot be taken in lieu of a required course offering.**

**AP Seminar** **#772**
**Grade 10-11** **5 Credits**
*Prerequisite: College or Honors English 9*
In AP Seminar, students in grades 10 and 11 investigate topics from a variety of perspectives, write research-based essays, and design and give presentations both individually and as part of a team. Students develop skills in critical thinking, collaboration, conducting research, and public speaking. AP Seminar is designed to prepare students for future AP courses. The AP Capstone program is a two-year program based on two AP courses: AP Seminar (taken during sophomore or junior year) and AP Research (taken during junior or senior year). Students who earn a score of 3 or higher in both courses' AP Exams and on any other 4 AP Exams will receive the AP Capstone Diploma.

**AP Research** **#781**
**Grade 11-12** **5 Credits**
*Prerequisite: AP Seminar; Highly recommended: Score of 3 or higher on AP Seminar Exam*
In AP Research, the second course in the AP Capstone Program, students will explore an academic topic, problem, issue, or idea that they have an individual interest in. Students will conduct a yearlong investigation to address their chosen research question. During AP Research, students further the skills acquired in AP Seminar by learning research methods, practicing ethical research, and accessing, analyzing, and synthesizing information. Throughout the year, students will reflect on their development, document their processes, and create scholarly work through a portfolio. The course culminates in an academic research paper and presentation. The AP Capstone program is a two-year program based on two AP courses: AP Seminar (taken during sophomore or junior year) and AP Research (taken during junior or senior year). Students who earn a score of 3 or higher in both courses' AP Exams and on any other 4 AP Exams will receive the AP Capstone diploma.

**School to Career: Work Experience** **#619**
**Grade 12** **5 Credits**

*Prerequisite**:** Students must complete an application and obtain pre-approval from the school counseling department, school to career coordinator, parent, and administration. Students must also be in good academic standing.*

This program will provide 12th grade students with the opportunity to explore a possible career interest by participating in a field-based work experience. Students begin with classroom instruction investigating career options, professional behavior, and employer/employee responsibilities. Students will be required to submit weekly time cards and journals, meet with the school to career coordinator on a regular basis, and complete four quarterly projects related to their experience. **Note:** Students are required to provide their own transportation to and from the work site.

**Teacher Assistant** **#552**
**Grade 11-12** **2.5 Credits**

*Prerequisite: None*

The independent study as a Teaching Assistant (TA) in a core class is designed for juniors and seniors who are interested in studying education in college. The students will aid the teacher with student questions, one-on-one tutoring, small group instruction and reinforcing topics. They will keep a journal of their experiences and create various activities to help students reinforce key concepts. Creation of lessons and activities will count as midterm and final exams.

**Drama & Stagecraft** **#087**
**Grade 9-12** **1 Credit/Semester**

*Prerequisite: None*

After-school drama is a program in which students rehearse and perform a scripted play. Students in Drama and Stagecraft learn the basics of stagecraft, self-discipline, and the importance of hard work, creativity, listening and observation skills, and self-confidence. Our students enjoy the rewards that come with working together to achieve a common goal. Drama meets after school for an hour and a half every Thursday (weather and holiday permitting) for two half-year sessions. Along with the weekly sessions, there is an additional week of rehearsals leading up to the final play (tech week). Depending on the year, the Drama and Stagecraft will run either one or two scripted plays. Students can elect to take Drama and Stagecraft for multiple semesters. Students may also elect to participate in Drama and Stagecraft for no credits if they cannot commit to the attendance requirement.

Grading will be determined by participation, behavior, and attendance. For attendance, the expectation is that students attend all scheduled Mondays for full participation credit. Tech week for all students is mandatory.

# SENIOR CAPSTONE

Students in their senior year are required to choose one of the senior capstone course options below to complete opposite their senior PE requirement. Students are encouraged to choose the option that best matches their plans following graduation. Students who are planning to graduate in a pathway can complete their pathway requirement through either a related senior project or research paper in the digital literacy and research course. These one semester courses are designed to help students demonstrate the skills they have acquired during their time at Douglas High School as well as prepare them for the next phase of life.

Students wishing to take more than one of these courses should consult with their counselor.

**Senior Project** **#618A**
**Grade 12** **1.25 Credits**

*Prerequisite: None*

This one-semester course allows students to explore in depth a particular area of interest. The project encompasses communication, problem solving, and research skills while teaching the importance of personal growth and responsibility. During this semester-long project, students are required to choose an area of interest, and work with a mentor in their chosen field. Students first propose their selected topic for study, conduct research on their subject matter, and keep a journal/portfolio based on their experiences. Then, near the end of senior year, students are required to share their experiences in a formal presentation. Upon completion of this course, students should have:

- Explored an area of their interest in-depth through research and fieldwork
- Improved the ability to communicate better with peers and/or the public
- Analyzed their own learning and experiences through a journal or portfolio
- Learned how to make formal presentations to better equip them for either the workforce or college

**Honors Senior Digital Literacy and Research** **#742**
**Grade 12** **1.25 Credits**

*Prerequisite: Honors English III or AP Language*

This one semester course teaches students digital literacy skills and prepares them for college level research. Students will learn a variety of research methods, evaluation skills, and citation formats. During this class, students are required to choose a topic of interest, conduct research, and complete a research paper using the appropriate citation style for their chosen topic. Students will also learn about digital literacy, how to conduct proper research, explore databases, and evaluate sources for credibility.

**Senior Career Readiness** **#743**
**Grade 12** **1.25 Credits**

*Prerequisite: None*

This class will focus on getting students ready for success in the next stage of life, whether it be college or the workforce. Students will learn about career choice, professionalism and acceptable workplace behavior along with life skills such as budgeting, taxes, and banking. Students will build a resume and practice interviewing for jobs. **This course is not recommended for students who have previously taken or are currently taking Personal Finance**.

**DECA Written Project – 1st semester only** **#751**
**Grade 12** **1.25 Credits**

*Prerequisite: None*

Students interested in business will join DECA and compete against other schools by preparing a written project as their Senior Project. Topics are chosen by students and projects are created based on DECA competition guidelines. Topics include a wide range of options from Business Operations and Personal Financial Literacy to Hospitality and Tourism options and many options in between.

**Senior Yearbook** **#758**
**Grade 12** **3.75 Credits**

*Prerequisite: None*

This project-based course culminates with the production of the school yearbook and satisfies the senior capstone requirement. (The student must take his/her PE credit the first half of the year in conjunction with this class and then remain enrolled in Yearbook entirely in the second semester). Students in this course will learn how to operate under deadlines and to communicate formally both verbally and in writing to staff and students. Students will also hone their skills as editors and learn how to write captions, copy, and headlines while demonstrating purposeful design principles. The senior members of this class will finalize the theme and design of the book and one senior member will be elected as Chief Editor. Students will overview some basic photography lessons on angles, placement, lighting, etc. and will produce a small portfolio of some of their photographs. They will also engage in some post production editing using Photoshop and the entire book is produced using online software provided. Students must be self-motivated and willing to work together as a team. They will be required to attend various school activities outside of the normal school day to photograph events and produce material for the yearbook (students can be provided a camera to use). Final admission to this course lies with the administration and teacher.