

# Rockville High School



Program of Studies  
2021-2022

# PROGRAM OF STUDIES GUIDE

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**ROCKVILLE HIGH SCHOOL**  
**Program of Studies Guide**  
**2021-2022**

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**ACCREDITATION**

Rockville High School is accredited by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering postgraduate instruction.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one that has the necessary resources to achieve its stated purpose through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by the New England Association should be directed to the administrative staff of the school or college. Individuals may also contact the Association by mail (New England Association of Schools and Colleges, Inc., 209 Burlington Woods Road, Suite 100, Burlington MA 01803), by phone (781-425-7700), or via the Internet (web address [www.neasc.org](http://www.neasc.org))

## PLANNING THE PROGRAM OF STUDIES

Dear Rockville Students and Families:

Your planning and placement for the next school year should be a shared decision with your parents or guardians, teachers, and school counselor. The schedule which you select should allow each and every day to be challenging, enriching, and sequential in regards to your planned graduation.

Our Program of Studies Guide highlights countless opportunities to meet the needs of your planned career path. Before finalizing your courses for the 2021-2022 school year, please research the optimal educational program that will best meet your individual needs. The choices that you make will directly correlate to the value, worth, and “total” experience that you receive at Rockville High School.

In summary, when finalizing your selection, be conscious of graduation requirements, personal interests, and plans after Rockville High School.

Respectfully,  
Kimberly Marinar  
Director of School Counseling

## SCHOOL COUNSELING

At the start of ninth grade, students are assigned to a counselor who will work individually with them throughout their high school experience. Conferences between students and the counselor usually take place during ROCK block, lunch, before or after school and occur as frequently as may be necessary. The following are items students may want to discuss with their counselor: difficulties with school subjects or other school-related problems; self-evaluation of abilities, interests, personal and academic strengths; selection of courses and studies; vocational and/or career planning; planning for school or college after graduation; part-time employment; full-time employment after graduation; and/or personal problems.

Parents/guardians are welcome to visit the School Counseling Office to discuss their student. Please call 860-870-6050 during the school day to schedule an appointment.

## CONFIDENTIALITY

Confidentiality is a serious part of all professional relationships. To avoid any misunderstanding between a student and their School Counselor, it is best that the student clarify any issue that is expected to be held in confidence. Likewise, it is important for students to know that, by law or sound ethical practices, there are situations whereby the counselor is required to disclose information that pertains to a student's safety or the safety of others. This statement is offered in the spirit of protecting students' rights.

## CREDIT REQUIREMENTS

All students in grades 9, 10, and 11 are required to take a minimum of **7.00 credits**. Grade 12 students are required to take a minimum of **6.00 credits**.

## GRADUATION REQUIREMENTS

### Credit Requirements for Graduation

All students are required to complete, pass, and earn credit for the following courses to be eligible to graduate from Rockville High School:

<u>CLASS OF 2022</u>		<u>CLASS OF 2023 &amp; beyond*</u>	
<u>Subject</u>	<u>Credits</u>	<u>Humanities</u>	<u>9.0 credits</u>
English	4.0	English	4.0
Mathematics	4.0	Social Science	1.5
Social Studies		U.S. History	1.0
Civics	0.5	Civics	0.5
U.S. History	1.0	Fine Arts****	1.0
Elective	1.5	Humanities Electives	1.0
Science			
Physical Science	1.0	<u>STEM</u>	<u>9.0 credits</u>
Biology	1.0	Mathematics	4.0
Elective	1.0	Science	1.0
Vocational Education***	1.0	Physical Science	1.0
Fine Arts****	1.0	Biology	1.0
Software Applications	0.5	Vocational Education***	1.0
Personal Finance	0.5	STEM Electives	1.0
World Language	2.0		
Physical Education	1.5	<u>Other</u>	<u>7.0 credits</u>
Health	0.75	World Language	2.0
Electives	3.75	Health & Wellness 1	0.5
Community Service**	50 hours	Health & Wellness 2	0.5
		Physical Education	1.0
		Software Applications	0.5
		Personal Finance	0.5
		Mastery Based Assessment	1.0
		Electives	1.0
		Community Service**	50 hours
<b>TOTAL = 25.0 credits</b>		<b>TOTAL = 25.0 credits</b>	

\* Beginning with the Class of 2023, the State of Connecticut's graduation requirements have been revised. They are now grouped into the areas of Humanities, STEM, and Other.

\*\* As part of their civic expectation at Rockville High School, students are required to donate their time to the service of others. This service must not be financially compensated in any way. Students may work with a specific non-profit organization or they may volunteer individually.

\*\*\* Courses in Business & Computer Science, Technology Education, Agricultural Science and Technology Education, and Family and Consumer Science meet the Vocational Education requirement. Software Applications and Personal Finance do not meet the Vocational Education requirement.

\*\*\*\* Courses in Art and Music meet the Fine Arts requirement. Creative Writing, and Video Production 1 & 2 also meet the Fine Arts requirement.

## CROSS CREDIT OPTIONS

The following courses have been approved as meeting an academic requirement for graduation:

<u>Elective</u>	<u>Credit Earned</u>	<u>Requirement Fulfilled</u>
Creative Writing I & II	0.5 each	Fine Arts
Advanced Creative Writing I	1	English 11 or 12 (if completed in grade 11 or 12) <u>or</u> Fine Arts
Advanced Creative Writing II	1	English 11 or 12 (if completed in grade 11 or 12) <u>or</u> Fine Arts
Humanities Scholar Seminar	1	English 12
Film Studies	0.5	English 12-College (semester 2)
Video Production I & II	0.5 each	Fine Arts <u>or</u> Vocational Education
Video Production III & IV	0.50 each	Fine Arts <u>or</u> Vocational Education
Greenhouse Management	0.5	Science Elective
Horticulture I & II	0.5 each	Science Elective
Veterinary Science I & II	0.5 each	Science Elective
Principles of Engineering I & II	0.5 each	Physical Science

Software Applications and Personal Finance do not fulfill the Vocational Education requirement.

## TRANSFER STUDENTS

The transcripts of students transferring into Rockville High School will be examined and credits awarded in terms of equivalent Carnegie units. Any student who transfers into Rockville High School in Grade 9, 10, or 11 will have their transcript grades figured into the two-and-one-half year and/or three-year rank at face value or they may request that the sending school re-compute the transcript grades on their weighted system and forward a new official transcript to RHS. This transcript should show the school's interpretation of the student's weighted average.

## TRANSCRIPTS

Each student's academic record is contained on his or her transcript. The transcript contains the student's name; date of birth; parent or guardian's name; address; date of graduation; a year-by-year listing of courses, levels, grades, and credits; and class rank. Transcripts do not show SAT scores. It is the responsibility of the student to forward official SAT scores to the colleges of their choice through the College Board.

## **SAT®\*\***

The SAT measures the verbal, mathematical, and writing abilities a student has developed over many years, both in and out of school. Along with a student's high school courses and grades, SAT scores help indicate how prepared the student is to do the kind of academic work most colleges require. These tests are useful because courses and grading standards vary so widely from school to school that making comparisons are difficult. Scores on standardized tests help admissions officers compare the presentation and ability of students from different schools.

## **SAT® SUBJECT TESTS\*\***

The SAT Subject Tests are required by some colleges for admissions or placement purposes. The Subject Tests are one-hour multiple-choice tests in specific subject areas. Unlike the SAT, the Subject Tests measure knowledge of a subject and the ability to apply that knowledge. Students should try to take an Achievement Test as soon as possible after completing the last course in that subject.

\*\* As a service to its students, Rockville High School is an official site for the SAT® and PSAT®. The examinations and the process of administration are the exclusive property of the College Board and any and all surveys such as the Student Search Service are not subject to any Federal Education Rights and Privacy Act (FERPA) regulations.

## **TESTING DATES FOR SAT & SUBJECT TESTS**

\* Exact testing dates are available at [www.CollegeBoard.com](http://www.CollegeBoard.com)

August	Senior Year	March	Junior Year
October	Senior Year	May	Junior Year
November	Senior Year	June	Junior Year
December	Senior Year		

Students should be aware of the test dates and see their counselor well in advance for information about registering for the test.

## **THE ACT®**

The ACT® is a national college admissions examination that contains multiple-choice subject area tests in English, Mathematics, Reading, and Science. ACT's writing test is optional and will not affect the composite score. ACT results are accepted by all four-year colleges and universities in the United States. For more information, exact testing dates, and testing locations, please visit [www.act.org](http://www.act.org).

## **ASVAB**

The ASVAB (Armed Services Vocational Aptitude Battery) is offered to high school and post-secondary students as part of the ASVAB Career Exploration Program. The program provides tools to help students learn more about career exploration and planning, in both the civilian and military worlds of work. There is no military obligation associated with this assessment.



## **ADVANCED PLACEMENT COURSES**

The Advanced Placement Program® is a cooperative educational endeavor between secondary schools and colleges and universities. The Program provides motivated high school students with the opportunity to take college-level courses in a high school setting. Students who participate in the Program not only gain college-level skills, but in many cases they also earn college credit while they are still in high school. AP courses are taught by dedicated and enthusiastic teachers who follow course guidelines developed and published by the College Board. Every AP student will be required to pay for and take the AP exam prepared by the College Board and administered in May. Students who are eligible for free or reduced-cost lunch qualify for a fee waiver on all AP exams they take that year. The exams are scored by the College Board and graded on a five-point scale (5=Extremely Well Qualified, 4=Well Qualified, 3=Qualified, 2=Possibly Qualified, 1=No Recommendation). Colleges use these grades as evidence of the students' abilities and achievements when they make their decisions regarding whether or not to grant credit and/or advanced placement. An AP score report is sent in early July to each student's home address, school, and, if the student has requested, to his or her college. Students should check with their college's admissions office for clarification of policies on Advanced Placement. It is important to note that each college determines college credit and/or advanced placement.

Rockville High School offers eight Advanced Placement courses.

Calculus AB	Physics
Chemistry	Statistics
Computer Science Principles	Studio Art
English Language & Composition	United States History

Additionally, the Advanced Placement exam is optional for students enrolled in Biology (ECE), French V (ECE), or Spanish V (ECE). Please see the individual course descriptions for further information. The AP Program offers additional courses in a variety of subject areas which students have the opportunity to independently prepare for and take the exam.

## **POLICY ON CREDITS EARNED AT TWO- OR FOUR-YEAR COLLEGES**

Seniors enrolled full-time at Rockville High School who wish to complete a course at a two-year or a four-year college with the intent of transferring that credit back to Rockville High School must receive authorization from the student's Administrator prior to enrolling in the course.

## **INDEPENDENT STUDY**

Independent studies are available within each subject area at Rockville High School. Students must have successfully completed other department courses and desire to continue their study in a specific area where there is not an advanced offering. All students wishing to enroll in an independent study course must obtain approval from the subject area teacher and department chairperson and complete the official application that may be obtained from a counselor. As part of this application, the student will write his or her own plan of activities as outlined in each department's guidelines. The deadline to apply for an independent study program is the last Friday in May for full-year or fall semester courses and the second Friday in January for spring semester courses.



## EARLY COLLEGE EXPERIENCE

The University of Connecticut's Early College Experience (ECE) provides academically motivated students the opportunity to take university courses while in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide an academic and a financial head-start on a college degree.

UConn ECE instructors are high school teachers certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity and critical thinking - all important for success in college. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. UConn credits are transferable to many colleges and universities. Students are charged per UConn credit plus a processing fee per course. Billing is handled by UConn. For additional information about the UConn ECE program, visit [www.ece.uconn.edu](http://www.ece.uconn.edu).

### University of Connecticut ECE Courses

UConn #	UConn Course	RHS #	RHS Course
SPSS 2520	Floral Art	0250E	Floral Design ECE
SPSS 1150	Agricultural Technology and Society	0258E	CT Agriculture in the 21st Century ECE
ANSC 1602	Behavior Training of Domestic Animals	0259E	Animal Behavior ECE
ANSC 1676	Intro to Companion Animal Management	0265E	Intro to Companion Animal Management ECE
SPSS 1110	Fundamentals of Horticulture	0284E	Horticulture II ECE
SPSS 3530	Advanced Floral Design	0293E	Advanced Floral Design ECE
ENGL 1010	Seminar in Academic Writing	2502E A/B	Academic Writing ECE
ENGL 1011	Seminar in Writing through Literature	2503E A/B	Writing through Literature ECE
AMST 1201	Introduction to American Studies	2504E A/B & 8503E A/B	American Studies ECE (English) American Studies ECE (History)
FREN 3250 FREN 3268	Global Culture I Grammar and Composition	3504E A/B	French V ECE
MATH 1030Q	Elementary Discrete Mathematics	5502EA/B	Discrete Mathematics ECE
SPAN 3178 SPAN 3179	Int. Spanish Composition Spanish Conversation: Cultural Topics	3505E A/B	Spanish V ECE
NRE 1000	Environmental Science	7339E	Environmental Science ECE
BIO 1107	Principles of Biology I	7521E A/B	Biology ECE
HIST 1400	Modern Western Traditions	8502E A/B	Modern European History ECE

## ROCKVILLE HIGH SCHOOL COLLEGE CAREER PATHWAYS PROGRAM

The Manchester Community College Career Pathways Program (CCP) provides academically motivated students the opportunity to take college courses while in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide an academic and a financial head-start on a college degree. CCP instructors are high school teachers certified as adjunct professors by MCC.

Students must be in Grades 10, 11, or 12 and receive a C average or above in order to receive MCC credits. A grade of B or better must be earned to receive credit for Financial Literacy (BFN 111) and Financial Accounting (ACC 115).

### Manchester Community College CCP Courses

MCC #	MANCHESTER COURSE	RHS #	RHS COURSE
BFN 111	Financial Literacy	1318C	Personal Finance CCP
ACC 115	Financial Accounting	1305C A/B	Accounting 1-College CCP
HSP 101	Principles of Food Preparation	4226 & 4306C	Principles of Food Preparation I & II CCP
HSP 103	Principles of Baking I	4216C & 4305C	Baking I & II CCP

### Middlesex Community College CCP Courses

MxCC #	MIDDLESEX COURSE	RHS #	RHS COURSE
VET 100	Introduction to Animal Care	0264	Veterinary Science I
VET 101	Introduction to Veterinary Science	0281	Veterinary Science II

## STEM & HUMANITIES SCHOLARS PROGRAM

Our STEM and Humanities Scholars Program was developed to provide Rockville High School students with a specialized four-year focus. Students study at the highest level and must complete specific course requirements. In addition, they must demonstrate leadership in their selected field of study as well as complete and present a Capstone project during their senior year. Students meet quarterly to engage in career exploration. The program includes authentic learning opportunities and guest speakers who are specialists in their fields. An application is required during the scheduling process for incoming ninth graders. Please see the school's website for an application.



# HUMANITIES SCHOLARS

Grade 9: Global Studies I & II or World History,  
English 9 Honors, & Speech  
**Choose a Specialty for your Sophomore Year**

## Visual/Performing Arts

- Grade 10:
- Fine Arts Electives (2cr)

- Grade 11:
- Fine Arts Electives (2cr)

- Grade 12:
- AP Art Portfolio\*\*
  - Independent Study
    - Digital art
    - Video
    - Photography
    - 2D
    - 3D
    - Music
    - Drama

## Writing

- Grade 10:
- English 10 Honors
  - Creative Writing I/II

- Grade 11:
- ECE Academic Writing \*\* -or-
  - AP Language and Composition\*\* &
  - Advanced Creative Writing

- Grade 12:
- ECE Writing through Literature\*\* &
  - Independent Study in Writing

## Humanities

- Grade 10
- English 10 Honors
  - Civics
  - Contemporary World Issues
  - English Elective

- Grade 11:
- ECE American Studies\*\*
  - Social Studies Electives (2cr)

- Grade 12:
- AP Literature\*\*
  - Social Studies (2cr)
  - Independent Study in Literature

## History

- Grade 10:
- Civics
  - Contemporary World Issues -or-
  - World History

- Grade 11:
- AP -or- Honors U.S. History\*\*
  - Social Studies (1cr)

- Grade 12:
- ECE Modern European History\*\*
  - Social Studies (2cr)
  - Independent Study in History

Rockville  
Humanities  
Scholars  
Graduation  
Requirements

4 English  
3 Social  
Studies  
1 Fine Arts  
.5 Speech  
4 Scholars  
1 Ind. Study

Min GPA: 80  
Job Shadow  
Scholar  
Meetings

Grade 9:  
1 English  
.5 Speech  
1 Social  
Studies

SELECT  
SPECIALTY

Grade 10:  
1 English  
1 Social  
Studies  
1-2 Scholars

Grade 11 / 12  
2 English  
1 Social  
Studies  
3 Scholars  
1 Ind. Study

Additional  
Opportunity  
to earn college  
credits:

\* MCC  
\*\* UCONN



# STEM SCHOLARS

Grade 9: Integrated Science, Biology, and Geometry  
(Algebra 1 *if necessary*)

Additional Options: CCE Technology Courses

Grade 10: Chemistry, Algebra II, Principles of Engineering\*

Additional Options: Math Science Technology

**Choose a Specialty for your Junior Year**

## Life Science

- Grade 11 and 12:
- Pre-calculus
  - Statistics
  - AP Chemistry\*\*
  - ECE
  - Environmental\*\*
  - Marine Science
  - Botany
  - Forensics
  - ECE Biology\*\*

\*Allied Health Program\* is  
Additional Application in Gr. 10

## Physical Science

- Grade 11 and 12:
- Pre-calculus
  - AP Calculus\*\*
  - Statistics
  - Math Science Tech
  - AP Chemistry\*\*
  - Meteorology
  - Astronomy
  - Forensics
  - ECE Physics\*\*
  - Static/Dynamic Engineering

## Mechanical Engineering

- Grade 11 and 12:
- Pre-calculus
  - AP Calculus\*\*
  - Statistics
  - Math Science Tech
  - ECE Physics\*\*
  - Mechanical Engineering: CAD/CAM\*
  - Power Auto Tech II
  - Static/Dynamic Engineering

## Civil Engineering

- Grade 11 and 12:
- Pre-calculus
  - AP Calculus\*\*
  - Statistics
  - Math Science Tech
  - ECE Physics\*\*
  - Architectural Drafting
  - Construction Sys. and Management
  - Static/Dynamic Engineering

Rockville  
STEM  
Scholars  
Graduation  
Requirements

4 Math  
3 Science  
1 Vocational  
4 Scholars  
1 Ind. Study

Min GPA: 80  
Job Shadow  
Scholar  
Meetings

Grade 9:  
2 Science  
1 Math

Grade 10:  
1 Science  
1 Math  
1 Vocational

SELECT  
SPECIALTY

Grade 11 / 12  
2 Math  
4 Scholars  
1 Ind. Study

Additional  
Opportunity  
to earn college  
credits:

\* MCC  
\*\* UCONN

## COURSE DESCRIPTIONS

A goal of the Vernon Public Schools is to ensure that all students have access to a rigorous and challenging curriculum (as defined by the Common Core State Standards) and graduate with the skills and knowledge they will need to be college or career ready in the twenty-first century. While course descriptions vary from department to department, they are purposefully written to make clear for students the foundational skills and competencies needed to afford them a successful learning experience. Students are encouraged to discuss their course selection interests with their school counselor, the department chair, and their teachers for a clearer understanding of the course expectations needed to make informed decisions in the course selection process.

## COURSE LEVELS

Rockville High School offers rigorous coursework for all students. Courses are offered at the Post-Secondary Prep, Honors, and/or Advanced Placement/Dual Enrollment level. Each level has a corresponding weight which is used to calculate grade point average (GPA). The weight is indicated in each course description within the program of Studies.

### **Advanced Placement (AP)/Dual Enrollment (UCONN, Manchester Community College, etc.)**

Advanced Placement and/or Dual Enrollment courses require students to follow a standardized curriculum that is equivalent to an introductory college course. AP/dual enrollment courses **may** allow students to receive college credit and/or be exempt from introductory college courses by passing an externally prepared exam, by earning a specific grade for the course at the discretion of a college or university, or receiving a specific score on the Advanced Placement Exam.

**Students enrolled into these courses possess the skills necessary to perform college-level work during high school and demand a large time commitment by students both in and out of school.**

### **Honors**

Honors courses offer an in-depth exploration of the course content at an increased pace. These courses offer a curriculum designed to challenge students who have demonstrated a high degree of proficiency in within the subject area. **Students enrolled in Honors courses should be independent, self-directed learners with highly developed communication skills, and the ability to analyze, synthesize and draw conclusions. Honors courses require a significant time commitment by students both in and out of the classroom.**

### **Post-Secondary Prep**

Post-Secondary Prep courses focus on the application of skills and concepts and are designed to challenge students. Reading, writing, listening, decision-making, critical thinking, and problem-solving skills are an integral part of all course work, requiring students to commit time beyond the classroom to complete assignments. Appropriate resources, levels of challenge, and support prepare students for colleges, universities, and other post-secondary education and career opportunities.

## COURSE OFFERINGS

A course may be withdrawn or enrollment may be restricted for reasons such as low enrollment, limited facilities, and/or availability of staff.

## CLASS RANK

Class rank is an important consideration in the admission policies of most colleges and is determined by the weighted numerical average of grades earned in all subjects. The class rank is computed for the two-and-one-half-year (five-semester) average and is also computed at the start of the senior year (three-year rank or six-semester). The rank is used for colleges, scholarships and post-secondary counseling. A three year, three marking period rank is used for selection of awards, and the selection of valedictorian, salutatorian, and Rockville High School Scholars.

All students will be ranked in class by a weighted system. This system includes three levels of courses with each assigned a quality point multiplier based upon academic difficulty. A student's final grade is multiplied by the assigned point multiplier and then averaged to determine class rank.

Post-Secondary Prep	1.00
Honors	1.05
Advanced Placement & Dual Enrollment	1.10

Any student taking a pre-approved supplemental course at an accredited institution will have their grades transferred at face value and incorporated into the class rank. Examples of accredited institutions include Manchester Community College, the University of Hartford, and others.

## ROCKVILLE HIGH SCHOOL SENIOR HONORS\*

\* based on the three-year, three-marking period ranking

**Valedictorian:** The student ranked first in the senior class with the highest weighted numerical average. The recipients of this award must have attended Rockville High School for at least two years.

**Salutatorian:** The student ranked second in the senior class with the second highest numerical weighted average. The recipients of this award must have attended Rockville High School for at least two years.

**RHS Scholars:** Students who have obtained a 90+ weighted average for three years and three marking periods. The recipients of this award must have attended Rockville High School for at least two years.

Early graduates are eligible to be recognized as RHS Scholars after two years and three marking periods.

# **COURSES AVAILABLE TO GRADE 9-12 STUDENTS FOR 2021-2022**

## **HUMANITIES**

### **ART**

0524	Foundations of Art & Design I
0525	Foundations of Art & Design II
0530	Drawing I
0531	Painting I
0540	Clayworks I
0541	Clayworks II
0544	Clayworks III
0545	Clayworks IV
0534	Sculpture I
0535	Sculpture II
0542	Two-Dimensional Studio Art I
0543	Two-Dimensional Studio Art II
0630	Photography I
0631	Photography II
0632	Photography III
0633	Photography IV
0522	Digital Art I
0523	Digital Art II
0634	Digital Art III
0635	Digital Art IV
0800A/B	AP Studio Art

### **ENGLISH**

2301A/B	English 9
2401A/B	English 9 – Honors
2302A/B	English 10
2402A/B	English 10 – Honors
2303A/B	English 11
2403A/B	English 11 – Honors
2504EA/B◇	American Studies-Engl.-ECE (w/8503E)
2500A/B	AP English Language & Composition (11)
2318A/B	Advanced Creative Writing I
2327A/B	Advanced Creative Writing II
2304A/B	English 12
2316	Film Studies
2305A/B	Effective Communication
2502E A/B	Academic Writing - ECE
2503E A/B	Writing through Literature – ECE
2328A/B	Humanities Scholar Seminar
2505A/B	ENG 101
9103A/B	Reading Efficiency
2206A/B	Foundations of Reading
2210A/B	Reading Essentials
2308	Creative Writing I
2309	Creative Writing II
2310	Acting for Film and Television I
2311	Acting for Film & Television I & II
8325A/B	A History of Popular Culture I & II

### **MUSIC**

0511	Audiovisual Tech
6522	Basic Piano Keyboard
6523	Intermediate Piano Keyboard
6536	Guitar
6521	Introduction to Music Technology
6537	Music Technology IIA – Music Production
6538	Music Technology IIB – Sound Recording
6529	Introduction to Musical Theater
6524	Marching Band I
6525	Marching Band II
6534A/B	Symphony Band I
6542A/B	Symphony Band I – Honors
6535A/B	Symphony Band II
6543A/B	Symphony Band II – Honors
6532A/B	Chamber Choir (novice)
6540A/B	Chamber Choir – Honors (novice)
6533A/B	Concert Choir
6541A/B	Concert Choir - Honors
6544A/B	Band / Vocal Ensemble – Honors

### **SOCIAL SCIENCE**

8301	World History I-Conflict & Cooperation
8302	World History II-Conflict & Cooperation
8401	World History I-Conflict & Cooperation– Hon.
8402	World History II-Conflict & Cooperation-Hon.
8406	Global Studies I – Honors
8407	Global Studies II – Honors
8319	Contemporary World Issues
8408	Contemporary World Issues – Honors
8304	Civics
8305A/B	United States History
8405A/B	United States History – Honors
8503E A/B◇	American Studies-History - ECE (w/2504E)
8501A/B	AP United States History
8502E A/B	Modern European History – ECE
8320	Sociology: Culture and the Media
8321	Sociology: Deviance & Inequality
8307	Economics
8322	Developmental Psychology
8323	Applied Psychology
8313	World War II
8409	World War II - Honors
8310	Introduction to Law
8311	Criminal Justice



## STEM

### **AGRICULTURAL SCIENCE & TECHNOLOGY EDUCATION**

#### Grade 9

0210AM*	Agricultural Education I – Ag Mechanics
0210AS*	Agricultural Education I – Animal Science
0210NR*	Agricultural Education I – Natural Resources
0210PS*	Agricultural Education I – Plant Science

#### Animal Systems Pathway

0279	Animal Anatomy and Physiology
0259	Animal Behavior
0259E	Animal Behavior - ECE
0292	Animal Fitting and Showmanship
0278	Animal Nutrition
0280	Animal Reproduction
0275	Horse Science
0265	Intro to Companion Animal Management
0265E	Intro to Companion Animal Mgmt - ECE
0262	Livestock Management
0261	Poultry Science
0264	Veterinary Science I
0264C	Veterinary Science I (MxCC)
0281	Veterinary Science II
0281C	Veterinary Science II (MxCC)

#### Plant Systems Pathway

0250	Floral Design
0250E	Floral Design – ECE
0293E#	Advanced Floral Design – ECE
0253	Floriculture
0254	Greenhouse Management
0255	Horticulture I
0284	Horticulture II
0284E	Horticulture II-ECE
0251	Landscape Technology
0256	Plant Identification & Classification

#### Power & Technical Systems Pathway

0270	Ag Structures & Building Technology
0271	Ag Equip Operation/Maint/Repair I
0287	Ag Equip Operation/Maint/Repair II
0272	Engine Technology
0282	Precision Agricultural Technology
0268	Welding I
0269	Welding II
0286	Welding III

#### Additional ASTE Courses

0220L A/B	Agricultural Education II – Leadership S1/S2
0222	Supervised Agricultural Experience (Gr. 10)
0232	Supervised Agricultural Experience (Gr. 11)
0242	Supervised Agricultural Experience (Gr. 12)
0267	Agricultural Natural Resources
0252	Aquaculture Science I
0266	Aquaculture Science II
0285	Aquaculture Science III
0273	Biotechnology
0258E	CT Agriculture in the 21 <sup>st</sup> Century-ECE

### **BUSINESS & COMPUTER SCIENCE**

1308A	Software Applications
1322	Personal Finance
1318C	Personal Finance (CCP)
1305C A/B	Accounting I – College (CCP)
1209	Business Law
1307	Management
1314	Introduction to Marketing
1319	Entrepreneurial I
1320	Entrepreneurial II
1321	Business & Math Concepts through Sports
1323A/B	Cooperative Work Experience
1324A/B	CWE Workplace Credit
1538	Intro to Computer Science I
1539	Intro to Computer Science II
1543A/B	Computer Language Fundamentals
1552A/B	AP Computer Science Principles

### **FAMILY & CONSUMER SCIENCES**

4201	Food for Today
4204	Food Choices
4211	Creative Foods
4216C	Baking I
4305C	Baking II (CCP)
4226C	Principles of Food Preparation I
4306C	Principles of Food Preparation II (CCP)
4210	Introduction to Child Development
4214	Parenting/Preparing/Protecting Children
4212A/B	Child Development
4301A/B	Childhood Education
4302	Education Practicum
4101A/B	Independent Living

### **MATHEMATICS**

5302A/B	Algebra I
5303A/B	Geometry
5401A/B	Geometry – Honors
5304A/B	Algebra II
5402A/B	Algebra II - Honors
5206/5207	Consumer Math S1 & S2
5305	Advanced Math 1
5306	Advanced Math 2
5307	Precalculus I
5308	Precalculus II
5403	Precalculus 1 – Honors
5404	Precalculus 2 – Honors
5311A/B	Math, Science, and Technology
5309A/B	Statistics
5406A/B	Statistics – Honors
5503A/B	AP Statistics
5405A/B	Calculus – Honors
5501A/B	AP Calculus AB
5502EA	Discrete Mathematics - ECE

### **SCIENCE**

7311A/B	Earth and Space Science
7411A/B	Earth and Space Science– Honors
7321A/B	Biology
7421A/B	Biology – Honors
7521E A/B	Biology – ECE
7331A/B	Chemistry
7431A/B	Chemistry – Honors
7531A/B~	AP Chemistry
7341A/B	Physics
7441A/B	Physics – Honors
7541A/B~	AP Physics
7335A/B	Anatomy & Physiology
7336A/B	Allied Health I
7337A/B	Allied Health II
7338	Marine Science
7339	Environmental Science
7339E	Environmental Science – ECE
7342	Astronomy
7343	Meteorology
7425	Botany
7423	Bio. & Chem. Forensic Science I
7424	Bio. & Chem. Forensic Science II
7344	Capstone I-STEM
7345	Capstone II-STEM

### **TECHNOLOGY EDUCATION**

6201A	Exploring Tech – Communications & Design
6201B	Exploring Tech - Engineering & Production
6305A/B	Engineering & Architectural Drafting
6219A/B	Power/Auto Technology I
6220A/B	Power/Auto Technology II
6215	Digital Media Design S1
6216	Digital Media Design S2
6204A/B	Wood and Material Processing
6222	Construction Management
6223	Construction Systems
6221A/B	Production & Engineering Technology
6310A/B	Fire Technology
6307	Video Production I
6313	Video Production II
6314	Video Production III
6315	Video Production IV
6316	Principles of Engineering I: Mechanical & Fluid Power
6317	Principles of Engineering II: Thermal & Elect. Power
6401A/B	Robotics

## **OTHER**

### **PHYSICAL EDUCATION & HEALTH**

7701	Health & Wellness 1
7702	Health & Wellness 2
9013	Team Sports 1
9016	Weight Training
9022	Fit for Life
9023	Life Sports
9004A/B	Physical Ed. Senior Leader
9020A/B	Physical Education Mentor

### **WORLD LANGUAGES**

3305A/B	French I
3406A/B	French I – Honors
3306A/B	French II
3407A/B	French II – Honors
3307A/B	French III
3408A/B	French III – Honors
3314A/B	French IV
3409A/B	French IV – Honors
3317A/B	French V
3410A/B	French V – Honors
3301A/B	Spanish I
3401A/B	Spanish I – Honors
3302A/B	Spanish II
3402A/B	Spanish II – Honors
3303A/B	Spanish III
3403A/B	Spanish III – Honors
3304A/B	Spanish IV
3404A/B	Spanish IV – Honors
3315A/B	Spanish V
3405A/B	Spanish V – Honors
3505E A/B	Spanish V – ECE

*	0.25 credit
~	1.50 credits
◊	2.00 credits
CCP	College Career Pathways course

## **COURSES AVAILABLE TO GRADE 9 STUDENTS FOR 2021-2022**

### **HUMANITIES**

#### **ART**

- 0524 Foundations of Art & Design I
- 0525 Foundations of Art & Design II
- 0522 Digital Art I
- 0523 Digital Art II
- 0540 Clayworks I
- 0541 Clayworks II
- 0630 Photography I
- 0631 Photography II

#### **ENGLISH**

- 2301A/B English 9
- 2401A/B English 9 – Honors
- 9103A/B Reading Efficiency
- 2206A/B Foundations of Reading
- 2210A/B Reading Essentials
- 2308 Creative Writing I
- 2309 Creative Writing II

#### **MUSIC**

- 0511 Audiovisual Tech
- 6522 Basic Piano Keyboard
- 6523 Intermediate Piano Keyboard
- 6536 Guitar
- 6521 Introduction to Music Technology
- 6537 Music Technology IIA – Music Production
- 6538 Music Technology IIB – Sound Recording
- 6529 Introduction to Musical Theater
- 6524 Marching Band I
- 6534A/B Symphony Band I
- 6542A/B Symphony Band I - Honors
- 6532A/B Chamber Choir (novice)
- 6540A/B Chamber Choir – Honors (novice)
- 6533A/B Concert Choir
- 6541A/B Concert Choir - Honors
- 6544A/B Band / Vocal Ensemble – Honors

#### **SOCIAL SCIENCE**

- 8301 World History I - Conflict & Cooperation
- 8302 World History II - Conflict & Cooperation
- 8406 Global Studies I – Honors
- 8407 Global Studies II – Honors
- 8401 World History I - Conflict & Cooperation– Honors
- 8402 World History II - Conflict & Cooperation-Honors

* 0.25 credit
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### **STEM**

#### **AGRICULTURAL SCIENCE & TECHNOLOGY EDUCATION**

- 0210AM\* Agricultural Education I – Ag Mechanics
- 0210AS\* Agricultural Education I – Animal Science
- 0210NR\* Agricultural Education I – Natural Resources
- 0210PS\* Agricultural Education I – Plant Science

#### **BUSINESS & COMPUTER SCIENCE**

- 1308A Software Applications
- 1322 Personal Finance
- 1538 Intro to Computer Science I
- 1539 Intro to Computer Science II

#### **FAMILY & CONSUMER SCIENCES**

- 4201 Food for Today
- 4210 Introduction to Child Development
- 4214 Parenting/Preparing/Protecting Children

#### **MATHEMATICS**

- 5302A/B Algebra I
- 5303A/B Geometry
- 5401A/B Geometry – Honors

#### **SCIENCE**

- 7311A/B Earth and Space Science
- 7411A/B Earth and Space Science – Honors

#### **TECHNOLOGY EDUCATION**

- 6201A Exploring Technology - Communications & Design
- 6201B Exploring Technology - Engineering & Production
- 6204A/B Wood and Material Processing
- 6215 Digital Media Design S1
- 6216 Digital Media Design S2
- 6219A/B Power/Auto Technology I
- 6305A/B Engineering & Architectural Drafting
- 6307 Video Production I
- 6313 Video Production II
- 6401A/B Robotics

### **OTHER**

#### **PHYSICAL EDUCATION & HEALTH**

- 7701 Health & Wellness 1
- 9013 Team Sports
- 9016 Weight Training
- 9022 Fit for Life
- 9023 Life Sports

#### **WORLD LANGUAGES**

- 3305A/B French I
- 3406A/B French I – Honors
- 3306A/B French II
- 3407A/B French II – Honors
- 3301A/B Spanish I
- 3401A/B Spanish I - Honors
- 3302A/B Spanish II
- 3402A/B Spanish II – Honors

# **HUMANITIES**

Art

English

Music

Social Science

## ART

Art classes are designed to develop and broaden critical and creative thinking skills, understanding of and appreciation for the visual arts and culture and increase students' proficiency in visual art techniques and processes. Students who wish to plan a portfolio for entrance into art schools or college art programs should notify an art teacher and/or the art department chairperson.

### **FOUNDATIONS OF ART & DESIGN I\*** (0524)

Fall Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. Students are offered the opportunity to explore various visual art forms and techniques in an introductory level course through the elements and principles of art and design

\*Note: Foundations of Art & Design I and II are required as a prerequisite to several Art Department course offerings.

### **FOUNDATIONS OF ART & DESIGN II\*** (0525)

Spring Semester      Credit 0.50      Weight 1.00

Prior successful completion of Foundations of Art & Design I is not required. This course is open to students in Grades 9, 10, 11, and 12. Students will explore various visual art forms and techniques through the elements and principles of art and design. Students will be introduced to a variety of media through two-dimensional and three-dimensional approaches to creating and responding to visual arts.

\*Note: Foundations of Art & Design I and II are required as a prerequisite to several Art Department course offerings.

### **DRAWING I** (0530)

Fall Semester      Credit 0.50      Weight 1.00

Prior successful completion of Foundations of Art & Design I and II is required. This course is open to students in Grades 10, 11, and 12. Students will explore different approaches to drawing while applying the elements and principles of design to develop skills and sensitivity to line, shape, color, value, texture and composition. A variety of mixed media and drawing techniques will be explored. Students will be expected to develop technical skills and their own styles of drawing.

### **PAINTING I** (0531)

Spring Semester      Credit 0.50      Weight 1.00

Prior successful completion of Drawing I is required. This course is open to students in Grades 10, 11, and 12. Students will explore different approaches to painting and painting techniques using a variety of media. Emphasis will be placed on the elements of art and design with an emphasis on color and composition. Students will develop technical skills and personal style. A variety of subject matter will be explored.

### **CLAYWORKS I** (0540)

Fall Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This course will explore various approaches to clay construction, while applying the elements and principles of design to create three-dimensional form. The course will emphasize decorative pottery approaches, and an introduction to hand building and the wheel. Various decorating techniques will be stressed, along with clay firing processes.

### **CLAYWORKS II** (0541)

Spring Semester      Credit 0.50      Weight 1.00

Prior successful completion of Clayworks I is not required. This course is open to students in Grades 9, 10, 11, and 12. This course will explore various approaches to clay construction, while applying the elements and principles of design to create three-dimensional form. The course will emphasize functional pottery approaches, and introduction to hand building and the wheel. Various decorating techniques will be stressed, along with clay firing processes.

### **CLAYWORKS III** (0544)

Fall Semester      Credit 0.50      Weight 1.00

This course is open to any student upon successful completion of Clayworks I and II. Using a variety of ceramic construction techniques, students will explore ways to communicate ideas in three-dimensional form.

**CLAYWORKS IV**

(0545)

Spring Semester

Credit 0.50

Weight 1.00

This course is open to any student upon successful completion of Clayworks III. Students will continue to be exposed to a wide range of clay techniques while they work towards the production of a ceramic concentration. Emphasis will be placed on developing original ideas and communicating those ideas in a three-dimensional form.

**SCULPTURE I**

(0534)

Fall Semester

Credit 0.50

Weight 1.00

Prior successful completion of Foundations of Art & Design I and II is required. This course is open to students in Grades 10, 11, and 12. This course will introduce techniques in three-dimensional form through sculpture and relief techniques. The Art elements of form, shape, and texture will be stressed as well as the technical use and applications of appropriate tools.

**SCULPTURE II**

(0535)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Sculpture I is required. This course is open to students in Grades 10, 11, and 12. This course will continue to provide opportunities for students to pursue working in three-dimensional form. Students will engage in instructional activities using a greater variety of materials and/or combination of materials.

**TWO-DIMENSIONAL STUDIO ART I**

(0542)

Fall Semester

Credit 0.50

Weight 1.00

Prior successful completion of Drawing I and Painting I is required. This course is open to students in Grades 11 and 12. This course is designed for students who are sequentially building their critical thinking skills and techniques in two-dimensional art. It will provide opportunities for students to explore their abilities to transmit forceful and meaningful ideas in a variety of media to a two-dimensional surface.

**TWO-DIMENSIONAL STUDIO ART II**

(0543)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Two-Dimensional Studio Art I is required. This course is open to students in Grades 11 and 12. Students will continue to be exposed to uses of a wide range of media, along with multiple uses and combinations while they develop a personal, visual concentration with their work. They will analyze and apply spatial issues with subject matter while they explore artworks created by contemporary and professional artists. The development of original ideas and communicating those ideas visually will be emphasized.

**PHOTOGRAPHY I**

(0630)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This course will introduce students to the basic elements of photography which include the technical skills of 35mm film camera operations, pictorial composition, lighting, developing, printing, mounting, and display. Students will be encouraged to develop artistic expression through the use of photography medium. It is not required that students own a camera.

**PHOTOGRAPHY II**

(0631)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Photography I is required. This course is open to students in Grades 9, 10, 11, and 12. This is a continuation and reinforcement of the skills and concepts taught in the Photography I course. More complex techniques will be introduced and students will be involved in problem solving activities.

**PHOTOGRAPHY III**

(0632)

Fall Semester

Credit 0.50

Weight 1.00

Prior successful completion of Photography II is required. This course is open to students in Grades 10, 11, and 12. This course will continue to instruct students in more advanced fundamentals of photography and will broaden the students' technical skills and aesthetic knowledge. Technical areas will cover advanced SLR and DSLR camera and darkroom techniques, chemical processes, studio lighting, and the introduction of medium format cameras and digital imaging. Owning a 35mm SLR camera (Single Lens Reflex camera) or a digital camera is encouraged but not required.

**PHOTOGRAPHY IV**

(0633)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Advanced Fundamentals of Photography (formerly Photography III) is required. This class is open to students in Grades 10, 11, and 12. The course is designed for students who wish to further explore photography with the use of Digital SLR cameras. Students will be introduced to the art of the digital darkroom by using Adobe Photoshop and Adobe Lightroom software. Individual creativity and the ability to make a personal visual statement will continue to be stressed. Students will be required to create digital portfolios of their work each quarter. Owning a DSLR camera (Digital Single Lens Reflex camera) or a similar digital camera is encouraged but not required.

**DIGITAL ART I**

(0522)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This course is designed to explore the basic concepts of digital art making. Students will learn how to create original artwork utilizing the computer to paint, draw, and illustrate digitally. Students will work in the art computer lab equipped with drawing tablets, digital cameras, t-shirt printing press, and a large format printer.

**DIGITAL ART II**

(0523)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Digital Art I is required. This course is open to students in Grades 9, 10, 11, and 12. This course will continue to explore various approaches to creating art digitally. Students will learn advanced digital media art making techniques such as digital painting, logo design, and short animations.

**DIGITAL ART III**

(0634)

Fall Semester

Credit 0.50

Weight 1.00

Prior successful completion of Digital Art II is required. This course is open to students in Grades 10, 11, and 12. Students will advance their knowledge of the in-depth functions of Adobe Photoshop software and still imagery and be introduced to video editing. Students will gain an understanding of the impact of digital editing in the media. It will be used in the development of purposeful edits of exhibit quality.

**DIGITAL ART IV**

(0635)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Digital Art III is required. This course is open to students in Grades 10, 11, and 12. Students will work on advanced digital editing assignments that are more individualized and conceptualized with the benefit of peer and teacher critique as well as opportunities for individualized teacher-guided assistance. Students will be given the option of developing one team project involving one or more classmates.

**ADVANCED PLACEMENT STUDIO ART - S1 & S2**

(0800A &amp; 0800B)

One Semester each

Credit 0.50 each

Weight 1.10

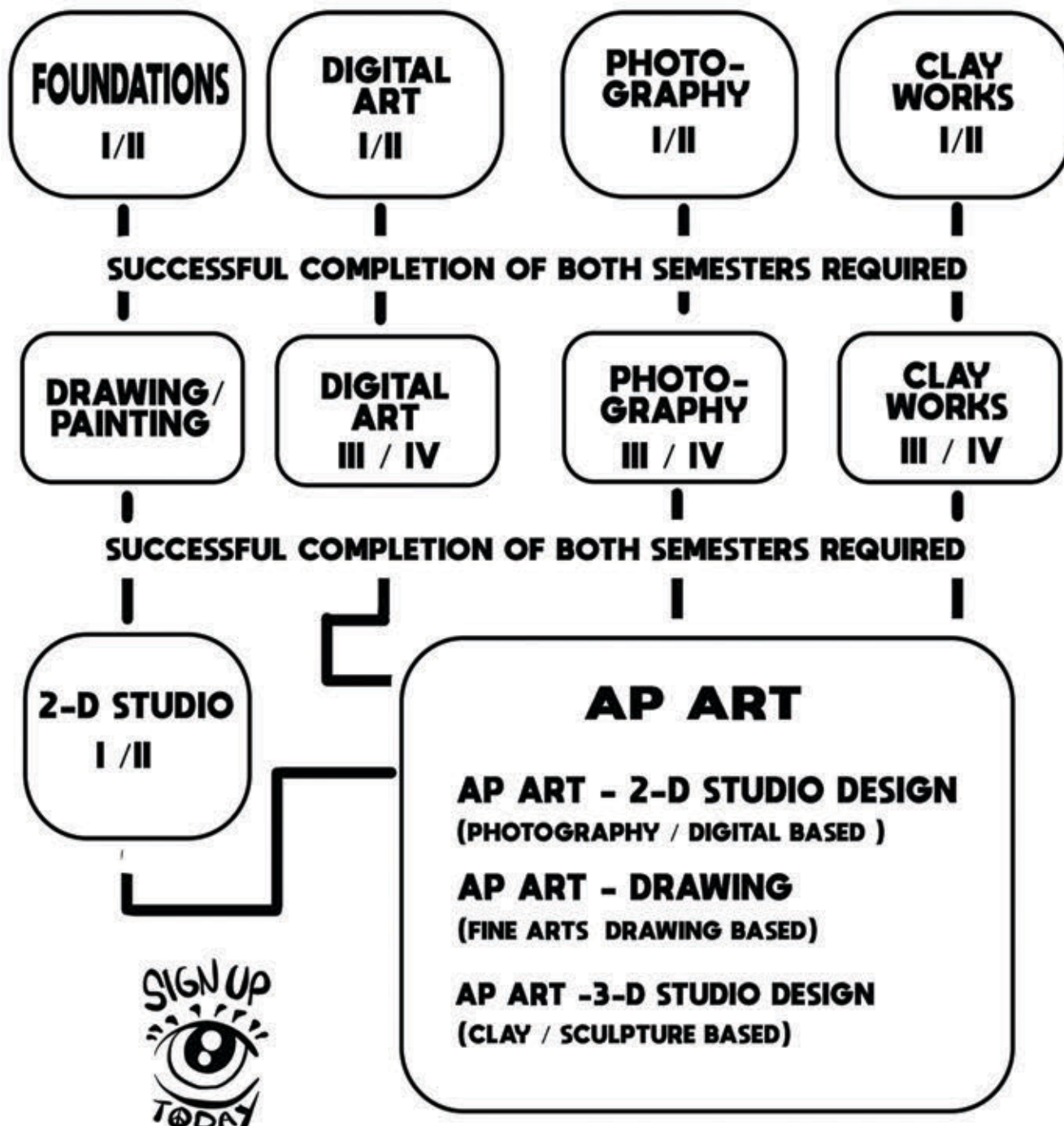
Prior successful completion of two semesters of Foundations of Art & Design, a 90 average in at least one additional art course, and departmental recommendation are required. This course is open to students in Grade 12. The Advanced Placement Studio Art course provides students with a learning experience equivalent to that of an introductory college course in studio art foundation. This College Board program is based on the premise that college-level work can be successfully developed by high achieving secondary school students. Students will create a portfolio of work in one of three areas of study: Drawing, 2-D Design, or 3-D Design. This body of work can be used to meet college admission portfolio requirements and will be assessed by the College Board for Advanced Placement credit in lieu of an examination.

Note: Any student wishing to plan a portfolio for entrance into art schools or college art programs should notify an Art Teacher and/or the Art Department Chairperson.



# RHS ART

**INTRO COURSES OPEN TO ALL STUDENTS**



## ENGLISH

The English department serves the entire school population through a relevant curriculum in the basic areas of reading, literature, written composition, speech, and grammar. The program is designed to motivate students and to meet a wide range of achievement

Graduation requirement: Students must earn four credits in the non-elective English program to earn a high school diploma at Rockville High School.

<b>ENGLISH 9 S1 &amp; S2</b>	Weight 1.00	(2301A & 2301B)
<b>HONORS</b>	Weight 1.05	(2401A & 2401B)
One Semester each	Credit 0.50 each	

This course is open to students in Grade 9. The English 9 course goals are to familiarize the motivated student with a cross-section of literature, to help the student express him/herself creatively and coherently, and to teach the student to think critically. In addition, this course provides instruction in the first part of a four year writing program. To help achieve these goals, the English department introduces the student to short stories and contemporary and classic novels. Outside readings, compositions, vocabulary, and speaking skills supplement the course, giving the student the background necessary for future experiences in the language arts. Preparation for the PSAT is provided. Ninth English focuses on improvement in basic reading and writing skills. Units of study are provided in literature, composition, and vocabulary, with an emphasis on organization and study skills. The honors level will include a more in-depth exploration of units by greater sampling of related materials and an increased pace.

<b>ENGLISH 10 S1 &amp; S2</b>	Weight 1.00	(2302A & 2302B)
<b>HONORS</b>	Weight 1.05	(2402A & 2402B)
One Semester each	Credit 0.50 each	

This course is open to students in Grade 10. The English 10 course is designed to prepare motivated students for more serious academic work. Literature by type is a major focus. Formal grammar, formal exposition, vocabulary building, and speech techniques are also stressed. Preparation for the PSAT is provided. The honors level will include a more in-depth exploration of units by greater sampling of related materials and an increased pace.

<b>ENGLISH 11 S1 &amp; S2</b>	Weight 1.00	(2303A & 2303B)
<b>HONORS</b>	Weight 1.05	(2403A & 2403B)
One Semester each	Credit 0.50 each	

This course is open to students in Grade 11. The English 11 course broadens the student's horizons and prepares them for advanced study. The areas of concentration in the junior year are three: usage (vocabulary and grammar), composition, and an analysis of the "American Dream." Students will explore literature (fiction and nonfiction) by American authors, including voices that may have been silenced or overlooked throughout American History. English 11 will bring in a focus of relevant articles and discussions that are necessary in today's society. Preparation for the PSAT and SAT is provided. The honors level will include a more in-depth exploration of units by greater sampling of related materials and an increased pace.

<b>AMERICAN STUDIES ECE – ENGLISH S1 &amp; S2</b>	(2504EA & 2504EB)
<b>AMERICAN STUDIES ECE – HISTORY S1 &amp; S2</b>	(8503EA & 8503EB)

### **University of Connecticut Early College Experience\***

One Semester each	Credit 0.50 each	Weight 1.10
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Successful completion of English 10 is recommended. Upon successful completion of this course, students will earn one (1) credit for English and one (1) credit for Social Studies (United States History). American Studies-ECE will be a two successive-block class encompassing an integrated study of American history and literature, enriched by exposure to American art, music, and research from the historian's as well as the writer's perspective. It will develop in students an in-depth understanding of key themes and an overview of the chronological development of history and literature which will be reflected in the humanities approach. Challenging college-level reading and writing assignments will be required throughout the course. Both the English and History sections must be elected at the same time for this course.

\*The ECE American Studies course is the AMST 1201 Seminar in American Studies course offered at the University of Connecticut. Students earning a grade of C or better in both the History and English components of the course will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION S1 & S2****Grade 11**

(2500A &amp; 2500B)

One Semester each      Credit 0.50 each      Weight 1.10

This course is intended for highly successful Grade 11 students who have completed English 10 – Honors with a recommended average of 90 and who have an aptitude for writing and have their English teacher's recommendation. The Advanced Placement course in English Language and Composition will prepare highly motivated Grade 11 students for the College Board Placement Test. It will emphasize expository and persuasive writing and will provide a study of past A.P. Language tests and samples. The curriculum will include the works of renowned essayists, a variety of literary terms, challenging vocabulary lessons, and a brief introduction to some aspects of American Literature. Summer reading and writing assignments are required. One formal essay will be due on an established summer date; other assignments will be due on the first day of classes. Students will be required to take (and pay for) the Advanced Placement Examination in the spring.

**ADVANCED CREATIVE WRITING I S1 & S2**

(2318A &amp; 2318B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 10, 11 and 12. Prior successful completion of Creative Writing I and II is required. Advanced Creative Writing I will provide the opportunity for committed students who have successfully completed Creative Writing I and II to write fiction, creative nonfiction, and poetry within a workshop setting. This workshop will have an interest-based consensus curriculum. Students will be encouraged through writing and discussion to question, to refine, and to expand their craft. During this course students will learn precise guidelines on how to write well and how to contact publishers for possible publication. This course will also provide focused critique and meaningful dialogue. In addition, there will be an authentic audience participation requirement. The major focus of this class will be the analysis of student writing in the classroom as well as frequent individual conferences. This course may be used as an English credit for 11<sup>th</sup> and 12<sup>th</sup> grade students who have successfully taken Creative Writing I & II. Tenth grade students enrolled in this course must take the required 10<sup>th</sup> grade English class.

**ADVANCED CREATIVE WRITING II S1 & S2**

(2327A &amp; 2327B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 11 and 12. Prior successful completion of Advanced Creative Writing I is required. Advanced Creative Writing II will provide the opportunity for committed students who have successfully completed Advanced Creative Writing I to write fiction, creative nonfiction, and poetry within a workshop setting. This workshop will have an interest-based consensus curriculum. Students will be encouraged through writing and discussion to question, to refine, and to expand their craft. During this course students will learn precise guidelines on how to write well and how to contact publishers for possible publication. This course will also provide focused critique and meaningful dialogue. In addition, there will be an authentic audience participation requirement. The major focus of this class will be the analysis of student writing in the classroom as well as frequent individual conferences. This course may be used as an English credit for 11<sup>th</sup> and 12<sup>th</sup> grade students who have successfully completed Advanced Creative Writing I.

**ENGLISH 12 S1 & S2**

(2304A &amp; 2304B)

One Semester Each      Credit 0.50 each      Weight 1.00

This course is open to students in Grade 12. The English 12 course focuses attention on contemporary non-fiction pieces, plays, and fiction. Students will be using various texts as a springboard to composition. These texts will include articles, editorials, advertisements, songs, poems, pictures, novels and excerpts from novels, plays, and short stories. There will be more emphasis on synthesizing multiple texts and creating individual thesis statements that are conceptual in nature. Students will also produce extensive reading journals for the purposes of brainstorming, facilitating discussion, and creating evidence of critical thinking. Over the course of the year, students will participate in at least four challenge essays modeled after the Manchester Community College challenge essay that determines a student's placement at MCC.

**FILM STUDIES**

(2316)

Spring semester      Credit 0.50      Weight 1.00

This course is open to students in Grade 12. This course will focus on the early development and historical evolution of America films, and the development of the actor's persona while also studying film genre and the auteur theory. This course will offer students the opportunities to view and critique films. This course may be used as a 0.50 English credit for 12<sup>th</sup> grade students in lieu of English 12 (semester two).

**EFFECTIVE COMMUNICATION S1 & S2**

(2305A &amp; 2305B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to Grade 12 students. Effective Communication is a course designed to enable students to understand, to practice, and to demonstrate the skills of effective communication. There is also a non-fiction reading and writing component to the course, in line with the MCC Challenge Essay and entry-level college English courses. Summer reading is required.

**ENG 101 S1 & S2**

(2505A &amp; 2505B)

One Semester each      Credit 0.50 each      Weight 1.05

This course is open to Grade 12 students. English 101 is designed to introduce students to “the language of the academy” – that is, to the complex literacies of reading, writing, thinking, and speaking required of college students regardless of their area of specialization. ENG 101 also introduces students to the specific requirements and standards of academic writing, including essay format, voice, and organizational strategies.

**ACADEMIC WRITING – ECE S1 & S2**

(2502EA &amp; 2502EB)

**University of Connecticut Early College Experience\***

One Semester each      Credit 0.50 each      Weight 1.10

This course is open to students in Grade 11 or 12 who have passed English 10 or 11 -Honors or Advanced Placement Language and Composition or who have earned a grade of 88 or higher in English 10 or 11. This course involves instruction in academic writing through interdisciplinary reading. It is designed for academically-driven students who want to be challenged with college coursework. Instruction will focus on helping students hone their academic writing skills to be better prepared for college. There will be a strong emphasis on the revision process. Assignments will emphasize interpretation, argumentation, and reflection.

\* Students who successfully meet the expectations of the Early College Experience requirement will earn 4 college credits (ENGL 1010 Seminar in Academic Writing) from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**WRITING THROUGH LITERATURE – ECE S1 & S2**

(2503EA &amp; 2503EB)

**University of Connecticut Early College Experience\***

One Semester each      Credit 0.50 each      Weight 1.10

This course is open to students in Grade 11 or 12 who have passed English 10 or 11 -Honors or Advanced Placement Language and Composition or who have earned a grade of 88 or higher in English 10 or 11. This course involves instruction in academic writing through literacy reading. It is designed for academically-driven students who want to be challenged with college coursework. Instruction will focus on helping students hone their academic writing skills to be better prepared for college. There will be a strong emphasis on the revision process. Assignments will emphasize interpretation, argumentation, and reflection.

\* Students who successfully meet the expectations of the Early College Experience requirement will earn 4 college credits (ENGL 1011 Seminar in Writing through Literature) from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**HUMANITIES SCHOLAR SEMINAR S1 & S2**

(2328A &amp; 2328B)

One semester each      Credit 0.50 each      Weight 1.05

This course is open to students in Grade 12. Prior successful completion of Advanced Creative Writing II is required. The Humanities Scholar Seminar course will provide the opportunity for committed students who have successfully completed Advanced Creative Writing II to write fiction, creative nonfiction, and poetry within a workshop setting. This workshop will have an interest-based consensus curriculum. Students will be encouraged through writing and discussion to question, to refine, and to expand their craft. During this course students will learn precise guidelines on how to write well and how to contact publishers for possible publication. This course will also provide focused critique and meaningful dialogue. In addition, there will be an authentic audience participation requirement. The major focus of this class will be the analysis of student writing in the classroom as well as frequent individual conferences. Students will work independently on individually-chosen projects while taking on a leadership role within this field. This course may be used as an English credit for 12<sup>th</sup> graders.



## ENGLISH DEPARTMENT ELECTIVES

For those students who want to extend their study, additional English course elective credits may be earned.

### CREATIVE WRITING I

(2308)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This one semester course is devoted to a study of short story writing, script writing, and poetry writing with emphasis on the study of professional authors' techniques and on student creations. The study of professional techniques encourages students to use critical analysis of their own work and to make revisions.

Note: This course may be used to fulfill the Fine Arts requirement for graduation.

### CREATIVE WRITING II

(2309)

Spring Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. Prior successful completion of Creative Writing I is required. This one-semester course is an extension of fiction and poetry writing with the addition of nonfiction writing such as biography, autobiography, and the familiar essay. A unit on children's literature will also be included, and students will be creating their own samples. Students who elect to take the course for both semesters can extend and perfect their previous writing. Models by established writers will be examined for writing technique and style.

Note: This course may be used to fulfill the Fine Arts requirement for graduation.

### ACTING FOR FILM AND TELEVISION I

(2310)

### ACTING FOR FILM AND TELEVISION II

(2311)

One Semester each

Credit 0.50 each

Weight 1.00

These courses are open to students in Grades 10, 11, and 12. The courses will introduce the various approaches to acting for film and television. During these courses, a number of genres will be examined including narrative film acting, industrial film acting, commercial acting, and various styles of television acting, including improvisational scripting. Students will also study make-up design as well as learn how to utilize marketing for self-promotion.

These courses will run simultaneously and in conjunction with two related courses (Video Production III and IV and Film Studies I and II), thus offering students a unique, interdisciplinary opportunity to work collaboratively with their peers and to contribute meaningfully to the pre-production, production, and post-production stages of short, original student films.

Note: These courses may be used to fulfill the Fine Arts requirement for graduation.

### A HISTORY OF POPULAR CULTURE I & II

(8325A & 8325B)

One Semester Each

Credit 0.50 each

Weight 1.00

This course is open to students in Grades 11 & 12. This course is designed to introduce the student to a variety of critical approaches towards the study of popular culture. This course will draw on student's prior knowledge of popular culture, with a view towards examining the subject from a scholarly perspective. The overarching objective of the course is to explore how popular culture, in all its various forms, influences the way humans perceive the world. A wide range of subjects (such as film, television, music, social media, the impact of video games, graphic novels, etc.) will be examined, using a broad range of critical approaches (such as historical perspective, genre theory, gender studies, semiotics, and political economy), so that the students can better understand how contemporary popular culture shapes their lives.

## ENGLISH AS A SECOND LANGUAGE S1 & S2

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12 whose English proficiency is determined to be in need of development. The ESL program is designed to assist English language learners in adapting to American culture and in acquiring English for both communicative and academic purposes. Individual needs in the four skills areas of listening, speaking, reading, and writing are addressed.

## READING EFFICIENCY S1 & S2

(9103A & 9103B)

One Semester each      Credit 0.50 each      Weight 1.00

This intervention course is open to students in Grades 9, 10, 11, and 12. It is designed to work on students' individual needs with a focus on active reading strategies and study skills. General skills developed through this course include note taking, vocabulary development, study skills, and test-taking skills.

## FOUNDATIONS OF READING S1 & S2

(2206A & 2206B)

One Semester each      Credit 0.50 each      Weight 1.00

This intervention course is open to students in Grades 9, 10, 11, and 12. This multi-sensory course is designed to address students' deficiencies in reading rate, listening, reading comprehension, and vocabulary development. The use of individualized reading exercises along with independent silent reading using leveled paperback books and on-level audiobooks, enable students to increase their reading rate, vocabulary knowledge, and comprehension.

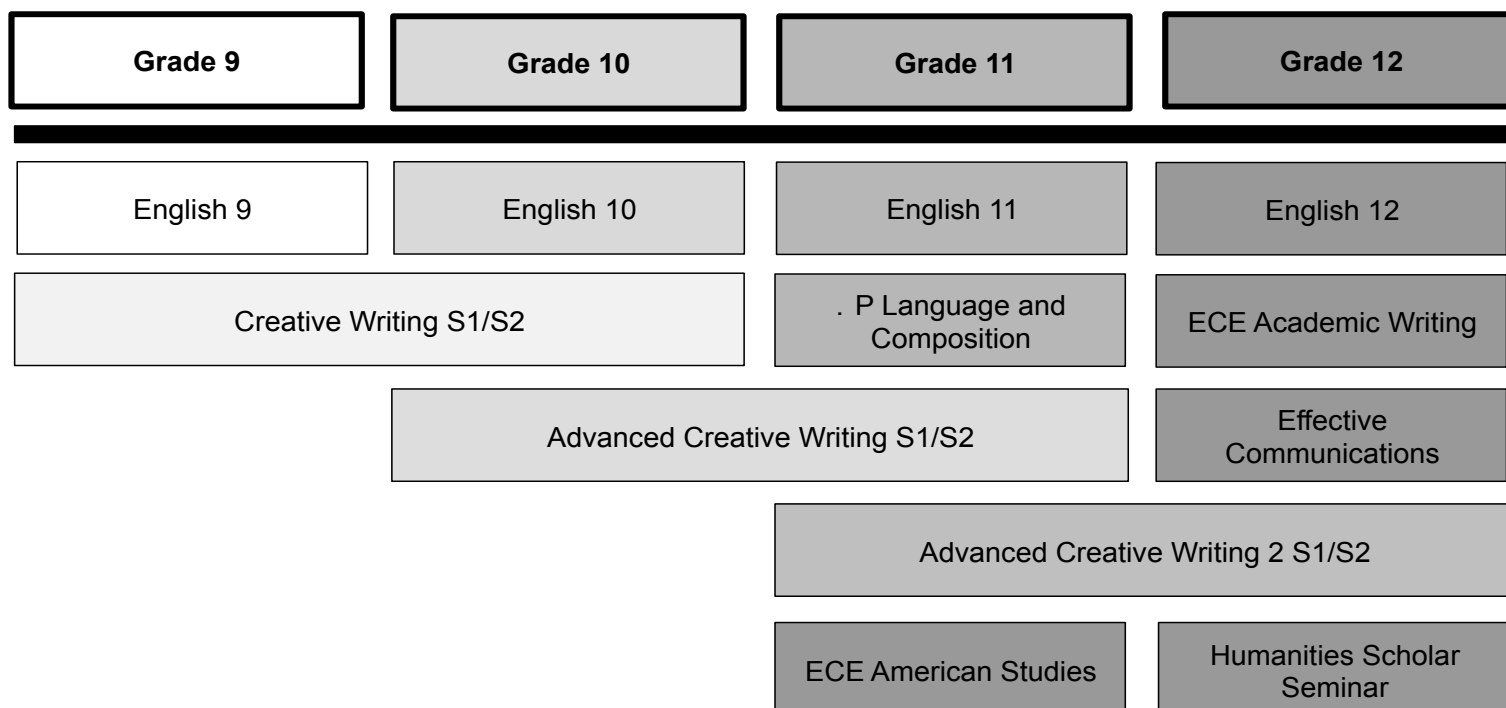
## READING ESSENTIALS S1 & S2

(2210A & 2210B)

One Semester each      Credit 0.50 each      Weight 1.00

This intervention course is open to students in Grades 9, 10, 11, and 12. This multi-sensory course provides readers with individualized, adjusted instruction to improve their decoding and encoding skills. Reading instruction provides comprehensive instruction in the areas of phonological and phonemic awareness, sight word recognition, vocabulary knowledge, reading rate, and spelling. Reading strategies supports and motivates students to become lifelong readers and learners by providing high-interest, leveled paperback books and on-level audiobooks.

## English Department - Course Selection Flow Chart



## MUSIC

Music education at Rockville High School is an integral part of the entire educational process. The program provides for student development both through and in music. The multifaceted program concentrates on the enhancement of cultural and aesthetic values. Participation in the program provides students with a deeper appreciation of the fine arts through the beauty and expression of music.

### Performance Courses

Concert performances are scheduled throughout the school year during non-school hours and are an integral part of the learning and assessment process. Participation in concerts and rehearsals outside of the school day is an important extension of the classroom learning and is mandatory for all ensemble members. Participants will be asked to purchase uniform and/or performance attire.

#### MARCHING BAND I

(6524)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grade 9 or 10 who are qualified instrumentalists through band director recommendation or audition (typically new members to the ensemble). **This course begins meeting in August prior to the start of the school year.** This elective course is offered for those band members interested in performing at football games, parades, and marching band competitions. The “DCI” (Drum Corps International) concept of marching and performance will be the foundation for all teaching. Emphasis will be placed upon fundamentals of musicianship, marching and maneuvering, musical expression, showmanship, physical coordination, and development of discipline and character. This course will run concurrently with Symphony Band I. Members of the Marching Band will perform during the first quarter with the Marching Band, and with the Symphony Band during the second quarter. After the first quarter, students will focus on traditional and contemporary literature for concert band with a traditional Symphony Band concert at the end of the quarter.

#### MARCHING BAND II

(6525)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 10, 11, and 12 who are qualified instrumentalists through band director recommendation or audition (typically new members to the ensemble). **This course begins meeting in August prior to the start of the school year.** This elective course is offered for those band members interested in performing at football games, parades, and marching band competitions. The “DCI” (Drum Corps International) concept of marching and performance will be the foundation for all teaching. Emphasis will be placed upon fundamentals of musicianship, marching and maneuvering, musical expression, showmanship, physical coordination, and development of discipline and character. This course will run concurrently with Symphony Band II. Members of the Marching Band will perform during the first quarter with the Marching Band, and with the Symphony Band during the second quarter. After the first quarter, students will focus on traditional and contemporary literature for concert band with a traditional Symphony Band concert at the end of the quarter.

#### SYMPHONY BAND I – S1 & S2

(6534A & 6534B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 9 or 10 who are qualified instrumentalists through band director recommendation or audition (typically new members to the ensemble). Students study and perform standard band literature of all stylistic periods. Fundamentals of musicianship, both technical and expressive, will be stressed. Playing assessments will be required each quarter along with daily practice outside of the school day. Students will also study musical terminology, music theory, and music history. This course will run concurrently with Marching Band I, but students in Symphony Band I will not be expected to participate in outside rehearsals or performances through Quarter 1.

This course is intended for students not interested in the extracurricular “DCI” performance styles, but students will still learn music for the fall season. Symphony Band members will perform at school events during the school day throughout Quarter 1 and will continue to perform as a traditional Symphony Band during Quarters 2, 3, and 4. Symphony Band concerts in Quarters 2, 3, and 4 will focus on traditional and contemporary literature for concert band.



**SYMPHONY BAND I – HONORS – S1 & S2**

(6542A &amp; 6542B)

One Semester each      Credit 0.50 each      Weight 1.05

This course is open to students in Grades 9 or 10 who are qualified instrumentalists through band director recommendation or audition (typically new members to the ensemble). Students study and perform standard band literature of all stylistic periods. Fundamentals of musicianship, both technical and expressive, will be stressed. Playing assessments will be required each quarter along with daily practice outside the school day. Students will also study musical terminology, music theory, and music history. This course will run concurrently with Marching Band I, but students in Symphony Band I will not be expected to participate in outside rehearsals or performances through Quarter 1.

This course is intended for students not interested in the extracurricular “DCI” performance style, but students will still learn music for the fall season. Symphony Band members will perform at school events during the school day throughout Quarter 1, and will continue to perform as a traditional Symphony Band during Quarters 2, 3, and 4. Symphony Band concerts in Quarters 2, 3, and 4 will focus on traditional and contemporary literature for concert band.

There are also the following additional requirements to receive Honors-weighted credit:

- Students must attain an 85% or higher on final playing assessments of each quarter.
- Students will have additional performance assessments throughout the year.
- Students will study music theory in a more comprehensive manner through outside coursework.
- Students are encouraged, but not required, to obtain private lessons.
- Students who elect Honors-weighted credit will be required to fulfill additional assignments and responsibilities selected from a menu at the beginning of the year.

**SYMPHONY BAND II – S1 & S2**

(6535A &amp; 6535B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 10, 11, and 12 who are qualified instrumentalists through band director recommendation or audition (typically experienced members of the ensemble). Students study and perform standard band literature of all stylistic periods. Fundamentals of musicianship, both technical and expressive, will be stressed. Playing assessments will be required each quarter along with daily practice outside of the school day. Students will also study musical terminology, music theory, and music history. This course will run concurrently with Marching Band II, but students in Symphony Band II will not be expected to participate in outside rehearsals or performances through Quarter 1.

This course is intended for students not interested in the extracurricular “DCI” performance style, but students will still learn music for the fall season. Symphony Band members will perform at school events during the school day throughout Quarter 1, and will continue to perform as a traditional Symphony Band during Quarters 2, 3, and 4. Symphony Band concerts in Quarters 2, 3, and 4 will focus on traditional and contemporary literature for concert band.

**SYMPHONY BAND II – HONORS – S1 & S2**

(6543A &amp; 6543B)

One Semester each      Credit 0.50 each      Weight 1.05

This course is open to students in Grades 10, 11, and 12 who are qualified instrumentalists through band director recommendation or audition (typically experienced members of the ensemble). Students study and perform standard band literature of all stylistic periods. Fundamentals of musicianship, both technical and expressive, will be stressed. Playing assessments will be required each quarter along with daily practice outside of the school day. Students will also study musical terminology, music theory, and music history. This course will run concurrently with Marching Band II, but students in Symphony Band II will not be expected to participate in outside rehearsals or performances through Quarter 1.

This course is intended for students not interested in the extracurricular “DCI” performance style, but students will still learn music for the fall season. Symphony Band members will perform at school events during the school day throughout Quarter 1, and will continue to perform as a traditional Symphony Band during Quarters 2, 3, and 4. Symphony Band concerts in Quarters 2, 3, and 4 will focus on traditional and contemporary literature for concert band.

There are also the following additional requirements to receive Honors-weighted credit:

- Students will attain an 85% or higher on final playing assessments of each quarter.
- Students will have additional performance assessments throughout the year.
- Students will study music theory in a more comprehensive manner through outside coursework.
- Students are encouraged, but not required, to obtain private lessons.
- Students who elect Honors-weighted credit will be required to fulfill additional assignments and responsibilities selected from a menu at the beginning of the year.

<b>CHAMBER CHOIR – S1 &amp; S2</b>	Weight 1.00	(6532A & 6532B)
<b>CHAMBER CHOIR – HONORS – S1 &amp; S2</b>	Weight 1.05	(6540A & 6540B)

One Semester each      Credit 0.50 each

This course is open to inexperienced choral students in Grades 9, 10, 11, and 12. It is designed to offer novice young voices the opportunity to perform a variety of choral literature of varying styles. The development of proper vocal technique and fundamental musicianship skills, including theory and sight singing, are emphasized in the daily rehearsal. Importance is also placed on studying the text and expressive designs in the literature being studied. Student achievement is primarily demonstrated through the performance of the music studied in the choral classroom. Students who elect the Honors-weighted course will be required to fulfill additional assignments and responsibilities selected from a menu at the beginning of the school year.

<b>CONCERT CHOIR – COLLEGE</b>	Weight 1.00	(6533A & 6533B)
<b>CONCERT CHOIR -- HONORS</b>	Weight 1.05	(6541A & 6541B)

Two Semesters (S1/S2)      Credit 0.50 each

This course is open to experienced choral students in Grades 9, 10, 11, and 12. It is designed to offer mixed voices (SATB) the opportunity to perform a variety of choral literature of varying styles. The development of proper vocal technique and more advanced musicianship skills, including theory and sight singing, are emphasized in the daily rehearsal. Importance is also placed on studying the text and expressive designs in the literature studied. Student achievement is primarily demonstrated through the performance of the music studied in the choral classroom. Students who elect the Honors-weighted course will be required to fulfill additional assignments and responsibilities selected from a menu at the beginning of the school year.

<b>BAND / VOCAL ENSEMBLE – HONORS</b>	(6544A & 6544B)
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Two Semesters (S1/S2)      Credit 0.50      Weight 1.05

Permission of both the band and choral instructors is required. This course is designed specifically for the serious and talented musician who wishes to continue developing skills in vocal and instrumental music through participation in both Band and a vocal ensemble (chorus). In this combination course, the student will attend each class for half of the block. In addition, each student will select pursuing either the vocal or instrumental emphasis and must fulfill the requirements of Honors Band or Honors Vocal Ensemble (chorus).

## Non-Performance Courses

<b>AUDIOVISUAL TECH</b>	(0511)
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One Semester      Credit 0.50      Pass/Fail

This course is open to students in Grades 9, 10, 11, and 12. Students will get the experience of performance success through audiovisual support. They will learn how to utilize auditorium audio and lighting equipment as well as any other school audiovisual equipment available. Students will learn to program lights, set lighting rigs, and prepare cues for a performance. The course will also focus on other stage management techniques such as blocking, stage management, and set design. Students will work on a project supporting at least one school auditorium event, by collaborating with the group putting on the event, interviewing the group or person for their needs, determining which equipment and special effects or needs are required, documenting what the total equipment needs are for the event, and operating or having others in the class help to operate the equipment, when more than one operator is needed to support the performance. This is an exploratory class that will give students the opportunity to learn about the technology behind the success of performances as a viable career choice in theater management.

<b>BASIC PIANO KEYBOARD</b>	(6522)
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One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This is an introductory course in the fundamentals of piano keyboard performance. Classroom topics include the study of musical notation and symbols, the performance of simple melodies, standard scales and chord progressions, folk songs, and popular music. Students will also perform ensemble music, with an emphasis on rhythmic accuracy and tempo pulse control.

**INTERMEDIATE PIANO KEYBOARD**

(6523)

One Semester

Credit 0.50

Weight 1.00

Prior successful completion of the Basic Piano Keyboard course offered at Rockville High School is required with the recommendation of the teacher (or a keyboard audition with the instructor). The Intermediate Piano Keyboard course is offered as a continuation of the Basic Piano course presently taught during the fall semester with the materials and content being at a higher level of difficulty. An emphasis will be placed on the study of piano literature within each period of music history (Baroque, Classical, Romantic, and 20<sup>th</sup> Century). All students in the Intermediate Piano Keyboard course will build upon the skills attained in the Basic Piano Keyboard course.

**GUITAR**

(6536)

One Semester

Credit 0.50

Weight 1.00

This course is open to all students in Grade 9, 10, 11, and 12. This course is designed for students with any level of guitar experience including beginners. Students will receive instruction on guitar performance, music notation reading, stylistic performance, and specific skills and techniques that are required to become a successful guitarist. Areas of concentration include correct posture, note/chord reading, aural skills, rhythmic patterns, chord study, finger-picking styles, musical forms, improvisation, and performing experiences.

**INTRODUCTION TO MUSIC TECHNOLOGY**

(6521)

One Semester

Credit 0.50

Weight 1.00

This course is open to all students in Grades 9, 10, 11, and 12. This course includes the study of the physics of music, sound production, Foley Art, music creation, and sound engineering. This elective course uses digitally produced sound as a medium for creating and performing musical experiments and projects. Areas of concentration include the study of stereo systems, microphones, PA systems, multi-track recording techniques, mixing and mastering, and Musical Instrumental Digital Interface (MIDI). This is an exploratory class that will give students the opportunity to learn about the technology behind the success of performances as a viable career choice in music technology.

**MUSIC TECHNOLOGY IIA – MUSIC PRODUCTION**

(6537)

One Semester

Credit 0.50

Weight 1.00

Prior successful completion of the Introduction to Music Technology course offered at Rockville High School is required with the recommendation of the teacher. This course is offered as a continuation of the Music Technology curriculum, but will focus on creation of individual music. An emphasis will be placed on MIDI interface and individual creation of music for specific projects. All students will be working with digital software to create original music for TV, movies, advertisements, and other media, in addition to original full-length compositions. All students in the Music Technology IIA-Music Production course will build upon the skills attained in the Introduction to Music Technology course. This is an intermediate class that will give students the opportunity to learn about the technology behind the success of performances as a viable career choice in music production.

**MUSIC TECHNOLOGY IIB – SOUND RECORDING**

(6538)

One Semester

Credit 0.50

Weight 1.00

Prior successful completion of the Introduction to Music Technology course offered at Rockville High School is required with the recommendation of the teacher. This course is offered as a continuation of the Music Technology curriculum, but will focus on recording and mixing. Students will record live musical performances, studio performances, voice-over work, and Foley Art, and will demonstrate advanced mixing techniques. All students will be working with digital software, mixing boards, microphones, and other recording materials to produce advanced sound mixes at a professional level. Students will become trained in auditorium sound, will become capable sound technicians for all events, and will work closely with the auditorium manager to work real events held in the RHS auditorium. All students in the Music Technology IIB-Music Production course will build upon the skills attained in the Introduction to Music Technology course. This is an intermediate class that will give students the opportunity to learn about the technology behind the success of performances as a viable career choice in sound recording.

**INTRODUCTION TO MUSICAL THEATER**

(6529)

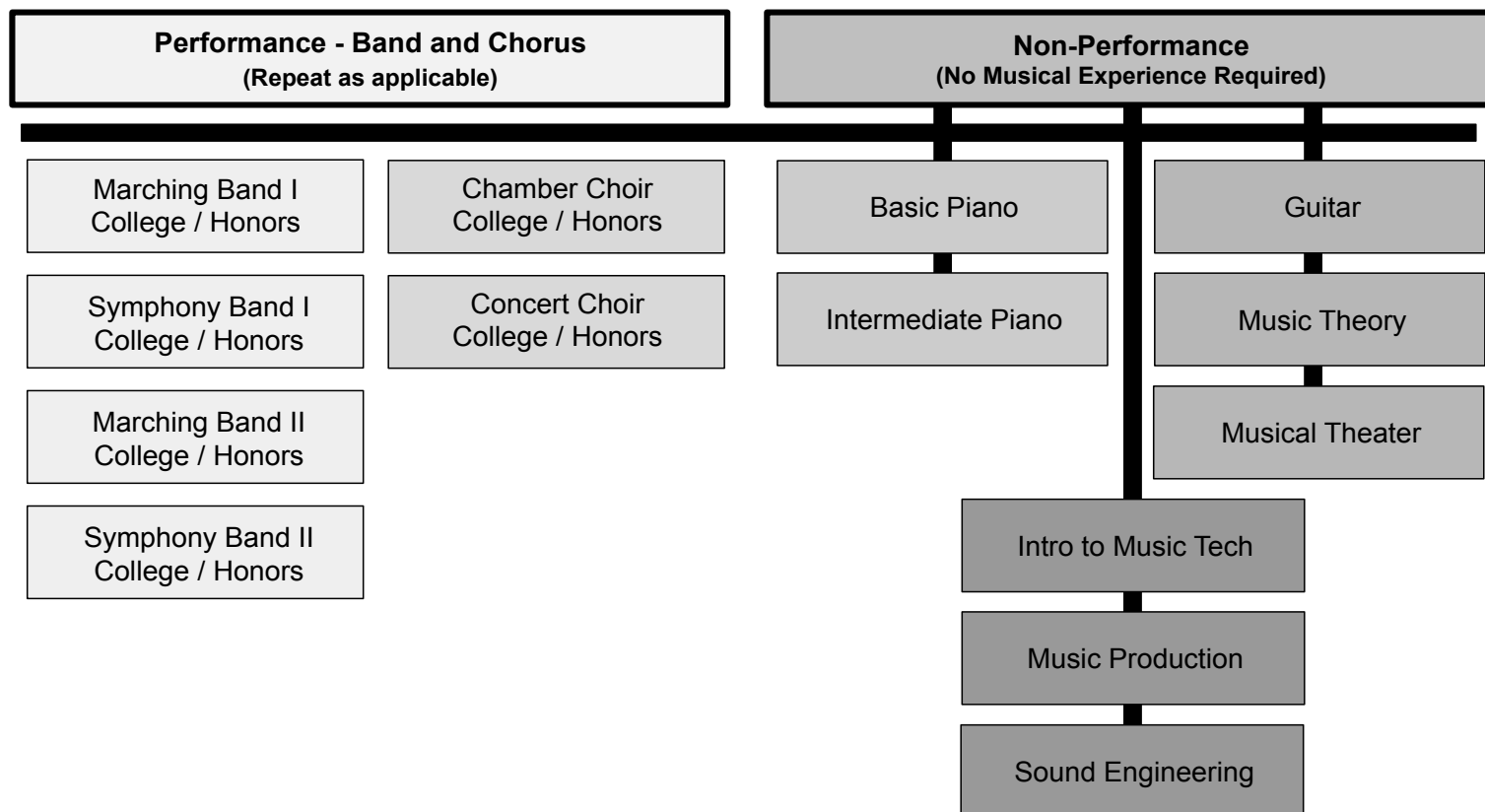
One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. The course will explore the history of American Musical Theater while developing skills necessary for performance in Musical Theater. Students will study and develop their acting, movement, and vocal performance techniques through active participation, analysis, and reflection. Students will study solo works and collaborate with other students in the class to perform larger works. Students will be required to sing and act on a regular basis, as well as analyze and evaluate performances of others. Additionally, students will receive basic training in other technical aspects of theater including sound, lights, sets, and stage management. The course will culminate with a class performance of a small work or scene from a larger work.

## Music Department - Course Selection Flow Chart



## SOCIAL STUDIES

The Social Studies department aims to develop and nurture students who are 21<sup>st</sup> century critical thinkers. Students will be challenged to develop the skills necessary to be college- and career-ready by engaging in an interdisciplinary approach to the social sciences. We strive to teach students to be open minded, problem solvers, and collaborators who can apply information learned to real world situations. In addition, we strive to ensure that all students become knowledgeable, responsible, and productive global citizens.

Students may enroll in the Humanities Scholar Program which provides an opportunity to specialize in one of many Humanities tracks throughout their four years at RHS.

<b>WORLD HISTORY 1 – CONFLICT &amp; COOPERATION</b>	Weight 1.00	(8301)
<b>HONORS</b>	Weight 1.05	(8401)
One Semester	Credit 0.50	

This course is primarily open to students in Grade 9 and 10. This is a survey course covering the Scientific Revolution to the Industrial Revolution. The course examines how new ideas have led to the development of political and revolutionary change, and what effects these changes had on societies of the world. This course helps define how the modern world emerged.

<b>WORLD HISTORY 2 – CONFLICT &amp; COOPERATION</b>	Weight 1.00	(8302)
<b>HONORS</b>	Weight 1.05	(8402)
One Semester	Credit 0.50	

This course is primarily open to students in Grade 9 and 10. This is a survey course covering the Rise of Imperialism to the present. Special emphasis is placed on selected events and their relationship to each other and to our modern world. The course examines how conflict defined a significant portion of the 20<sup>th</sup> century and how that conflict led to cooperation and the creation of our global community.

<b>GLOBAL STUDIES I – HONORS</b>	(8406)	
<b>GLOBAL STUDIES II – HONORS</b>	(8407)	
One semester each	Credit 0.50 each	Weight 1.05

These courses are intended for students in Grades 9 through 12. The courses provide students with the opportunity to explore what is happening in various regions and civilizations at a given time in both Western and non-Western civilization. In addition, it enables students to investigate issues and themes from multiple perspectives and make global connections and linkages that lead to in-depth understanding. As students meet various social studies and common core standards, they will have multiple opportunities to explore the content and intellectual skills of history and the social science disciplines.

<b>CONTEMPORARY WORLD ISSUES</b>	Weight 1.00	(8319)
<b>HONORS</b>	Weight 1.05	(8408)
One Semester	Credit 0.50	

This course is intended for students in Grade 10, but is open to students in Grade 11 and 12. The course is designed to give students an understanding of the major problems and issues in contemporary world society. Topics to be covered include: political instability throughout regions of the world; rights versus threats posed by emerging nations; globalization; climate changes; and current world events. Students will use several approaches to study contemporary world issues such as Internet research, comparing and contrasting world news organizations, various multimedia mediums, magazines, and news journals. The Honors-weighted course presents the same basic curriculum as Contemporary World Issues. The major difference will be the in-depth exploration, analysis of selected topics, and the amount of student participation.

<b>CIVICS – COLLEGE</b>	(8304)	
One Semester	Credit 0.50	Weight 1.00

This course fulfills a graduation requirement for all students and is intended to be selected in Grade 10. Through the study of civics and government, students will gain knowledge of the United States Constitution, how the U.S. system of government works, and how the rule of law and the value of liberty and equality have an impact on individual, local, state, and national decisions. Students will also come to understand the rights and responsibilities of American citizens through an understanding of political systems and international relations.

**UNITED STATES HISTORY I & II  
HONORS**

Weight 1.00  
Weight 1.05

(8305A & 8305B)  
(8405A & 8405B)

One Semester each      Credit 0.50 each

These courses fulfill a graduation requirement for all students and are intended to be selected in Grade 11. Although these courses serve as an introduction to advanced studies in American history at the university level, they also provide a strong background for those who will not elect United States history while at college, but who will be expected to have a good understanding of the discipline. These are intensive courses that survey the political, economic, and social development of the United States from the Age of Discovery to the present. The Honors courses present a more in-depth exploration and analysis of selected topics and more student participation is expected. Summer work will be assigned for the Honors course.

**AMERICAN STUDIES ECE – HISTORY - S1 & S2**

(8503EA & 8503EB)

**AMERICAN STUDIES ECE – ENGLISH - S1 & S2**

(2504EA & 2504EB)

**University of Connecticut Early College Experience\***

One Semester each      Credit 0.50 each      Weight 1.10

Successful completion of English 10 is recommended. Upon successful completion of this course, students will earn one (1) credit for English and one (1) credit for Social Studies (United States History). American Studies-ECE will be a two successive-block class encompassing an integrated study of American history and literature, enriched by exposure to American art, music, and research from the historian's as well as the writer's perspective. It will develop in students an in-depth understanding of key themes and an overview of the chronological development of history and literature which will be reflected in the humanities approach. Challenging college-level reading and writing assignments will be required throughout the course. The English and History sections must be elected at the same time.

\*The ECE American Studies course is the AMST 1201 Introduction to American Studies course offered at UCONN. Students earning a grade of C or better in both the History and English components of the course will earn 3 college credits from UCONN. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**ADVANCED PLACEMENT UNITED STATES HISTORY - S1 & S2**

(8501A & 8501B)

One Semester each      Credit 0.50 each      Weight 1.10

This course is open to students in Grade 11. A grade of 90 or higher in Honors for all previous Social Studies and English courses is suggested. The Advanced Placement course in United States History is an in-depth survey course offered on the university level to high school students who are qualified. The course is designed to provide students with the analytical skills and the factual knowledge necessary for dealing critically with materials and problems relating to United States history. Instruction includes preparation for taking the Advanced Placement examination in United States History. The coursework will consist of essays, document readings, and some research during each quarter. Assessments will consist of several or more chapters. Students will be required to take the Advanced Placement in United States History exam given in the spring in order to receive credit for the course. Summer work completion is required as part of the course.

**MODERN EUROPEAN HISTORY – ECE - S1 & S2**

(8502EA & 8502EB)

**University of Connecticut Early College Experience\***

One Semester each      Credit 0.50 each      Weight 1.10

This course is open to students in Grade 12. Prior successful completion of United States History-Honors, American Studies-ECE, or Advanced Placement United States History is suggested. The Modern European History course is an in-depth survey course offered on the university level. The course will emphasize the development of analytical thinking, factual knowledge, and reading and writing skills. Content will include major European events from the Renaissance to the present day. Students will interpret primary sources, work with maps and graphs, analyze different historical viewpoints, and make their own conclusions about historical events.

\*The ECE Modern European History course is the HIST 1400 Modern Western Traditions course offered at the University of Connecticut. Students earning a grade of C or better in ECE Modern European History course will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.



**ECONOMICS**

(8307)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. Economics is the study of values and social goals. It includes such areas as the market, sales, stock market, surpluses, the supply and demand theories, and the function of government. Economics examines the gross domestic product, money, banking, and the national debt. The students are exposed to comparative economics systems, the role of business, labor unions, international trade, and the problems of population and underdeveloped countries.

**SOCIOLOGY-CULTURE & THE MEDIA**

(8320)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. Through a study of sociological perspectives, culture, and socialization, students will gain a better understanding of their role and impact on our ever-changing world. It is recommended that students have an interest in topics related to culture, social justice, and the media's impact on their lives.

**SOCIOLOGY-DEVIANCE AND INEQUALITY**

(8321)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. Students will look at their society in new ways as they study deviance, social inequality, and social change. In addition, issues of race, gender, and ethnicity will be discussed.

**DEVELOPMENTAL PSYCHOLOGY**

(8322)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. This is a survey course introducing modern psychology by presenting scientific and humanistic interpretations of the human mind and behavior. Topics to be covered are biological bases of behavior, perception, learning, personality, and social influences.

**APPLIED PSYCHOLOGY**

(8323)

One Semester

Credit 0.50

Weight 1.00

This course is open to all students in Grade 11 and 12. This course covers the scientific study of psychology including an analysis of the connection between the body and the mind. The course examines how biology affects people's behavior and mental processes and how people experience the world around them, along with identifying categories of and behaviors associated with various psychological disorders as well as the appropriate treatments for people struggling with mental disorders.

**WORLD WAR II  
HONORS**

Weight 1.00

(8313)

Weight 1.05

(8409)

One Semester

Credit 0.50

This course is open to students in Grades 11 and 12. It is an in-depth study of one of history's most devastating conflicts. It will cover the social, political, economic, and cultural history of the major countries involved in World War II. Specific issues addressed in this course will be the causes and effects of World War II, the rise of dictators, diplomatic relations, major military operations, the human experience of those who were involved in World War II, the Women's Rights movement, minority involvement (African American, Hispanic, Native American) in the war, racism and the Holocaust, the use of atomic weapons, the Cold War, citizenship and values of "the Greatest Generation," urbanization, and the role of a wartime economy. Students will be required to read several historical books, write research papers, and be able to analyze and think critically using a variety of primary source documents. The option for Honors-level credit is available with teacher recommendation.

**INTRODUCTION TO LAW**

(8310)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. The purpose of this course is to provide the students with a basic knowledge of civil, criminal, consumer and family law. The philosophy of law and law enforcement procedures will be discussed and analyzed. A considerable amount of reading will be required and a vocabulary of legal terms will be stressed throughout the course.

**CRIMINAL JUSTICE**

(8311)

One Semester

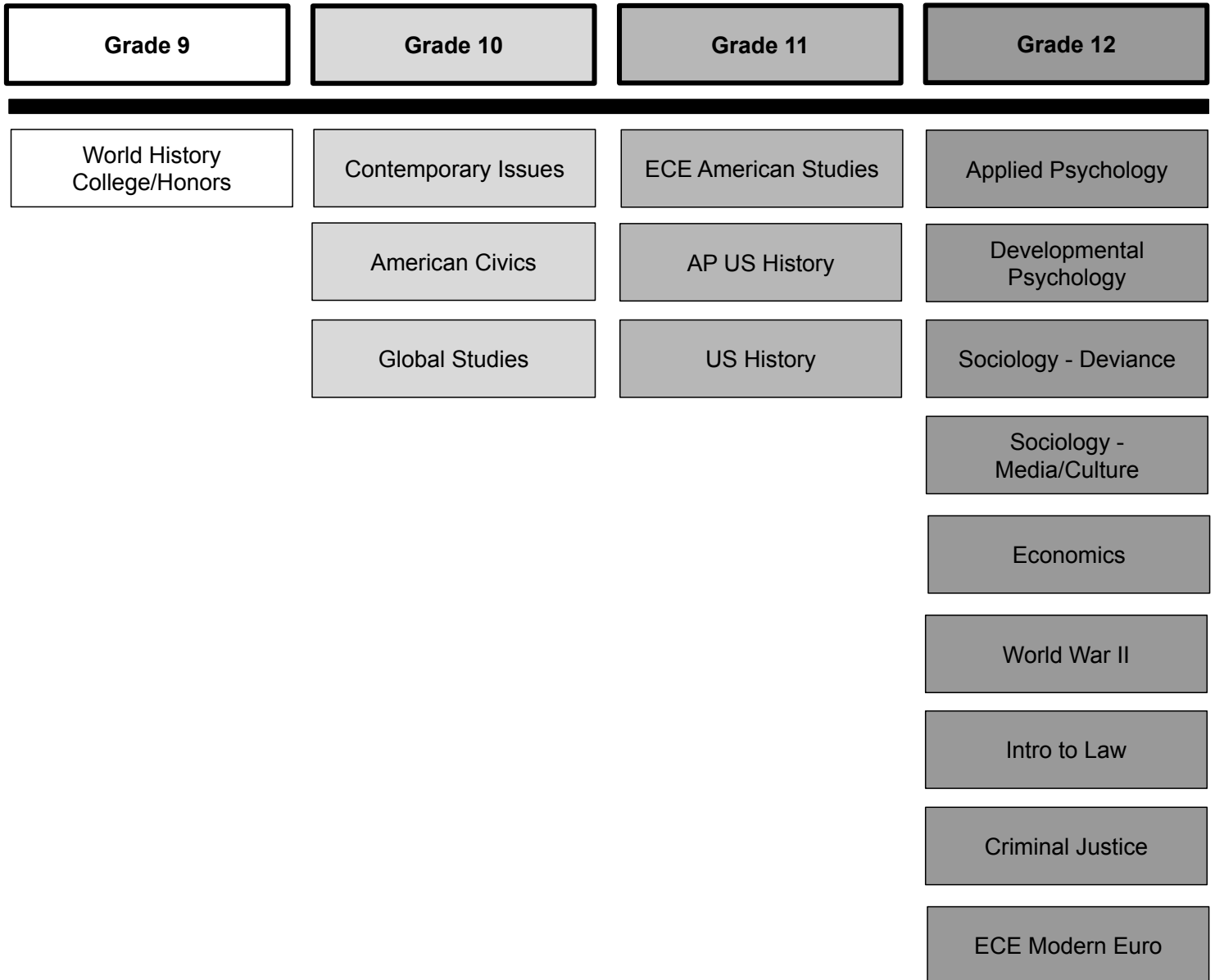
Credit 0.50

Weight 1.00

This course is open to students in Grade 11 and 12. This course is designed to give students a better understanding of law enforcement as it relates to the average citizen. The course will be team taught at Rockville High School with an officer from the Vernon Police Department. Students will be expected to complete rigorous reading, writing, and research assignments.



## Social Studies Department - Course Selection Flow Chart



# **STEM**

Agricultural Science &  
Technology Education

Business & Computer Science

Family & Consumer Science

Mathematics

Science

Technology Education

## AGRICULTURAL SCIENCE & TECHNOLOGY EDUCATION COURSES

Students wishing to be in this program must complete an application and an interview and be accepted by the Agricultural Science and Technology Education (ASTE) staff.

### GRADE 9 ASTE

In this exploratory year students are required to take all four quarter long classes

Agricultural Education I			
Introduction to Animal Systems	Introduction to Power, Structural, and Technical Systems	Introduction to Plant Systems	Introduction to Natural Resource Systems

### GRADE 10 ASTE

Each student in grade 10 is required to take Agricultural Education II – Leadership. Students can then choose one additional course each semester in their area of interest.

Agricultural Education II – Leadership	
Engine Technology	Agricultural Equipment Operation, Maintenance, and Repair I
Intro to Horticulture	Agricultural Natural Resources
Animal Fitting & Showmanship	Animal Anatomy & Physiology

### GRADE 11 & 12 ASTE

Juniors & Seniors choose four semester courses each year.

Courses marked with an asterisk (\*) have a prerequisite.

Power Structural, & Technical Systems	Animal Systems	Plant Systems	Additional Courses
Engine Technology	Animal Fitting & Showmanship	Floral Design (ECE option)	Aquaculture Science I
Agricultural Equipment Operation, Maintenance, and Repair I	Introduction to Companion Animal Management (ECE option)	Advanced Floral Design ECE*	Aquaculture Science II*
Agricultural Equipment Operation, Maintenance, and Repair II*	Animal Behavior (ECE option)	Greenhouse Management	Aquaculture Science III*
Precision Agricultural Technology	Animal Anatomy & Physiology	Horticulture I	Connecticut Agriculture in the 21st Century
Agricultural Structures and Building Technology	Veterinary Science I (MxCC option)	Horticulture II* (ECE option)	Agricultural Natural Resources
Welding I	Veterinary Science II* (MxCC option)	Landscape Technology	ASTE Senior Independent Study
Welding II*	Livestock Management	Plant Identification and Classification	
Welding III*	Horse Science	Floriculture	
	Poultry Science		
	Animal Reproduction		
	Animal Nutrition		

## **SUPERVISED AGRICULTURAL EXPERIENCE**

Full Year course      Credit 1.00 each      Weight 1.00

Grade 10      (0222)

Grade 11      (0223)

Grade 12      (0224)

Students enrolled in Agricultural Science and Technology Education are required to maintain an acceptable SAE in grades 10, 11, and 12. SAE allows students to build upon their coursework by gaining real-world, hands-on experience within their chosen career path. Students will enhance their agriculture industry knowledge, gain financial independence and management skills, and determine whether the career choice aligns with their interests and abilities. Up to one additional credit is earned for the completion of the SAE each year.

## **AGRICULTURAL SCIENCE & TECHNOLOGY EDUCATION COURSE DESCRIPTIONS**

### **AGRICULTURAL EDUCATION I**      All four quarter-long courses are required.

One Quarter each      Credit 0.25 each      Weight 1.00

This course is open to Grade 9 Agricultural Science and Technology Education students who have applied and been accepted to the program. Agricultural Education I is divided into four classes. Each class is one quarter in length. Grade 9 students must take and pass each of the following Agricultural Education I classes:

#### AG ED I- ANIMAL SCIENCE - Fall Semester      (0210AS)

In Animal Science, students will explore career opportunities and gain an understanding of the importance of Animal Science to all areas of Agriculture. Students discuss domestication, differentiate between animal science & animal husbandry, and learn animal breeds, as well as animal handling, care and restraint of various species.

#### AG ED I- AGRICULTURE MECHANICS - Fall Semester      (0210AM)

In Agriculture Mechanics, students will explore career opportunities and gain an understanding of the importance of Agriculture Mechanics to all areas of agriculture. Students will learn shop safety and receive their OSHA 10-Hour Certification.

#### AG ED I- PLANT SCIENCE- Spring Semester      (0210PS)

In Plant Science, students will explore career opportunities and gain an understanding of the importance of Plant Science to all areas of Agriculture. Students examine the main anatomical structures of a plant, plant propagation and plant life cycles. This class includes hands-on experiences with germinating and transplanting plants.

#### AD ED I - NATURAL RESOURCES - Spring Semester      (0210NR)

In Natural Resources, students will explore career opportunities and gain an understanding of the importance of Natural Resources in the Agricultural Sciences. Students explore foundational concepts of management, protection, enhancement and improvement of soil, water, wildlife, forests, and air.

## **Agricultural Science and Technology Education – Animal Systems Pathway**

### **ANIMAL ANATOMY AND PHYSIOLOGY**      (0279)

One Semester      Credit 0.50      Weight 1.00

This course is open to Grade 10, 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their freshman year in the ASTE Program. Students will identify and describe the major body systems of animals. The physiology of the nervous, skeletal, muscular, respiratory, circulatory, and digestive systems will be included. Students will also classify animals based on their digestive systems. Laboratory experiences will be integrated into coursework. Students interested in an animal-related career should elect this course. This course is a requirement for all other Animal Systems Courses.

**ANIMAL BEHAVIOR** (0259)

One Semester      Credit 0.50      Weight 1.00

or**ANIMAL BEHAVIOR -- ECE** (0259E)**University of Connecticut Early College Experience credit\***

One Semester      Credit 0.50      Weight 1.10

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program and have completed Biology. In this course, students will study the natural behaviors of animals and various training techniques. Students will learn the different classifications of behaviors exhibited in domesticated and wild animals. The techniques used to study and record animal behavior will be discussed and practiced. Students will also learn the methods used to train domestic animals. Various applications of appropriate training techniques will also be taught.

\*The ECE ANIMAL BEHAVIOR is comparable to the ANSC 1602 (Behavior Training of Domestic Animals) course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**ANIMAL FITTING AND SHOWMANSHIP** (0292)

One Semester      Credit 0.50      Weight 1.00

This course is open to Grade 10, 11 and 12 students enrolled in the Agricultural Science and Technology Education Program. The course will focus on the principles of livestock fitting and showmanship and small animal fitting and showmanship. Health care, transporting animals, feed needs, livestock show regulations, fitting techniques and showmanship will be covered. Species will include, but are not limited to: cattle, sheep, goats, equine, rabbits and pocket pets. This is lab based class and industry visits.

**ANIMAL NUTRITION** (0278)

One Semester      Credit 0.50      Weight 1.00

This course is open to Grade 11, and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. In this course, students develop their knowledge of the anatomy and physiology of animal digestion. The basic nutrients will be identified and their importance discussed. The principles of digestion, nutrient absorption and metabolism will also be studied. Students will also determine the nutrient requirements of animals and develop appropriate feeding programs. Students interested in an animal-related career should elect this course.

**ANIMAL REPRODUCTION** (0280)

One Semester      Credit 0.50      Weight 1.00

This course is open to Grades 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. Students will focus on the anatomy and physiology of the reproductive systems of animals. Topics include meiosis, heritability, genotypes, phenotypes, gene dominance and recessiveness, hormones, modes of reproduction and the environment. Students will learn and develop proper breeding program management in the lab setting. Additionally, students will identify the breed characteristics and develop their own breeding program on a chosen livestock species. Laboratory experiences and research will play key roles in this course. Students interested in an animal-related career should elect this course.

**HORSE SCIENCE** (0275)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 11 and 12 enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. Topics will include: equine genetics, reproduction, and nutrition and handling. Best management practices for horse facilities and proper housing will be covered at length. A culminating portfolio project will be included that involves the business aspects of horse management and career opportunities in the equine industry.

**INTRODUCTION TO COMPANION ANIMAL MANAGEMENT** (0265)

One Semester      Credit 0.50      Weight 1.00

or**INTRODUCTION TO COMPANION ANIMAL MANAGEMENT -- ECE** (0265E)**University of Connecticut Early College Experience credit\***

One Semester      Credit 0.50      Weight 1.10

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. The course will focus on the principles of companion animal health care, management, safety, restraint, nutrition, anatomy, genetics, reproduction, and the application of new and emerging technologies of small animals. Species will include, but are not limited to, dogs, cats, birds, reptiles, amphibians, pocket pets, and small exotics.

\*The ECE Introduction to Companion Animal Management course is comparable to the ANSC 1676 (Intro to Companion Animal Management) course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**LIVESTOCK MANAGEMENT** (0262)

One Semester      Credit 0.50      Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. The course will focus on large animal agricultural production. Species studied will include sheep, alpacas, goats, cattle, and swine. Topics include: production systems, biosecurity, safe handling, nutrition, reproductive management, and animal ethics. Regular laboratory work is a part of this unit and daily preparation is required.

**POULTRY SCIENCE** (0261)

One Semester      Credit 0.50      Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. This course is designed to focus on domestic fowl. Topics include: egg production, meat bird production, avian anatomy, handling and restraint, incubation, brooding, and avian diseases. The exploration of alternative avian species will also be discussed.

**VETERINARY SCIENCE I** (0264)

One Semester      Credit 0.50      Weight 1.00

or**VETERINARY SCIENCE I – CCP\*** (0264C)

One Semester      Credit 0.50      Weight 1.10

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed sophomore year in the ASTE Program. The course will focus on the practices and procedures associated with the Veterinary Clinic. Veterinary terminology, zoonotic and other commonly diagnosed diseases, practice management, patient management, normal animal vital signs and yearly care, restraint and handling, physical examinations and treatment, sterilization and disinfection, and assisting with surgery will be covered. Careers in the veterinary field will be investigated as well as the employable skills associated with the various positions. Students will also have the opportunity to earn an industry certification in Animal First Aid and CPR. Guest speakers and field trips will be utilized to enhance the course content. Students may receive cross credit in Science.

\*This course is comparable to the VET100 (Introduction to Animal Care) course offered at Middlesex Community College. Students who successfully meet the prerequisites of Middlesex Community College may take this course for 2 college credits when it is taught by a Middlesex CC-certified instructor. There is no fee for students who elect to take this course for college credit.

**VETERINARY SCIENCE II** (0281)

One Semester Credit 0.50 Weight 1.00

or

**VETERINARY SCIENCE II – CCP\*** (0281C)

One Semester Credit 0.50 Weight 1.10

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Veterinary Science I. The course will build on content covered in Veterinary Science I regarding the practices and procedures associated with the Veterinary Clinic. Pharmaceuticals, dosage calculations, vaccination and deworming protocols, diagnostic techniques and laboratory tests, animal management during emergencies, ethics and laws that govern the practice of veterinary medicine will be covered. Specialty careers in the veterinary field will be investigated as well as the employable skills associated with the various positions. Guest speakers and field trips will be utilized to enhance the course content. Students may receive cross credit in Science.

\*This course is comparable to the VET101 (Introduction to Veterinary Science) course offered at Middlesex Community College. Students who successfully meet the prerequisites of Middlesex Community College may take this course for 3 college credits when it is taught by a Middlesex CC-certified instructor. There is no fee for students who elect to take this course for college credit.

### **Agricultural Science and Technology Education – Plant Systems Pathway**

**FLORAL DESIGN** (0250)

One Semester Credit 0.50 Weight 1.00

or

**FLORAL DESIGN – ECE** (0250E)**University of Connecticut Early College Experience credit\***

One Semester Credit 0.50 Weight 1.10

This course is open to all RHS students in Grades 11 and 12. It is also open to Grade 10 students, depending on class size. Students may be enrolled in the Agricultural Science and Technology Education Program but it is not required. Students enrolled in the ASTE program will be given preference. This course introduces the basic principles of floral design, including corsage work, the art of flower arranging for the home or floral shop and for other uses such as holidays and other special occasions. Students will learn the basic techniques in creating fresh and permanent floral designs through actual lab experience. The course will also introduce the retail florist business to include development, management, operation, and sidelines of the florist industry.

\*The ECE Floral Design course is comparable to the SPSS 2520 (Floral Art) course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 2 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**ADVANCED FLORAL DESIGN -- ECE#** (0293E)**University of Connecticut Early College Experience credit\***

One Semester Credit 0.50 Weight 1.10

This course is open to ASTE students that have completed Floral Design with a grade 'C' or higher. In-depth study of post-harvest requirements for specialized floral crops. Exposure to novel floral materials and abstract, tribute, high-style, and wedding designs. Retail price structuring, wire services, and mass-production concepts will also be covered.

\*The ECE Floral Design course is comparable to the SPSS 3530 (Floral Art) course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 2 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

#This course has been proposed by the Agricultural Science and Technology Education Department for the 2021-2022 school year and is pending approval by the Vernon Board of Education.



**FLORICULTURE**

(0253)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Program who have successfully completed their sophomore year in the ASTE Program. The course offers students an opportunity to study the production of flowering crops in a greenhouse environment. Topics include the production of seasonally-appropriate greenhouse crops, appropriate cultural management practices, integrated pest management, and marketing the crop for retail sale.

**GREENHOUSE MANAGEMENT**

(0254)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. Students will engage in hands-on laboratory experiences in the production greenhouse and conservatory. Topics include: identifying the parameters of a greenhouse environment, the control of climate and cultural practices, local greenhouse crops and houseplants, and industry-accepted practices associated with the start-up and maintenance of greenhouse plants and their environment. Students may receive cross credit in Science.

**HORTICULTURE I**

(0255)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to Grade 10, 11, and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their freshman year in the ASTE Program. Topics include: the science and practice of horticultural plant propagation and culture; the basic concepts of plant structure, growth, and function; integrated pest management; the impact of new technology; and horticulture and the environment. Students may receive cross credit in Science.

**HORTICULTURE II**

(0284)

Spring Semester

Credit 0.50

Weight 1.00

or**HORTICULTURE II – ECE**

(0284E)

**University of Connecticut Early College Experience credit\***

Spring Semester

Credit 0.50

Weight 1.08

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Intro to Horticulture. Students enrolled in Horticulture II will continue to learn about the science and practice of working with plants. Students will apply knowledge of plant anatomy and physiology to plant propagation, greenhouse crop culture, pest management, and marketing. In addition, students will explore current issues in horticulture such as environmental concerns related to horticultural practices and genetic engineering. This class will follow a syllabus approved by the Plant Science Department at the University of Connecticut. Students may receive cross credit in Science.

\*The ECE Horticulture II course is comparable to the SPSS 1110 (Fundamentals of Horticulture) course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**LANDSCAPE TECHNOLOGY**

(0251)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. Students do not need to be enrolled in the Agricultural Science and Technology Education Program to elect this course but students in the ASTE Program will be given preference. The course will introduce students to a basic study of the theory and principles of landscape design. Designs are applied to selected problems, both hypothetical and actual, in landscape development. Preliminary sketches and final drawings are prepared. Students will learn how to identify and select common trees, shrubs, ground covers, and vines used in landscape design. Students will learn to operate a variety of landscape equipment for landscape installation and maintenance. Practical landscaping work is done on school grounds or in the town of Vernon.

**PLANT IDENTIFICATION AND CLASSIFICATION**

(0256)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. The course will include an introduction to plant taxonomy and naming and classifying plants based on their physical characteristics. This class includes field trips to observe an extensive variety of plant species. Students will identify plants using this scientific (botanical) classification. Any student interested in pursuing a career or hobby in any area of plant science will benefit from this class.

**Agricultural Science and Technology Education –  
Power & Technical Systems Pathway****AGRICULTURAL STRUCTURES AND BUILDING TECHNOLOGY**

(0270)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program. Students will plan, build and/or maintain an agricultural structure. Students will create a project cost estimate for materials and labor. Students will design and construct agricultural structures using lumber and metal materials. Students will learn to safely use woodworking framing, and roofing tools & techniques. Students will examine owner's manuals to classify the types of safety hazards associated with the different woodworking tools. Students will install electrical circuits including single pole switches with lights, three-way switches with lights and duplex receptacles.

**AGRICULTURAL EQUIPMENT OPERATION, MAINTENANCE AND REPAIR I** (0271)

Spring Semester

Credit 0.50

Weight 1.00

This course is open to Grade 10, 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Engine Technology. Students will operate tractors and skid steers with various implements while observing all safety precautions. Students will examine and identify safety hazards associated with tractors and skid steers. Students will perform pre-operation inspections and start-up and shut-down procedures on tractors and skid steers as specified in the owner's manuals. Students will adjust equipment and machinery for safe and efficient operation.

**AGRICULTURAL EQUIPMENT OPERATION, MAINTENANCE AND REPAIR II** (0287)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Agricultural Equipment Operation, Maintenance & Repair I. Students will perform preventative maintenance and scheduled services to maintain tractors and skid steers. Students will develop preventative maintenance schedules. Students will practice ordering parts, using service manuals and following instructions to properly service and repair tractors and skid steers. Students will analyze and calculate the cost of using and properly maintaining tractors and skid steers.

**ENGINE TECHNOLOGY**

(0272)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to Grade 10, 11 and 12 students enrolled in the Agricultural Science and Technology Education Program. Students will explore, service, and repair small gas engines. Students will identify and classify components of internal combustion engines, analyze and explain how the components interrelate during operation. Students will compare and contrast two-stroke and four-stroke engines utilizing a Briggs and Stratton repair manual to find engine specifications. Students will evaluate service and repair needs for small gas engines and learn to order parts.

**PRECISION AGRICULTURAL TECHNOLOGY**

(0282)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. This course will focus on current technological systems that increase the precision of agricultural practices. By studying advanced technologies, students from any career pathway will gain the skills they need to become competitive 21<sup>st</sup> century agricultural specialists. Topics include: Drone (UAV) imaging, computer modeling and analysis, computer aided farm equipment, GPS navigation, and other emerging technologies.

**WELDING I**

(0268)

One Semester Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program. Students will identify the personal protection equipment (PPE) used in welding. Students will identify the hazards associated with welding. Students will conduct a safety inspection of welding tools, welding equipment and the welding area. Students will demonstrate the ability to safely set-up, use and maintain Shielded Metal Arc Welding (SMAW) equipment. Students will use the five-digit American Welding Society classification system for selecting electrodes used in SMAW. Students will demonstrate the ability to weld beads, weld in all positions and weld joints.

**WELDING II**

(0269)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Welding I. Students will demonstrate the ability to safely set-up, use and maintain Gas Metal Arc Welding (GMAW) equipment. Students will demonstrate the ability to safely set-up, use and maintain Oxy-Acetylene welding equipment. Students will compare and contrast the principles and procedures for SMAW, GMAW and Oxy-Acetylene. Students will analyze a situation and determine the best welding process to be used in metal fabrication. Students will evaluate the quality of metal fabrication procedures.

**WELDING III**

(0286)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Welding II. Students will construct and/or repair metal structures and equipment using SMAW. Students will construct and/or repair metal structures and equipment using GMAW. Students will construct and/or repair metal structures and equipment using Oxy-Acetylene.

**Agricultural Science and Technology Education –  
Additional Courses****AGRICULTURAL EDUCATION - LEADERSHIP II - S1 & S2**

(0220LA &amp; 0220LB)

One Semester

Credit 0.50

Weight 1.00

This semester course is required for Grade 10 students enrolled in the Agricultural Science and Technology Education Program. Students will participate in units that include: Team Building, Respect, Public Speaking, Career Planning, Responsibility, Communications, Employable Skills, and Financial Planning. The FFA motto and goals are key components of the curriculum.

**AGRICULTURAL NATURAL RESOURCES**

(0267)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 10, 11 and 12 students enrolled in the Agricultural Science and Technology Education Program. The course is designed for students who want to further their understanding of the Earth's natural resources and environmental topics. Students will explore the relationship between living organisms and the environment. Topics will include: wildlife management, forestry, pollution control, and environmental impacts of agriculture. Students will be exposed to the equipment and techniques used by people working in this field. Journals, lab reports, and computers are a part of this unit.

**AQUACULTURE SCIENCE I**

(0252)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their freshman year in the ASTE Program. Students will analyze historic and current trends impacting the Aquaculture Industry. Students will classify aquatic species according to taxonomy, use and potential for aquaculture in the United States. Students will manage an aquatic facility, focusing on aquatic species requirements, efficiency, safety, and ease of handling. Students will evaluate and manage water resources and quality. Students will study the anatomy and physiology of aquatic species to include finfish, crustaceans and mollusks. Students will relate the importance of aquatic species organs to their health, growth and reproduction. Students will evaluate spawning techniques for aquatic species and spawn aquatic species.

**AQUACULTURE SCIENCE II**

(0266)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Aquaculture Science I. Students will utilize best-practice protocols based upon aquatic species behaviors and welfare. Students will apply principles of nutrition to ensure proper growth, development, reproduction and economic production of aquatic species. Students will provide proper health care of aquatic species. Students will design and implement a health management program, perform diagnostic testing to detect health problems and treat common diseases, parasites and physiological disorders.

**AQUACULTURE SCIENCE III**

(0285)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed Aquaculture Science II. Students will apply management and record keeping skills to organize and operate an aquaculture business in an efficient manner. Students will evaluate the effectiveness of different production methods. Students will devise and evaluate marketing plans for an aquaculture product. Students will assess the compliance of production practices with established laws and regulations. Students will study aquaponics and look at ways aquaponics can be utilized to enhance sustainable aquaculture practices by reducing water consumption and waste production.

**BIOTECHNOLOGY**

(0273)

One Semester

Credit 0.50

Weight 1.00

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. In this course, biotechnology will be defined and various examples of biotechnology will be researched and presented. The history of biotechnology will be traced and discussed. Topics include, but are not limited to: cloning, fermentation, tissue culture, and transgenic plants and animals. The impact of biotechnology on the agricultural industry will be examined. Students will define relevant terminology and discover and discuss "bioethics."

**CONNECTICUT AGRICULTURE IN THE 21st CENTURY -- ECE**

(0258E)

One Semester

Credit 0.50

Weight 1.10

**University of Connecticut Early College Experience credit\***

This course is open to Grade 11 and 12 students enrolled in the Agricultural Science and Technology Education Program who have successfully completed their sophomore year in the ASTE Program. Development of agricultural systems and technologies and their influence on societies. Topics include 21<sup>st</sup> century trends in agriculture, such as: soil management, the impact of organic methods, urban agriculture, marketing agricultural products, permaculture, diversified agricultural production, and agritourism, to name a few. Emphasis is placed on responsible stewardship through sustainable agricultural practices. The instructor will utilize technology, guest speakers, and field trips.

This course is comparable to the SPSS 1150 (Agricultural Technology and Society) course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

## BUSINESS & COMPUTER SCIENCE EDUCATION

Business and Computer Science Education serves the entire school population through a rigorous relevant curriculum, oriented to providing career direction, job skills and a sound foundation for advanced study. The computer science component is designed to assist students in becoming computer literate before the end of their high school education. The hands-on method introduces students to technology and hardware. Hardware and software is updated regularly to meet the latest in industry trends.

### SOFTWARE APPLICATIONS

(1308A)

One semester      Credit 0.50      Weight 1.00

Successful completion of Software Applications is a graduation requirement. The course is open to students in all grades. This course is designed for students with an existing general understanding of the PC and software. The course fits the needs of both the college-bound and non-college-bound student. The goal is to equip students with software and computer skills for use in and out of school. In addition, this course will prepare students for adapting to computer hardware and software changes on a personal and vocational level. This course will cover software applications including: word processing, spreadsheets, presentation, desktop publishing, and web design. Emerging topics in hardware, software, and communications are integrated using authentic tasks.

Note: Software Applications does not meet the Vocational Education requirement for graduation but will meet the 0.5 credit graduation requirement in Software Applications.

### PERSONAL FINANCE

(1322)

One Semester      Credit 0.50      Weight 1.00

Successful completion of this course is a graduation requirement. The course is open to all students in Grades 9 through 12. This course provides students an opportunity to learn how to manage their personal finances now and in the future, in a computer learning environment. Topics include financial planning, income and taxes, budgeting, banking, credit, saving and investing, and insurance.

Note: Personal Finance does not meet the Vocational Education requirement for graduation but will meet the 0.5 credit graduation requirement in financial literacy.

### PERSONAL FINANCE (College Career Pathways)

(1318C)

One Semester      Credit 0.50      Weight 1.10

Can be taken for MCC credit in place of Personal Finance (1322)

Successful completion of this course is a graduation requirement. The course is open to all students in Grades 10, 11, and 12. This course provides students an opportunity to learn how to manage their personal finances now and in the future, in a computer learning environment. Topics include financial planning, income and taxes, budgeting, banking, credit, saving and investing, and insurance. Students who successfully meet all requirements will receive the MCC equivalent credit for BFN 111. A grade of B or better must be earned to receive credit for Financial Literacy (BFN 111). Students will earn three college credits from Manchester Community College when the course is taught by an MCC-certified instructor.

Note: Personal Finance (CCP) does not meet the Vocational Education requirement for graduation but will meet the 0.5 credit graduation requirement in financial literacy.

### BUSINESS LAW

(1209)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 11 and 12. Grade 10 students may select the course with the permission of the instructor. This course will explore how business laws affect all of us in our daily lives. The course will look at laws governing business structures, contracts, workplace employment, and consumer protections. The course will also discuss new laws as they are passed by the state and federal governments.

### MANAGEMENT

(1307)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 11 and 12. Grade 10 students may select the course with the permission of the instructor. This course deals with techniques of effective management. It covers all areas that managers address. Students will study motivation theories as well as power, leadership, and authority. Students will also analyze the employee lifecycle from interviewing and hiring to performance evaluation and awarding raises and promotions. Students will research how business culture varies across the globe.



**INTRODUCTION TO MARKETING**

(1314)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 10, 11 and 12. Successful completion of Software Applications is recommended. This course will provide students with an understanding of the role of Marketing in the modern business world. The course will also provide a basic understanding of the fundamental topics in Marketing. Some topics that are included are: sports marketing, public relations, global marketing, distribution, promotion, endorsements, agents, managers, ethics, advertising, and market research.

**ENTREPRENEURIAL I**

(1319)

**ENTREPRENEURIAL II**

(1320)

One semester each

Credit 0.50 each

Weight 1.00

These courses are open to students in Grades 10 (at instructor's discretion), 11, and 12. Successful completion of Software Applications is recommended. Completion of English 11 with a grade of B or better is recommended. These courses deliver solid coverage of the fundamentals of business management as students learn not only how to start a business, but also how to manage, grow, and harvest a business. The courses also place the student in the role of decision maker, allowing them to immediately apply what they have learned to current challenges in today's small businesses. Thorough emphasis is placed on building business plans ensuring that students can effectively create, manage, and analyze a plan for their own venture.

**BUSINESS AND MATH CONCEPTS THROUGH SPORTS**

(1321)

Fall Semester only

Credit 0.50

Weight 1.00

This course is open to students in Grades 10 (at instructor's discretion), 11 and 12. Through professional football, students will be provided with an understanding of business and math concepts including: budgeting, statistics, research analysis, communication, and business writing. Data will be organized using spreadsheet software and evaluated to draw various conclusions. Students will be provided a weekly budget amount and through statistics and analysis assemble a weekly football team. Using a "Fantasy Football" foundation, students will be given a salary cap each week and can only select the proper combinations of players that will fit within that predetermined salary cap. Students will be responsible for assembling weekly rosters, and compete with other students' teams. Each week students will prepare weekly statistics and provide quarterly management reports (verbal and written) on their success in budget and statistical management.

**ACCOUNTING I (College Career Pathways) - S1 & S2\***

(1305CA/1305CB)

One Semester each

Credit 0.50 each

Weight 1.10

This course is open to students in Grades 10, 11, and 12. Successful completion of Algebra I is recommended. The College Accounting I course provides students with a sound basic knowledge of accounting concepts and procedures. It provides a good foundation for advanced study in various areas of business. This course is intended for students interested in pursuing a future career path in business (accounting, finance, management, etc.) at the college level. The mental processes of analysis, interpretation and synthesis of accounting data receive emphasis to develop logical reasoning techniques. Exposure to manual and computer methods of accounting are provided to open vistas for career development. The course also provides a good foundation for entry into business occupations. Its work is advanced in content. The fundamentals are presented in a practical, easy-to-understand manner, teaching by example. The accounting principles described are those endorsed by the National Accounting Standards Board and the Connecticut CPA Association. This course may be taken in a student's junior or senior year for College Career Path credit.

\*These courses (when completed together) qualify for the College Career Pathways Program with Manchester Community College. A grade of B or better must be earned to receive credit for Financial Accounting (ACC 113). Students will earn three college credits from Manchester Community College when the course is taught by an MCC-certified instructor.



**INTRODUCTION TO COMPUTER SCIENCE I**

(1538)

One semester

Credit 0.50

Weight 1.00

Introduction to Computer Science I is open to students in Grades 9, 10, 11, and 12. Successful completion of Algebra I is recommended. This course is intended to be an introductory computer science course. Mapped to CTSA – Computer Science Teachers Association - standards, the course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user centered design, and data, while inspiring students as they build their own websites, apps, animations, games, and physical computing systems.

**INTRODUCTION TO COMPUTER SCIENCE II**

(1539)

One semester

Credit 0.50

Weight 1.00

Introduction to Computer Science II-Python is open to students in Grades 9, 10, 11, and 12. Successful completion of Algebra I is recommended. This course is designed to offer an introduction to computer science using the Python programming language and the Alice object oriented programming environment. Students learn the basics of computer programming, along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. The course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in CS computer science and prepares students for further study in computer science, including A.P. Computer Science Principles and A.P. Computer Science A courses. Topics will include: Number Calculations and Data, Decisions, Repetition and Loops, Graphics, For Loops, Text and String Processing, Functions, Arrays, 2-D Arrays, and the Internet. Students will have an opportunity to preview other programming topics as well.

**COMPUTER LANGUAGE FUNDAMENTALS - S1 & S2**

(1543A &amp; 1543B)

One Semester each

Credit 0.50 each

Weight 1.00

This course is open to students in Grades 11 and 12 who have successfully completed Introduction to Computer Science I and II. The course lays the foundation for students with little or no programming experience to learn the Java programming language. The course introduces fundamental programming concepts and terminology in an easy, engaging manner. Students will work with an advanced version of Alice, apply Java programming constructs using the Greenfoot, Swift, and Unity development environments. They will examine features that relate to methods and classes, and progress into encapsulation, inheritance, and polymorphism. These courses are the prerequisite for Java programming.

**ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES - S1 & S2**

One Semester each

Credit 0.50 each

Weight 1.10

(1552A &amp; 1552B)

This course is open to students in Grades 10, 11, and 12 who have successfully completed Algebra and who have earned at least a 3.0 GPA. This course is designed to be equivalent to a first semester introductory college computer course for humanities majors.

In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. Students also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

**COOPERATIVE WORK EXPERIENCE - S1 & S2**

(1323A &amp; 1323B)

One Semester each

Credit 0.50 each

Weight 1.00

This course is open to students in Grade 12 or with instructor approval. Work Experience is a course designed to help students learn the practical skills necessary to be successful in future employment. Students will combine academic instruction in the classroom with actual work/job training experience in the business community. Classroom instruction will focus on topics including career planning, career acquisition and retention, work safety, labor laws, problem solving, self-management, communication skills, and utilizing technology in the work environment. Grades will be based on successful completion of assignments related to the work experience, site visitations, projects, and classwork.

**COOPERATIVE WORK EXPERIENCE WORKPLACE CREDIT - S1 & S2** (1324A & 1324B)

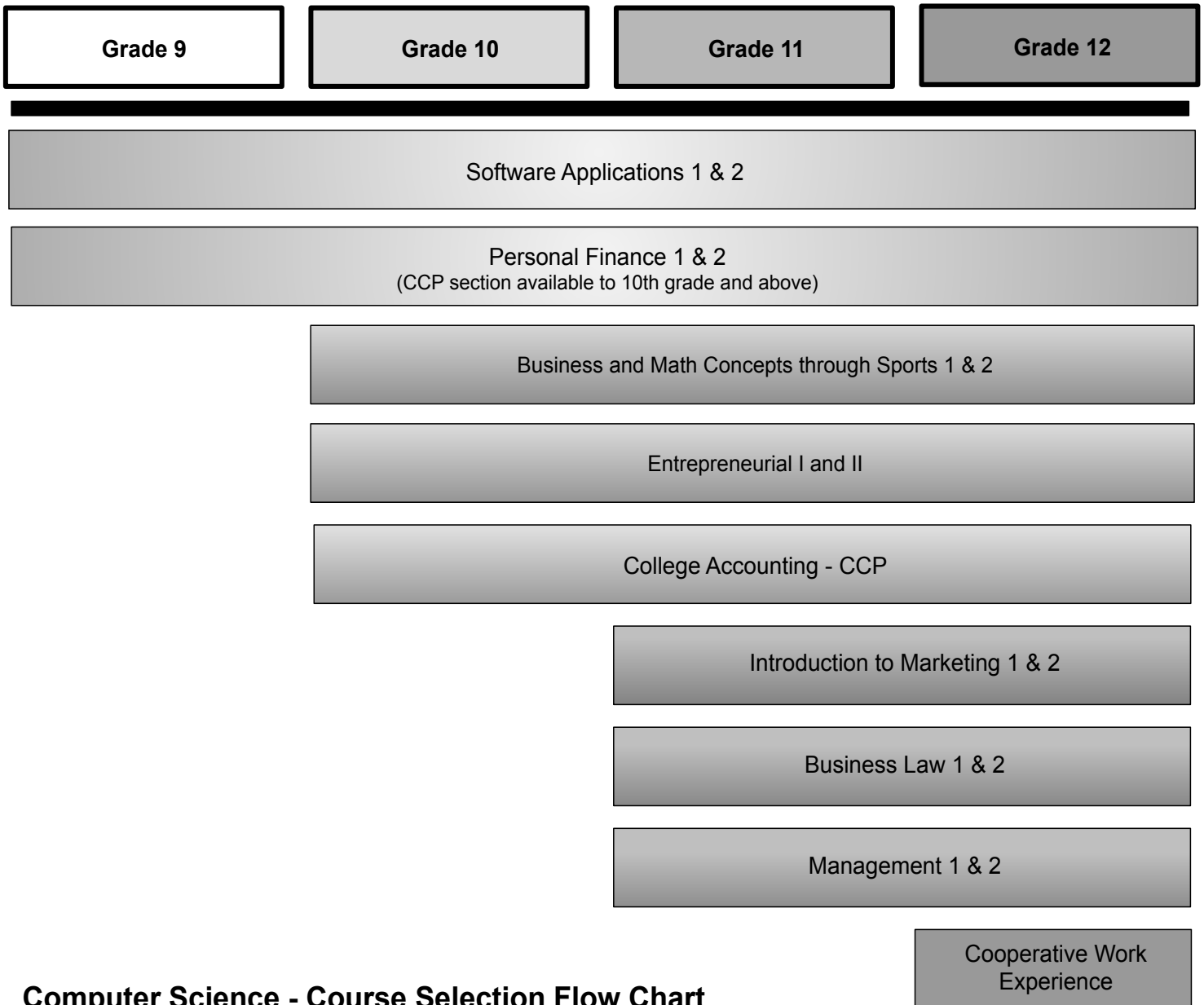
One Semester each

Credit 0.50 each

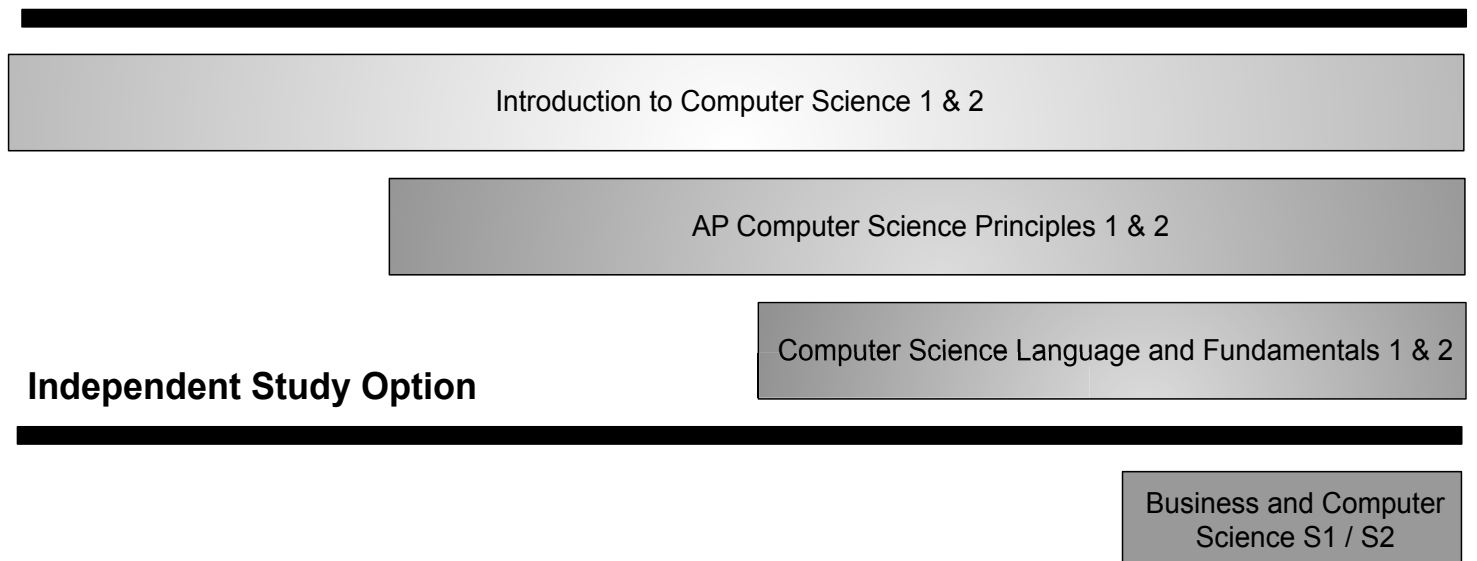
Weight 1.00

This course is open to students in Grade 12 or with instructor approval. Students must be able to provide their own transportation to and from work. Students must receive a 70% or higher in the classroom component to be eligible for this credit. In addition, students must work a minimum of ten (10) hours per week during the semester, provide proof of employment, and complete various workplace evaluation reports and assignments.

## Business Education - Course Selection Flow Chart



## Computer Science - Course Selection Flow Chart



## Independent Study Option

## FAMILY AND CONSUMER SCIENCES

Family and Consumer Sciences provides all students with an opportunity to develop knowledge, skills, and understanding that can be applied to all phases of family life. Opportunities to develop career and vocational interests are also emphasized.

### FOOD FOR TODAY

(4201)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. The course is designed for the student who wants to update their baking skills by learning basic baking techniques. An introduction to ingredients and their purposes will be studied. This course will include classroom and hands-on laboratory experiences in baking. Sanitation and safety in the classroom and the kitchen are emphasized. Students will prepare quick breads as part of a fundraiser. Topics of study include but are not limited to: quick breads, pies, cookies and chocolate. This course is a prerequisite for Creative Foods and ultimately for Baking I and II.

### FOOD CHOICES

(4204)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 10, 11, and 12. The course includes the principles of food preparation, the use of up-to-date kitchen equipment, and nutrition and health issues that affect food choices. Topics students will learn about include but are not limited to: pastas, grains, eggs and dairy. This course is a prerequisite for Creative Foods and ultimately for Food Preparation I and II.

### CREATIVE FOODS

(4211)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 10, 11, and 12. Prior successful completion of Food for Today or Food Choices is required. Creative Foods emphasizes planning, purchasing, preparing, and serving foods for special occasions. International foods are also researched and prepared in class. Students are expected to develop greater technical skill and use more difficult recipes in this course. Sweet and savory recipes will be made and enjoyed. Some catering may be included and career opportunities are explored.

### PRINCIPLES OF FOOD PREPARATION I (College Career Pathways)

(4226C)

One Semester      Credit 0.50      Weight 1.10

This course is open to students in Grades 11 and 12. Prior successful completion of a Foods course is required. Students must elect both semesters of the course. The course introduces students to the basic techniques and procedures required to prepare basic foods in a hands-on kitchen laboratory environment. Emphasis is placed on the use of equipment, identification of standard quality products, and the importance of methods by which to develop sanitary working habits. Laboratory classes emphasize safety and sanitation, food presentation, identifying and utilizing flavors, and food science basics.

### PRINCIPLES OF FOOD PREPARATION II (College Career Pathways)\*

(4306C)

One Semester      Credit 0.50      Weight 1.10

This course is open to students in Grades 11 and 12. Prior successful completion of Principles of Food Preparation I is required and students must elect both semesters of the course. The course is a continuation of Principles of Food Preparation I. The course continues techniques in differentiating cooking techniques using dry and moist heat and preparing stocks, sauces, soups and dressings. Students will prepare entrees using a variety of meat and fish dishes, vegetables and starches.

\*This course, when successfully completed with Principles of Food Preparation I, qualifies for the College Career Pathways program with Manchester Community College when taught by an MCC-certified instructor. Students can earn three college credits with MCC under their Culinary Arts Associate's Degree Program. The equivalent course at MCC is HSP 101 (Principles of Food Preparation).

**BAKING I (College Career Pathways)**

(4216C)

One Semester

Credit 0.50

Weight 1.10

This course is open to students in Grades 11 and 12. Prior successful completion of a Foods course is required. The course presents an introduction to baking and pastry with intensive hands-on laboratory training in a quantity food environment. The course competencies concentrate on the production and quality control of baked goods that are used in the home and in the hospitality industry. Laboratory classes emphasize basic ingredients and production techniques for breads, cookies, folded doughs, batters, basic cakes, pies, and creams.

**BAKING II (College Career Pathways)\***

(4305C)

One Semester

Credit 0.50

Weight 1.10

This course is open to students in Grade 11 and 12. Prior successful completion of Baking I is required. The course is a continuation of Baking I. It will include cake assembly and decoration, fruit desserts, custards, puddings, and pastries. Career exploration and service techniques will also be covered.

\*This course, when successfully completed with Baking I, qualifies for the College Career Pathways program with Manchester Community College when taught by an MCC-certified instructor. Students can earn three college credits with MCC under their Culinary Arts Associate's Degree Program. The equivalent course at MCC is HSP 103 (Principles of Baking I).

**INTRODUCTION TO CHILD DEVELOPMENT**

(4210)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. The course provides students with an understanding of the development of children from conception through preschool. Students will learn about children's physical, emotional, social, and intellectual needs as they grow. Topics of study include: reasons to learn about child development; pregnancy; prenatal care; childbirth; and newborn, infant, toddler, and preschool-aged children. Class structure and learning includes group discussion, reflection, current events, guest speakers, and individual and group projects.

**PARENTING, PREPARING AND PROTECTING CHILDREN**

(4214)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. The course provides all students, whether interested in being a parent or not, with important skills and knowledge about how to best raise, protect, and prepare children for a great start in life. The course covers important topics including: family structures; discipline, guidance, health, and safety of young children; abuse and neglect; how children learn; and preparing for early education experiences. Class structure and learning includes group discussion, reflection, current events, guest speakers, and individual and group projects.

**CHILD DEVELOPMENT – S1 & S2**

(4212A &amp; 4212B)

One Semester each

Credit 0.50 each

Weight 1.00

This course is open to students in Grades 10, 11, and 12. Students must elect both semesters of the course. Semester one will look at the development of the child in the preschool years, preparing for the Nursery School students to arrive in November. Semester two, in addition to the continuation of the Nursery School, explores child development from Prenatal to Three. Overall emphasis is on understanding the physical, emotional, social, and intellectual development of children from conception to age six with special emphasis on preschool aged children. Other topics include parenthood responsibilities, children with special needs, and the influence of the family on the developing child. This course is intended for students considering careers dealing with children such as teaching, health careers, social and recreational work, and for those interested in learning more about children.

**CHILDHOOD EDUCATION - S1 & S2**

(4301A &amp; 4301B)

One Semester each

Credit 0.50 each

Weight 1.00

This course is open to students in Grades 11 and 12. Prior successful completion of Child Development or Introduction to Child Development and Parenting is required. Students must elect both semesters of the course. This course is designed to provide students with the information and skills necessary to work in early childhood education. Students will learn about developmental theories, curriculum development, and careers in early childhood education. Students are responsible for planning, conducting, and evaluating all aspects of the nursery school program with emphasis on preparing children for kindergarten.

**EDUCATION PRACTICUM**

(4302)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grade 12 with the recommendation of the Childhood Education teacher. The Education Practicum course is offered in conjunction with Independent Living. Seniors interested in the field of education, with two years experience in the Child Development/Childhood Education program, will assist in teaching independent living skills to students with special needs. This course may be repeated for additional credit.

**INDEPENDENT LIVING**

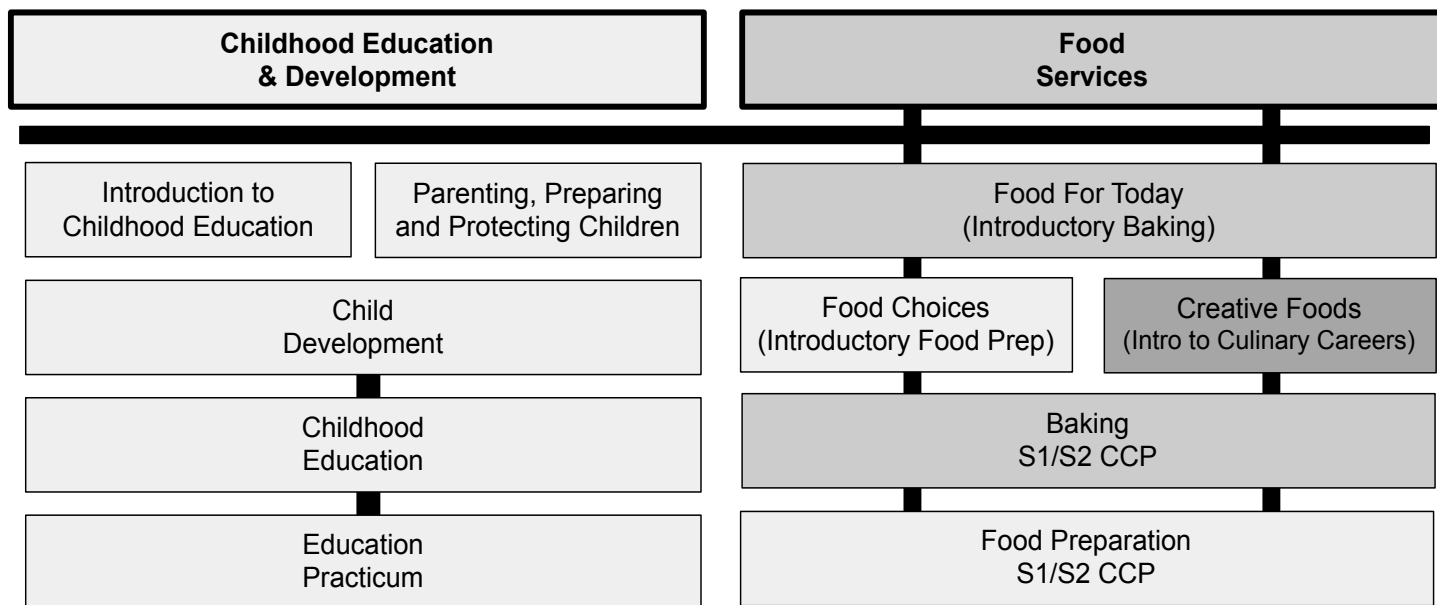
(4101A &amp; 4101B)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12 with the recommendation of the School Counseling Department or a student's case manager. Independent Living is offered in conjunction with the Education Practicum course. The course is designed to improve the quality of life for students needing extra support in independent living skills. Topics include food preparation and nutrition, clothing, home management, child care, and interpersonal relationships. Independent Living may be repeated for additional credit.

**Family and Consumer Science - Course Selection Flow Chart**

\*Suggested progression is based on course content. Prerequisites will be needed for some classes to fulfill College Career Pathways (CCP) objectives. While these pathways encourage students to develop their own goals and passions, there is limited flexibility due to the distinct characteristics of their career alignment.

Suggested Progression \* Underclassman ----- Upperclassman

# MATHEMATICS

Mathematics is an integral part of every career as well as a necessity for the consumer. The mathematics program provides a variety of courses to meet the needs of individual students. Students should select a sequence of courses which provides the maximum challenge and which is appropriate for future educational and career goals.

Graduation requirements: Students are required to earn four credits in Mathematics to earn a high school diploma at Rockville High School.

## **ALGEBRA I - S1 & S2**

Weight 1.00

(5302A & 5302B)

One Semester each Credit 0.50 each

This course is open to students in Grades 9, 10, 11, and 12. The course will focus on the fundamentals of algebra, while connecting mathematical themes to the real world and to other subject areas. Emphasis will be placed on exploration and discovery of mathematical concepts while building understandings that provide a strong foundation for future courses. Study areas include: equations and problem solving; solutions of inequalities; operations with polynomials; fractional equations; coordinate graphs of ordered pairs and linear equations; sentences in two variables; radical expressions; and quadratic equations.

## **GEOMETRY - S1 & S2 HONORS**

Weight 1.00

(5303A & 5303B)

Weight 1.05

(5401A & 5401B)

One Semester each Credit 0.50 each

This course is open to students in Grades 9, 10, 11, and 12. Prior successful completion of Algebra I is required. This course incorporates plane, solid, and coordinate geometry. Study areas include: transformations; angles; parallel and perpendicular lines; congruent and similar figures; properties of triangles; quadrilaterals; ratio and proportions; right triangles and trigonometry; properties of circles; two- and three dimensional figures, and probability.

## **ALGEBRA II - S1 & S2 HONORS**

Weight 1.00

(5304A & 5304B)

Weight 1.05

(5402A & 5402B)

One Semester each Credit 0.50 each

This course is open to students in Grades 10, 11, and 12. Prior successful completion of Algebra I is required. Study areas include: operations with functions including composition of functions and inverse functions; quadratic functions and complex numbers; polynomials; rational functions; logarithmic and exponential functions; trig functions; inferential statistics; and matrices. Concepts are presented to align with the difficulty level of SAT questions. A TI-83 or TI-84 calculator is recommended for this course.

## **CONSUMER MATHEMATICS – S1 & S2**

(5206 & 5207)

One Semester each Credit 0.50 each Weight 1.00

These courses are primarily open to students in Grade 12. These courses are designed to assist students in making the transition to financial literacy in the 21st century. Topics will include: Income, Budgeting, Banking, Credit, Automobiles, Insurance, Income Tax, Home Care, Travel, and Vacation Planning. These courses stress student involvement in gathering financial information as well as the computational aspects of determining where one's money goes.

## **ADVANCED MATHEMATICS – S1 & S2**

(5305 & 5306)

One Semester each Credit 0.50 each Weight 1.00

This course is open to students in Grades 11 and 12. Prior successful completion of Algebra II is strongly advised. This course is NOT open to students who have successfully completed Precalculus I and/or Precalculus II. The Advanced Math sequence is intended for the student who plans to study in the area of liberal arts at the college level and who wishes additional preparation in mathematics. Study areas include: relations and linear functions; quadratic functions; polynomial functions, rational functions, functions, exponential and logarithmic functions, trigonometric functions; modeling periodic behavior, trigonometric equations and their applications; trigonometric identities; and applications of the Law of Sines and the Law of Cosines. Students are encouraged to select both semesters of this course. A TI-83 or TI-84 graphing calculator is recommended, but not required.



**STATISTICS - S1 & S2**

Weight 1.00

(5309A &amp; 5309B)

**HONORS**

Weight 1.05

(5406A &amp; 5406B)

**ADVANCED PLACEMENT**

Weight 1.10

(5503A &amp; 5503B)

One Semester each Credit 0.50 each

This course is open to students in Grades 11 & 12. Prior successful completion of Algebra II is required. Students will learn about the major concepts and tools for collecting, analyzing, and drawing conclusions from data. They will develop analytical and critical thinking skills as they learn to describe data patterns and departures from patterns, plan and conduct studies, and use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences. Statistics can be studied concurrently with Precalculus or Calculus, but is only advised for students seeking serious mathematical challenge. This course prepares students for the study of statistics required for many collegiate majors. A TI-83 or TI-84 calculator is required for this course. Students in the Advanced Placement level are required to take (and pay for) the Advanced Placement exam in the spring.

**PRECALCULUS – S1 & S2**

Weight 1.00

(5307 &amp; 5308)

**HONORS**

Weight 1.05

(5403 &amp; 5404)

One Semester each Credit 0.50 each

This course is primarily open to students in Grade 11 and Grade 12. Prior successful completion of Algebra II is strongly advised. This is the fourth course in the sequence including Algebra I, Geometry, and Algebra II. It is designed to prepare students for the study of calculus or other college math courses. Study areas include: inequalities and absolute value; functions and notation for functions; algebra of functions; composition and inversion of functions; rational functions, circular functions; trigonometric functions; solving triangles; trigonometric identities; trigonometric graphs; inverse trigonometric functions; applications of trigonometry, analytic geometry, lines, circles, and ellipses; hyperbolas; parabolas; conic sections; parametric equations and polar coordinates (honors level), binomial theorem; exponents and logarithms; sequence and series; permutations and combinations; and probability.. A TI-83 or TI-84 graphing calculator is recommended for this course.

**CALCULUS – HONORS - S1 & S2**

(5405A &amp; 5405B)

One Semester each Credit 0.50 each Weight 1.05

This course is open to students in Grade 12. Successful completion of Precalculus II is strongly advised. This course is designed to prepare students for a rigorous two-semester Calculus course at the college level. Study areas include: review of functions; theory of limits; derivatives of polynomial and rational functions; implicit differentiation; applications of the derivative; mean value theorem; differential equations; definite integrals; fundamental theorem of integral calculus; application of the definite integral; differentiation and integration of transcendental functions; special methods of integration; and improper integrals.

**ADVANCED PLACEMENT CALCULUS AB - S1 & S2**

(5501A &amp; 5501B)

One Semester each Credit 0.50 each Weight 1.10

This course is open to students in Grade 12. Prior successful completion of Precalculus II is strongly advised. This course is intended for students who wish to pursue college level studies while still attending secondary school. It is designed to prepare students for the Advanced Placement Calculus AB examination. Areas of study are elementary functions, differential calculus, and integral calculus, with the inclusion of all topics as suggested by the College Entrance Examination Board. All students taking the course will be required to take (and pay for) the Advanced Placement examination in the spring.

**DISCRETE MATHEMATICS - ECE**

(5502EA)

**University of Connecticut Early College Experience credit\***

One Semester Credit 0.50 Weight 1.10

Prior successful completion of one year of Precalculus is recommended. Topics covered in this class will be problem solving strategies, solutions of simultaneous linear equations, sequences, counting and probability, graph theory, deductive reasoning, the axiomatic method and finite geometries, and number systems.

\*Students who successfully meet the expectations of the Early College Experience requirement will earn 3 college credits (MATH 1030Q: Elementary Discrete Mathematics) from the University of Connecticut. It cannot be taken concurrently with or after UCONN MATH 1131Q: Calculus I. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

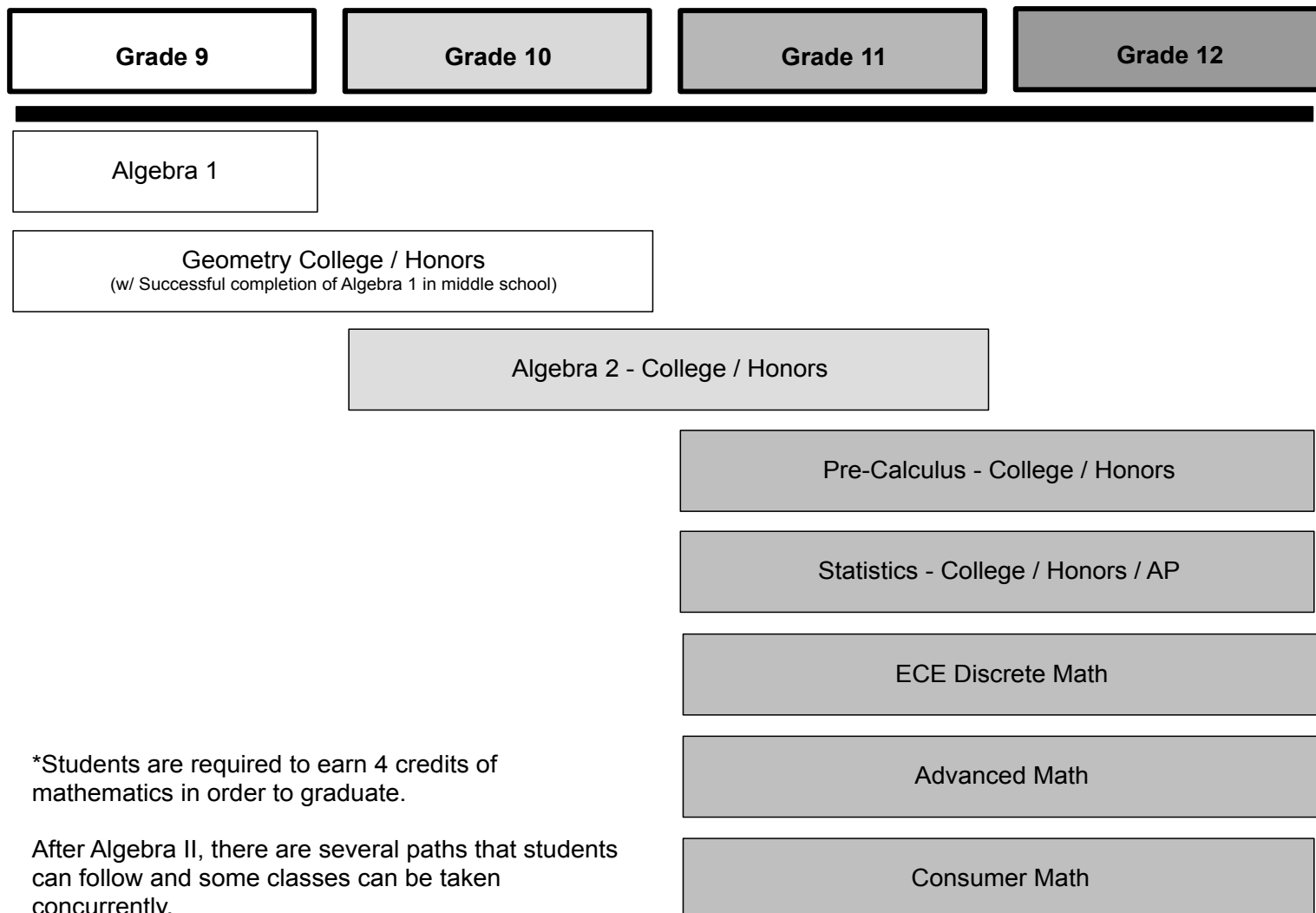
**MATH, SCIENCE, AND TECHNOLOGY - S1 & S2**

(5311A &amp; 5311B)

One Semester each Credit 0.50 each Weight 1.00

This course is designed to have a thematic approach to real world problems. The purpose of the course is to ensure the use of hands-on, problem-solving techniques in order to increase students' understanding that Math, Science, and Technology are inherently interactive and are an integral part of society. Possible themes include transportation, mechanical systems, energy, toys, medicine, health and wellness, communication, electronics, home, and engineering and design.

## Math Department - Course Selection Flow Chart



## SCIENCE

The Science department aims to develop scientifically literate students through the use of discussion, experiments, demonstrations, technology, resource people, and visitations to scientific institutions. Students must acquire the necessary values, attitudes, and skills that will enable them to be objective in their approach to the many problems they will encounter in a rapidly changing, scientifically oriented society. The recommended sequence of courses is Earth and Space Science in grade 9, Biology in grade 10, followed by a one credit elective course.

Students enrolled in the STEM Scholars Program will complete both Earth & Space Science and Biology in Grade 9 in addition to their Math course. The program requires a minimum of twelve (12) STEM credits upon graduation, one of which must be the STEM Capstone course. Students are also expected to attend quarterly after school meetings. Students will receive recognition at graduation upon successful completion of all program requirements.

Success in science on the Next Generation Science Standards (NGSS) test (or district performance task) is a requirement for graduation. The NGSS test encompasses concepts application and experimentation from Earth & space science, life science, and physical science.

Graduation requirement: Students are required to earn three credits in Science, including Biology, a physical science (Integrated or Earth & Space Science, Chemistry, or Physics), and one Science elective, to earn a diploma from Rockville High School.

<b>EARTH AND SPACE SCIENCE - S1 &amp; S2</b>	Weight 1.00	(7311A & 7311B)
<b>HONORS</b>	Weight 1.05	(7411A & 7411B)
One Semester each	Credit 0.50 each	

This is an introductory Science course open to Grade 9 students. The course is designed to meet the scientific needs of the 21<sup>st</sup> century student. This course covers three main areas of study: Earth's Place in the Universe, Earth's Systems, and Earth and Human Activity. Students will have exposure to new science skills, processes, and content, as well as be expected to construct models and develop an understanding of human interaction with Earth's systems. Students in the honors level will engage in student-centered creative problem-solving activities appropriate for highly capable, high achieving students. For honors students, a grade of 85 or better in Grade 8 Science is recommended.

<b>BIOLOGY - S1 &amp; S2</b>	Weight 1.00	(7321A & 7321B)
<b>HONORS</b>	Weight 1.05	(7421A & 7421B)
One Semester each	Credit 0.50 each	

Biology is open to students in Grades 10, 11, and 12. The course is designed to meet the scientific needs of the 21<sup>st</sup> century student. The Biology course includes a depth of curriculum and laboratory experience needed for study beyond high school. It is recommended that students are fluent in graphing, data analysis, and laboratory reporting skills. Prior successful completion of Earth and Space Science is strongly suggested. Honors level students must have successfully completed Earth and Space Science-Honors or have earned a grade of 85 or better in Earth and Space Science. Students selecting this course should understand that the workload is substantially more demanding than the college level course. Greater emphasis is placed on student-centered activities, research, and independent exploration of course topics. Students will assume a greater degree of responsibility for learning through independent work, critical thinking, and completion of out-of-class assignments. At all levels of Biology, concepts include scientific methods and processes, cell anatomy and physiology, genetics, evolution, and ecology. Students taking this course will be required to complete and present a final research project.

<b>BIOLOGY – ECE - S1 &amp; S2</b>	(7521EA & 7521EB)
<b>University of Connecticut Early College Experience*</b>	
One Semester each	Credit 0.50 each
	Weight 1.10

This course is open to students in Grades 11 and 12. Prior successful completion of Biology-College or Honors and Chemistry-College or Honors is required per UCONN policy. The course will follow the syllabus of the University of Connecticut Biology 1107 course. Course topics include an in-depth study of biochemistry, cell structure and function, genetics, and animal structure and function. The curriculum includes extensive lab work, which supplements class discussions and lectures. Students are expected to do independent work outside of the classroom, as this course awards college credit. HuskyCT (Blackboard Learn) online will be used to facilitate discussions outside of the classroom.

\*The ECE Biology course is the BIO 1107 course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 4 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**CHEMISTRY - S1 & S2  
HONORS**

Weight 1.00  
Weight 1.05

(7331A & 7331B)  
(7431A & 7431B)

One Semester each      Credit 0.50 each

Chemistry is open to students in Grades 10, 11, and 12 or with special permission of the Science Department Chairperson. This course is recommended for students who need a third science credit. The course is designed to meet the scientific needs of the 21<sup>st</sup> century student. Prior successful completion of Algebra I is strongly recommended. It is expected that students will enter the college level course with the necessary math skills in order to be successful, as these Algebra I skills will be applied frequently. This course is recommended for students who plan to attend a two- or four-year college. For honors level students, the study of the mathematical justifications is approached at a more advanced and detailed level. Theory and mathematical application are emphasized in areas of heat and energy, atomic theory, and stoichiometry. At all levels of Chemistry, students are expected to work both independently in the classroom and in groups during laboratory work and discussions. Topics will include: atomic structure, the periodic table, chemical bonding and reactions, stoichiometry, nuclear chemistry, equilibrium and reaction rates. The use of critical thinking and problem solving is an integral component of this course.

**ADVANCED PLACEMENT CHEMISTRY - S1 & S2**

(7531A & 7531B)

Fall Semester = 2 blocks      Credit 1.0      Weight 1.10  
Spring Semester = 1 block      Credit 0.50      Weight 1.10

This course is open to students in Grades 11 and 12 who have successfully completed Chemistry and Algebra II. A grade of 85 or higher in Chemistry is highly recommended. It is preferred that students have successfully completed the Chemistry-Honors course. The Advanced Placement Chemistry course is designed for students intending to major in the sciences in college. The depth and breadth of this course is similar to that of freshman college chemistry with emphasis on advanced problem solving, critical thinking, inquiry, and experimental design. Topics for discussion include atomic theory, chemical bonding, gas laws, states of matter, reaction types, acid-base theory, stoichiometry, kinetics, thermodynamics, solutions, oxidation-reduction reactions, and equilibrium. Students will be required to take (and pay for) the Advanced Placement Examination in the spring. A score of 4 or 5 on the Advanced Placement examination in Chemistry will earn 8 credits at the University of Connecticut if/when a student enrolls there.

**PHYSICS - S1 & S2  
HONORS**

Weight 1.00  
Weight 1.05

(7341A & 7341B)  
(7441A & 7441B)

One Semester each      Credit 0.50 each

This rigorous course is open to students in Grades 10, 11, and 12. Prior successful completion of Algebra I, Geometry, and Algebra II, with a grade of 80 or better in each course, is highly recommended. If a student does not satisfy these prerequisites, permission of the Physics teacher is required. These same courses are highly recommended for honors level students except they should achieve a grade of 85 or better in each course. The honors course is designed for students who plan to further their education in the sciences. If a student does not satisfy these recommendations, permission of the Physics teacher is required. Topics for study and laboratory investigation include velocity, acceleration, projectile motion, forces, work, energy, momentum, rotational motion, fluid mechanics, thermodynamics, vibrations and waves, sound, properties of light, electrostatics, and electromagnetism. Some selected topics in contemporary physics may also be included.

**ADVANCED PLACEMENT PHYSICS - S1 & S2**

(7541A & 7541B)

Fall Semester - 2 blocks      Credit 1.0      Weight 1.10  
Spring Semester - 1 block      Credit 0.50      Weight 1.10

This course is open to students in Grades 11 and 12 who have successfully completed the Physics course or with written approval of the Physics teacher. A grade of 85 or better is recommended. It is preferred that students have successfully completed the Honors course. The Advanced Placement Physics course is designed for students intending to major in the sciences in college. AP Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Students will be required to take (and pay for) the Advanced Placement Examination in the spring.

Note: Since this course is algebra-based, some select colleges may not accept this for exemption from their introductory freshman offering.

**ANATOMY AND PHYSIOLOGY - S1 & S2**

(7335A &amp; 7335B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 11 and 12 who have successfully completed Biology. This course is designed for college-bound students who plan to further their studies in the biological sciences. Topics will include: cells and tissues, biochemistry, and the major body systems (integumentary, skeletal, muscular, nervous, lymphatic, circulatory, respiratory, endocrine, digestive, and reproductive). Dissections are a substantial lab component to this course. Highly motivated students with good study habits will find this course challenging. A research paper is required in this course. This course meets the Science elective requirement for graduation.

**ALLIED HEALTH I - S1 & S2**

(7336A &amp; 7336B)

One semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grade 11. Prior successful completion of Algebra I and Biology is recommended. An application and interview is required for acceptance into this program. Applications can be picked up in the Career Center. Allied Health I is designed for students who are considering a career in one of the Allied Health fields. As such, it is an introduction to the various career options and basic requirements common to the health care industry. This course will be applied toward the elective Science requirement for graduation.

**ALLIED HEALTH II- S1 & S2**

(7337A &amp; 7337B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grade 12 who have successfully completed Allied Health I. This course is designed for college-bound students who plan to further their studies in the biological sciences. Topics will include: cells and tissues, biochemistry, and the major body systems (integumentary, skeletal, muscular, nervous, lymphatic, circulatory, respiratory, endocrine, digestive, and reproductive). Dissections are a substantial lab component to this course. Highly motivated students with good study habits will find this course challenging. A research paper is required in this course per MCC's policy. This course meets the elective Science requirement for graduation.

**MARINE SCIENCE**

(7338)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 11 and 12. Prior successful completion of Earth and Space Science and Biology is recommended. This course is designed for students who wish to further their understanding of oceanography and marine biology. Topics include the physical properties of seawater, water density, evolution of marine organisms and the ecosystems in which these organisms live. Dissections are a substantial lab component to this course. Special emphasis is placed on man's influence within these marine habitats and possible solutions to current global problems. Students should be prepared for regular homework assignments, dissections, and tests that are all on a college preparatory level. This course does not meet the physical or the biological science requirement for graduation, but will be applied toward the Science elective requirement for graduation.

**ENVIRONMENTAL SCIENCE**

(7339)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 11 and 12. Prior successful completion of Biology is recommended. This course is designed for students who wish to further their understanding of environmental topics. Topics will include ecology, environmental pollution, energy sources, natural cycles, and loss of biodiversity. Global change topics (ozone depletion, greenhouse effect, deforestation, etc.) and problems specific to Vernon will be discussed. Some knowledge of computers and scientific testing procedures is helpful but not necessary. One major report will be required. Students should be prepared for regular homework assignments, lab reports, and tests that are all on a college preparatory level. This course does not meet the physical or biological science requirement for graduation, but will be applied toward the Science elective requirement for graduation.



**ENVIRONMENTAL SCIENCE - ECE**

(7339E)

**University of Connecticut Early College Experience credit\***

One Semester

Credit 0.50

Weight 1.10

Prior successful completion of Biology with a grade of 85 or higher is required. This course follows the syllabus of the University of Connecticut NRE 1000 Environmental Science course. This course is an introduction to basic concepts and areas of environmental concern and how these problems can be effectively addressed. Topics include: human population; ecological principles; conservation of biological resources; biodiversity; croplands, rangelands, forestlands, soil and water conservation; pollution and water management; and wildlife and fisheries conservation.

\*The ECE Environmental Science course is the NRE 1000 course offered at the University of Connecticut. Students who successfully meet the expectations of the Early College Experience requirement will earn 3 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

**ASTRONOMY**

(7342)

One semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12 who have successfully completed an Earth Science course. This course is designed for students who want to further their understanding of our Universe. Topics will include the history of astronomical studies, our solar system, stars, galaxies, and the Universe. The possibility of extra-terrestrial life will also be a focus in this class. Students must be prepared for regular homework assignments, projects, research papers, and lab assignments. This course does not meet the physical or biological Science requirements for graduation but will be applied toward the Science elective requirement for graduation.

**METEOROLOGY**

(7343)

One semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12 who have successfully completed an Earth Science course. This course studies the structure of the Earth's atmosphere and the dynamics of weather. Students will be exposed to weather forecasting techniques and topics such as severe weather, climate change, weather modeling, and local weather issues. Students should be prepared for regular homework assignments, lab reports, and graphing of weather data. This course does not meet the physical or biological Science requirement for graduation but will be applied toward the Science elective requirement for graduation.

**BOTANY**

(7425)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. Prior successful completion of both Earth Science and Biology courses is highly recommended. This is an introductory course in botany and plant physiology beginning with plant classification and the identification of common plant families, followed by an examination of the immense variety of plant structures (roots, stems, leaves, flowers, fruits, and seeds) that have evolved to perform specific functions within the ecosystem. Students will evaluate plant growth and development through experimentations and investigations of plant hormones and response to stimuli. Lastly, this course will analyze the role of humans in plant evolution through plant breeding and asexual propagation methods. This course does not meet the physical or biological Science requirement for graduation but will be applied toward the Science elective requirement for graduation.

**BIOLOGICAL AND CHEMICAL FORENSIC SCIENCE I**

(7423)

One Semester

Credit 0.50

Weight 1.05

This course is open to students in Grades 11 and 12. Prior successful completion of Biology and Chemistry is recommended. This course is designed to introduce students to the basics of biological and chemical forensic analysis. Students will complete challenging coursework in the following topics: crime scene analysis, collection of evidence, identification and classification of fingerprint evidence, identification and classification of physical evidence, forensic anthropology, and forensic entomology. Students will learn various detection, collection, and laboratory testing methods that are performed by forensic scientists. Students will demonstrate their understanding of these topics through written and laboratory assignments. This class will provide a hands-on approach to learning forensic science and help students develop the tools and techniques needed to interpret data for both chemical and biological analysis of evidence.



**BIOLOGICAL AND CHEMICAL FORENSIC SCIENCE II**

(7424)

One Semester

Credit 0.50

Weight 1.05

This course is open to students in Grades 11 and 12. The course is designed to further explain the role of forensic analysis after the completion of Biological and Chemical Forensic Science I. Students will complete challenging coursework in the following topics: properties of matter, DNA analysis and serology, blood typing and splatter analysis, ballistics, chemical analysis of drugs, and trace evidence. Students will learn the various presumptive and confirmatory tests performed by forensic scientists and demonstrate their understanding by working in a team to solve a mock crime scene. Over the course of the semester, students will learn the tools and techniques used to interpret data for both chemical and biological analysis of evidence.

**CAPSTONE I – STEM**

(7344)

One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. Students will design a research project on a STEM topic of their choice. Students in this class will conduct background research and compose a literature review. They will use multiple tools to access, evaluate, and apply information; solve problems through analysis, synthesis, and reflection; and communicate knowledge clearly and effectively for a variety of purposes and audiences, all while researching a topic of choice.

**CAPSTONE II – STEM**

(7345)

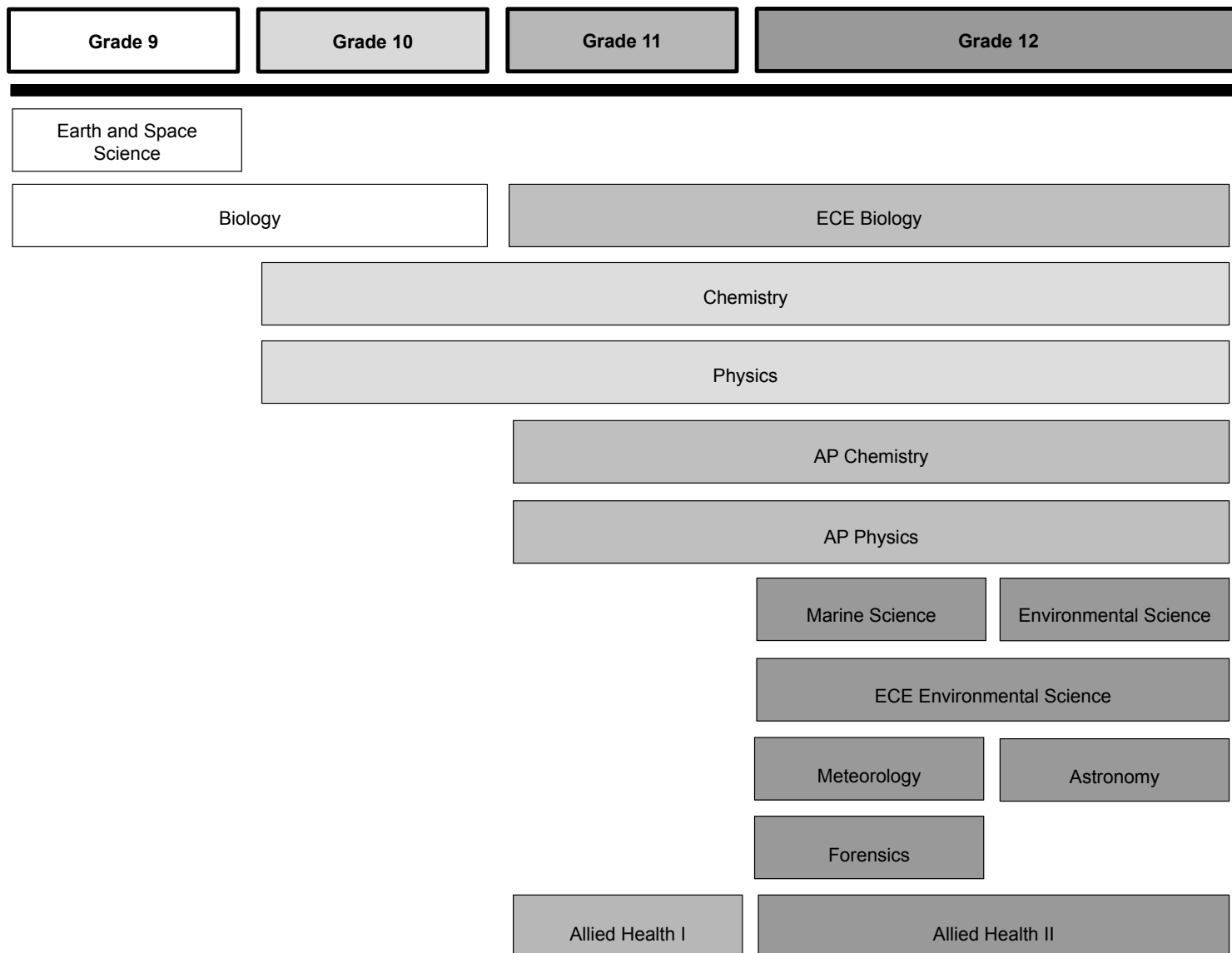
One Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 11 and 12. A passing grade in the Capstone I-STEM course is required to enroll in Capstone II-STEM. Students will implement a research project on a STEM topic of their choice. Students will collect data, run statistical analyses, write a research proposal and paper, and create a professional research presentation. Students will use multiple tools to access, evaluate, and apply information; solve problems through analysis, synthesis, evaluation, and reflection; and communicate knowledge clearly and effectively through a variety of purposes and audiences, all while researching a topic of choice.

## Science Department - Course Selection Flow Chart



## TECHNOLOGY EDUCATION

Technology education includes the study of transportation, communication, manufacturing, construction, and engineering. The curriculum provides students with an opportunity to develop their career and vocational interests. Math, Language Arts and technological literacy will be stressed while the students are engaged in activity-based learning. Students will develop critical thinking and problem solving skills through interdisciplinary learning activities involving science, technology, engineering and mathematics (STEM). Teamwork is emphasized whenever possible. The environmental, social, and political impacts of technology will be considered in all courses. Critical thinking skills learned in technology education are vital to all students, no matter what level of education and/or career path they intend to pursue.

### **EXPLORING TECHNOLOGY - Communications & Design** (6201A)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. The course serves as an introduction to all technology education programs offered at Rockville High School and builds on systems model concepts learned from technology education classes taken at Vernon Center Middle School. Units and activities in this course will coincide with projects based in CAD Design, 3D Design, Architecture, and Graphic & Video Communications. The social, cultural, environmental, and economic impacts of technology will also be discussed, as well as technology's role in the digital age.

### **EXPLORING TECHNOLOGY - Engineering and Production** (6201B)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grade 9, 10, 11, and 12. The course serves as an introduction to all technology education programs offered at Rockville High School and builds on systems model concepts learned from technology education classes taken at Vernon Center Middle School. Units and activities in this course will coincide with projects based in Transportation, Engineering, Production, Manufacturing, and Construction. The social, cultural, environmental, and economic impacts of technology will also be discussed, as well as technology's role in the digital age.

### **ENGINEERING AND ARCHITECTURAL DRAFTING - S1 & S2** (6305A & 6305B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This "real world" course will place emphasis on CAD program SOLID WORKS and residential home design program SKETCHUP. Students will study the design process, working drawings, details, 2D and 3D perspectives, and photo-realistic renderings of, machine parts, interior and exterior architectural designs. The intent of this course is to provide the knowledge and experience needed to develop, read, and complete plans and blueprints. Scale models of student designs will be constructed or 3D printed.

### **POWER/AUTO TECHNOLOGY I - S1 & S2** (6219A & 6219B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This introductory course will familiarize students with the basic tools, materials, machines, and procedures used by a technician in career fields like automotive, residential, and agricultural equipment maintenance. The "systems approach" to learning (engines, cooling, lubrication, electrical, fuel systems, and starting and changing circuits) will be emphasized. Training will focus on certification requirements for the related career fields. Students will earn the opportunity to work on vehicles and equipment to apply the theories learned in the classroom as they progress through the basic skills content. The year ends with real-world automotive and equipment servicing as well as learning diagnosis and repair skills to be used in Power/Auto Technology II.

### **POWER/AUTO TECHNOLOGY II - S1 & S2** (6220A & 6220B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 10, 11 and 12. Successful completion of Power/Auto Technology I with a grade of 75 or higher is required. Students assume the responsibility of advanced automotive repair, rebuilding work, diagnostic troubleshooting, and light auto body work. Typical service problems in each system are identified, along with symptoms, probable causes, and recommended service procedures. Students work in groups, apply problem solving skills, and utilize the three C's (complaint, cause, and correction) to diagnose and repair a vehicle. The eight ASE content areas (brakes, engine repair, engine performance, suspension, HVAC, electrical, and manual and automatic transmissions) and testing procedures are stressed for those students who display an interest in pursuing an automotive-related career.

**DIGITAL MEDIA DESIGN S1**

(6215)

One Semester

Credit 0.50

Weight 1.00

Digital Media Design S1 is open to students in Grades 9, 10, 11 and 12 and focuses on Graphic and Web Design. This course introduces students to many aspects of the Digital Media and Communications industry. Web designing, printing, publishing, typography, video editing, animation and multimedia designing will be stressed through the use of programs such as Adobe Photoshop (photo editing and manipulating), Adobe After Effects (animation and video) and Adobe Premiere (video and multimedia editing). Individual and team-based projects will help students understand the future direction of the industry and prepare them for careers in Graphic and Digital Media Design. Projects are aimed at real world-based digital design projects.

**DIGITAL MEDIA DESIGN S2**

(6216)

One Semester

Credit 0.50

Weight 1.00

Digital Media Design S2 is open to students in Grades 9, 10, 11 and 12 and focuses on Motion and Game Design. Prior successful completion of Digital Media Design S1 is strongly encouraged as this course will build skill sets and apply concepts grounded in Photoshop and Design standards. Students will be exposed to the use of 3D graphics and texture maps prevalent in game design, the basic programming of game design, and an introduction to 3D graphics and animation. Using programs like Adobe Photoshop, Adobe Premiere, Adobe Animate, and Scratch, students will learn the application of these programs in Digital Media Design.

**WOOD AND MATERIAL PROCESSING - S1 & S2**

(6204A &amp; 6204B)

One Semester each

Credit 0.50 each

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. This course uses wood and various other materials as a medium to teach material processing concepts. Safe and proper hand tool and machine use is stressed throughout the year. Projects will be completed using different types of processing techniques. Projects will begin with basic hand tools and progress to projects requiring complex machinery and techniques. Example projects include a bluetooth speaker and cell phone charging dock/stand. Construction math skills will be emphasized.

**CONSTRUCTION MANAGEMENT**

(6222)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to students in Grade 10, 11, and 12. Prior successful completion of Woodworking I / Manufacturing is strongly recommended due to the exposure to materials terminology and processes. This is not a hands-on building course. The content centers on the business of construction administration, financing, engineering, and information on construction industry careers. This course will place emphasis on building codes, green building techniques, American Disabilities Act building requirements, scheduling, pricing, and working drawings. It will also include technology's impact on society and the environment, group problem solving skills, and the integration of math and science concepts. It is highly recommended for students interested in a career in construction.

**CONSTRUCTION SYSTEMS**

(6223)

Spring Semester

Credit 0.50

Weight 1.00

This course is open to students in Grade 10, 11, and 12. Prior successful completion of Woodworking I / Manufacturing is strongly recommended due to prior lab safety and skill level preparedness. This course will provide students with a hands-on introduction to construction technology. Emphasis is placed on information relating to tools, materials, equipment, and systems used in the construction field. Practical application is sought through the construction of scale models and/or outbuildings. The course will combine the practical and theoretical approaches to learning and will place emphasis on group problem solving skills and the integration of math and science concepts. It is highly recommended for students interested in a career in construction.

**PRODUCTION & ENGINEERING TECHNOLOGY - S1 & S2**

(6221A &amp; 6221B)

One Semester each

Credit 0.50

Weight 1.00

This course is open to students in grades 10, 11 and 12. Due to required knowledge and safety, prior successful completion of either Principles of Engineering, Power Auto I, or Woodworking I is recommended. Students will focus on the development and study of problem solving techniques in the STEM fields of Science, Technology, Engineering, Art, and Math. The emphasis during the first semester will be on producing Technical Drawings by hand and using SolidWorks design software. The primary learning activity will have students manufacture an electric guitar. The emphasis of the second semester will be on Mastercam design software and Subtractive Manufacturing using CNC and manual machines to produce projects. Activities may include the use of hand and power tools, material fabrication, welding, machining, electronics, pneumatics, hydraulics, and systems assembly. Work will be completed both individually and in a group atmosphere where teamwork will be emphasized. Career opportunities will be discussed throughout the course.

**FIRE TECHNOLOGY - S1 & S2**

(6310A &amp; 6310B)

One Semester each      Credit 0.50

Weight 1.00

This course is open to students in Grades 10, 11 and 12. The Fire Technology course is designed to give students an entry-level, working knowledge base to pursue a future career in firefighting. Throughout the course, the students will work with both the Fire Technology teacher and the local fire department to gain valuable coursework and hands-on experience. Students will learn about personal protection equipment, hose lines, search and rescue, tools, hydrants, vehicle extraction, CPR and First Aid, along with other basic firefighting skills. There will be several field trips and guest speakers throughout the year where students will learn from local experts.

**VIDEO PRODUCTION I**

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(6307)

Fall Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. Cameras and Screens have become part of our daily life. In this course students learn to communicate with video. The course promotes the importance of both technical and creative skills to produce quality videos. Instruction is provided through an activity-based approach to learning the fundamentals of video pre-production, production, and post-production. Students will learn to operate video cameras, graphics and editing software. Through the preproduction and postproduction process, students will have the opportunity to write scripts, act, use camera tricks, and edit their own Music Videos, Commercials, and Silent Movies using Adobe Premiere and iMovie. Students may select either Fine Arts or Vocational Education credit for this course.

**VIDEO PRODUCTION II**

(6313)

Spring Semester

Credit 0.50

Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. Prior successful completion of Video Production I is recommended but not necessary as video cameras and editing softwares have become more readily available with smart phones. In this class, students will further explore creative approaches to video as they continue to practice and refine its uses as a powerful communication medium. Messaging will be a major theme of course as we explore public service announcements, reality TV, the TV studio, broadcast journalism, and documentary techniques. Students may select either Fine Arts or Vocational Education credit for this course.

**VIDEO PRODUCTION III**

(6314)

Fall Semester

Credit 0.50

Weight 1.00

Prior successful completion of Video Production I or II is recommended. This course is open to students in Grades 10, 11 and 12. The course is an advanced level of Video Production for those students who would like to apply the knowledge and skills gained from Video Production I and II to an applied career focus through the learning of cinematography. The advancement of communications will be emphasized with efforts to produce videos with high quality cinematography using DSLR cameras, advanced camera operations and filming techniques. Lighting scenes for different moods and atmospheres, capturing quality audio and using Foley/sound effects will also be a focus in this advanced class. Students will receive Vocational Education credit for this course.

**VIDEO PRODUCTION IV**

(6315)

Spring Semester

Credit 0.50

Weight 1.00

Prior successful completion of Video Production I, II or III is strongly recommended. This course is open to students in Grades 10, 11 and 12. The course will continue to provide opportunities for students to advance their media communications knowledge and skills in the world of film and cinematography, with a focus on broadcast journalism. Students will be further exposed to the TV studio to create unique programming. Students will receive Vocational Education credit for this course.

**PRINCIPLES OF ENGINEERING I: MECHANICAL AND FLUID POWER**

(6316)

Fall semester

Credit 0.50

Weight 1.00

Prior successful completion of Algebra 1-College is strongly recommended due to sequential learning. This course is open to students in Grades 10, 11, and 12. This is a hands-on lab course. Concepts taught will revolve around the four kinds of energy systems that make up the simplest and most complex technological devices and equipment including mechanical, fluid, electrical, and thermal systems. Activities will include a multitude of hands-on labs based on the principle units of force, work, rate, and resistance. Science, technology, engineering, and math (STEM) applications are combined to show the relevance of each used in engineering design with real world problem solving activities.

## PRINCIPLES OF ENGINEERING II: THERMAL AND ELECTRICAL POWER

(6317)

Spring semester

Credit 0.50

Weight 1.00

Prior successful completion of Principles of Engineering I and Algebra 1-College are strongly recommended due to sequential learning. This course is open to students in Grades 10, 11, and 12. This is a hands-on lab course. It is a continuation of the concepts taught in Principles of Engineering I revolving around the four kinds of energy including mechanical, fluid, electrical, and thermal systems. In this course, activities will include a multitude of hands-on labs based on the advanced principle units of energy and power. Science, technology, engineering, and math (STEM) applications will be combined to show the relevance of each used in engineering design with real world problem solving activities.

## ROBOTICS - S1 & S2

(6401A & 6401B)

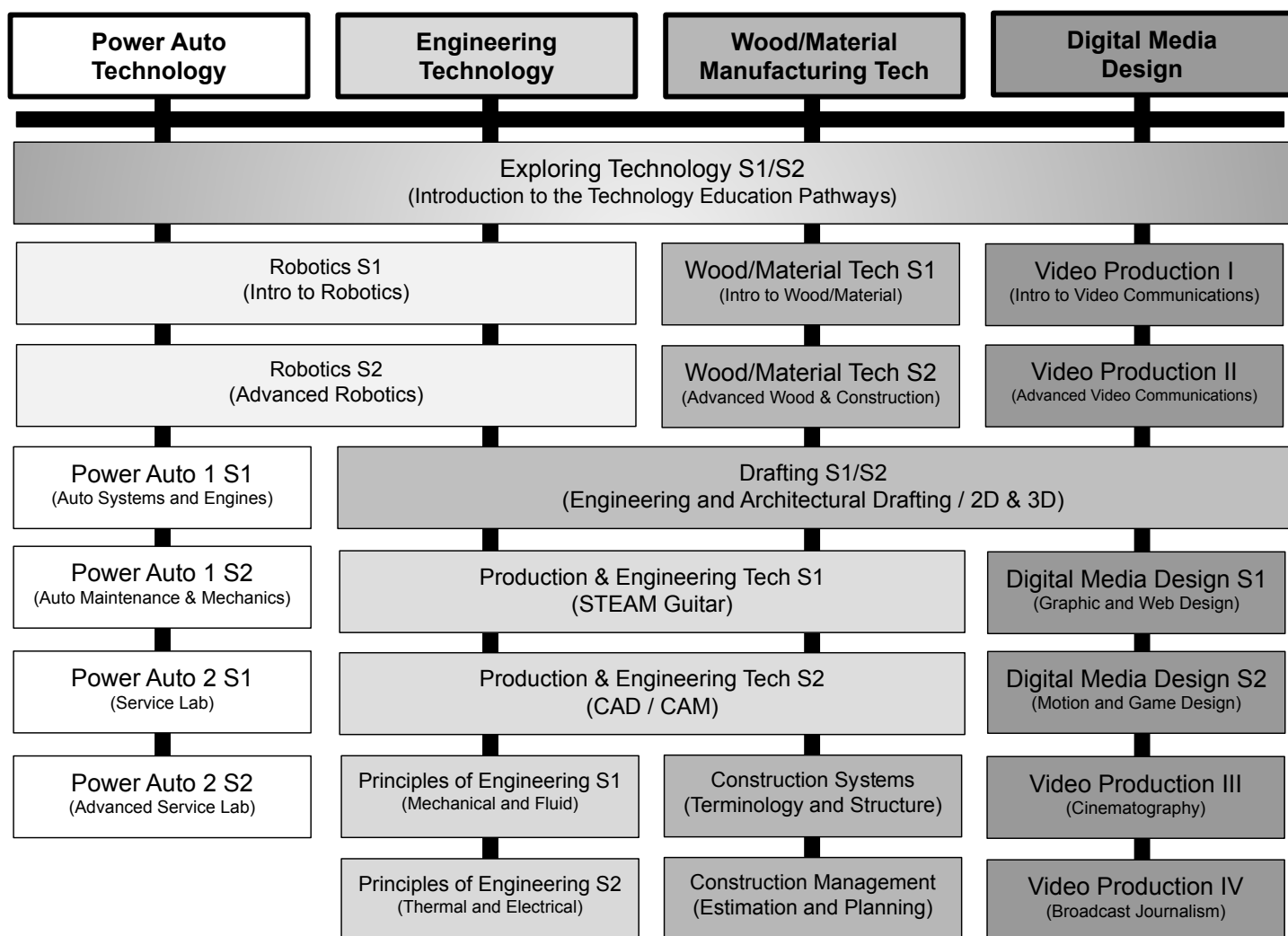
One Semester each

Credit 0.50 each

Weight 1.05

This course is open to students in Grades 9, 10, 11 and 12. The course will introduce students to the fundamentals of robotic engineering, coding logic, electronics, and designing robots to solve problems. Emphasis is placed on degrees of freedom, mechanical energy, programming, and current industrial uses. The building of a competition-style robot for First Tech Challenge and other problem solving challenges will be stressed, such as designing a robot to play tic-tac-toe and the world's slowest robot challenge.

### Technology Education - Course Selection Flow Chart



\*Suggested Progression\* Underclassman ----- Upperclassman

\*Suggested progression is based on course content but in no way should prevent an Underclassman passionate about Video or Engineering from taking these courses first and designing their own progression of learning.

These pathways are meant to be flexible, promote college and career learning, and encourage students to develop their own goals and passions.

Standalone Course:  
Fire Technology



# **OTHER**

Physical Education  
& Health

Special Education

World Languages

## PHYSICAL EDUCATION & HEALTH

The physical education and health program provides a blueprint for how students can live an active, healthy, and balanced life. Likewise, it affords students the opportunity to acquire and hone essential 21<sup>st</sup> century skills such as critical thinking, problem solving, communication and collaboration, and health literacy in addition to enabling students to become self-directed learners and responsible, productive citizens.

The common goal for both physical education and health education is that students will develop skills, acquire essential knowledge, and, ultimately, make a connection between this knowledge and how it affects their ability to live a healthy and balanced life. Accordingly, students will make plans and take actions that will ensure a lifetime of health and well-being.

The skills learned in physical education and health courses are life-long skills that will benefit the future of all students.

### PHYSICAL EDUCATION COURSES

The goal of all physical education courses is for students to understand the relationship between physical fitness and physical activity and living a healthy and balanced life. Emphasis is on the five components of physical fitness and providing students with experiences in a variety of fitness activities including lifetime/leisure, individual and team sports, and physical fitness. Curricular outcomes are to promote students' personal fitness and encourage their involvement in physical fitness and physical activity, not only during physical education class, but also as an integral part of a healthy lifestyle.

#### **FIT FOR LIFE**

(9022)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. It is designed to acquaint students with the proper physical exercise needed to maintain a healthy body and to experience activities that will promote the concept of physical fitness for a lifetime. Classes are designed using the F.I.T.T. Principle (Frequency, Intensity, Time, and Type). Activities may include power walking, yoga, Pilates, cardiovascular training, H.I.I.T. training (high-intensity interval training), circuit training, aerobics, step aerobics, and kickboxing.

#### **LIFE SPORTS**

(9023)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. It is designed to acquaint students with games and activities that promote physical fitness for a lifetime and provide opportunities for enjoyment, self-expression, and communication. Activities may include badminton, tennis, pickleball, volleyball, power walking, Bocce, Frisbee golf, golf, and bowling.

#### **TEAM SPORTS**

(9013)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grade 9, 10, 11, and 12. It is designed to allow student participation in team sports. The emphasis is on rules, skills, and strategies of team sports. Game play will encourage cooperation, communication, and sportsmanship. Activities may include basketball, volleyball, Tchoukball, flag football, soccer, softball, team handball, speedball, and ultimate Frisbee.

#### **WEIGHT TRAINING**

(9016)

One Semester      Credit 0.50      Weight 1.00

This course is open to students in Grades 9, 10, 11, and 12. It is designed to give students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. Students will learn the basic fundamentals of weight training, strength training, aerobic training, core training, and overall fitness training and conditioning.

**PHYSICAL EDUCATION SENIOR LEADER\* -- S1 & S2**

(9004A &amp; 9004B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grade 12. It is designed to provide students with practical leadership, organizational, and instructional experience in the physical education field. Students will actively participate in and lead small and large group activities and assist the physical education teachers in teaching, testing, officiating, and handling the managerial tasks associated with physical education instruction. Students applying for acceptance into this course should have a strong background in fitness or athletics and possess a variety of athletic and leadership skills. Approval of the Physical Education & Health department and the student's School Counselor are required. Throughout the course, students should consistently demonstrate good sportsmanship and positive leadership or may be removed from the class. Applications can be obtained in the School Counseling office.

\*This course may not be used toward the Physical Education requirement for graduation.

**PHYSICAL EDUCATION MENTOR\* -- S1 & S2**

(9020A &amp; 9020B)

One Semester each      Credit 0.50 each      Weight 1.00

This course is open to students in Grades 10, 11, and 12. It is offered in conjunction with Unified Physical Education and is designed to provide practical experience working with students with special needs. Physical Education Mentors will assist Unified students in improving their cardiovascular fitness, muscular strength, muscular endurance, flexibility, and body composition. Emphasis is placed on sportsmanship, responsible behavior, rules, skills, appropriate game play, and spatial awareness. Approval of the Physical Education & Health and Special Education department chairs is required. Applications can be obtained in the School Counseling Office.

\*This course may not be used toward the Physical Education requirement for graduation.

**HEALTH EDUCATION COURSES**

The goal of the health courses is for students to understand the relationship between the various health topics and living a healthy and balanced life so that they can make connections and apply skills for a life-time of health and well-being. The curriculum is based on the State of Connecticut *Healthy and Balanced Living Curriculum Framework* and emphasis is on the big idea: How do I live a healthy and balanced life? Students will obtain accurate information to help them develop lifelong positive attitudes and behaviors, and, ultimately, make informed, appropriate, and healthful choices that will lead to productive lives.

**HEALTH & WELLNESS 1**

(7701)

One Semester      Credit 0.50      Weight 1.00

This course is required for students in Grade 9. Study will include mental, emotional, and social health, goal setting, decision making, healthy relationships, bullying, growth and development and sexual health, and substance abuse. Students will self-assess their mental, emotional, and social health, develop short and long-term personal and academic goals, and engage in activities that will demonstrate their understanding of how learning and applying knowledge about various health topics can help them live healthy and balanced lives.

**HEALTH & WELLNESS 2**

(7702)

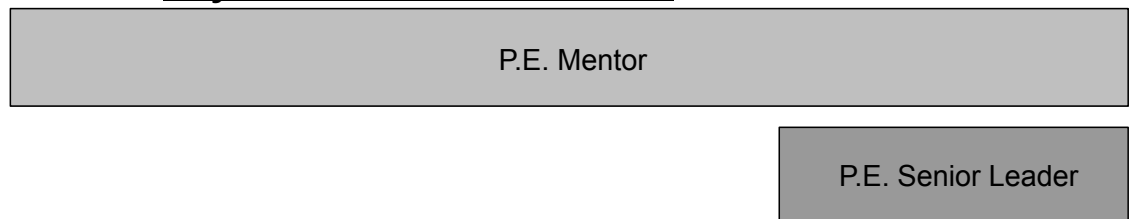
One Semester      Credit 0.50      Weight 1.00

This course is required for students in Grade 10. Study will include nutrition, eating disorders, substance abuse, breast and testicular cancer, first aid, CPR, and physical fitness. Students will participate in the Connecticut Physical Fitness Assessment as part of the course requirement. In preparation for the assessment, students will self-assess their fitness levels and, subsequently, develop a plan to improve their current level of fitness with the goal of scoring in the Health Fitness Zone or High Fitness Zone of the Fitness Assessment as well as maintaining physical fitness for a lifetime.

## Health and Physical Education - Course Selection Flow Chart



### Physical Education Electives \*do not meet graduation requirements



## SPECIAL EDUCATION

Moving from one level of a special education course (designated by \* at the end of the course name) to another, or from special education to a general education course, is a Planning and Placement Team (PPT) decision and part of a student's Individualized Education Plan (IEP).

Special Education courses and program selection are based on recommendations made at a student's Planning and Placement Team Meeting (PPT) and outlined in an Individual Education Plan (IEP). Programming is designed to assist identified students who require specialized instruction and/or social, emotional, or behavioral support to receive educational benefit and successfully prepare for post-graduate opportunities.

### LEARNING STRATEGIES - S1 & S2

(9158A & 9158B)

One semester each      Credit 0.50 each      Weight 1.00

Special Education students receive small group specialized instruction to improve study skills, organization, work completion, and identified goals and objectives. This course may be taken multiple times. Upon successful completion of both semesters students can earn one elective credit.

### LIFE SKILLS LANGUAGE ARTS\* - S1 & S2

(9123A & 9123B)

One semester each      Credit 0.50 each      Weight 1.00

Special Education students receive small group specialized instruction on a modified language arts curriculum improving reading, writing, listening, and speaking skills. This course may be taken multiple times. Upon successful completion of both semesters students can earn one English credit.

### LIFE SKILLS MATH\* - S1 & S2

(9147A & 9147B)

One semester each      Credit 0.50 each      Weight 1.00

Special Education students receive small group specialized instruction on a modified mathematics curriculum improving computation and problem solving skills that have real life applications. This course may be taken multiple times. Upon successful completion of both semesters students can earn one Mathematics credit.

### LITERARY STRATEGIES - S1 & S2

(9109A & 9109B)

One semester each      Credit 0.50 each      Weight 1.00

Special Education students receive specialized and intensive multi-sensory instruction to improve decoding, spelling, reading fluency, and/or reading comprehension. This course may be taken multiple times. Upon successful completion of both semesters students can earn one elective credit.

### PRE-ALGEBRA\* - S1 & S2

(5201A & 5201B)

One semester each      Credit: 0.50 each      Weight 1.00

Using a modified Pre-Algebra curriculum, this course uses small-group specialized instruction to prepare Special Education students with the foundational concepts required to be successful in Algebra I. Upon successful completion of both semesters students can earn one Mathematics credit.

### WORK EXPERIENCE - S1 & S2

(9156A & 9156B)

One semester each      Credit 0.50 each      Weight 1.00

Special Education students improve their vocational skills by having hands-on, experiential opportunities working at job sites located in and around the Vernon community. This course may be taken more than once. Upon successful completion of both semesters students can earn one Vocational credit.

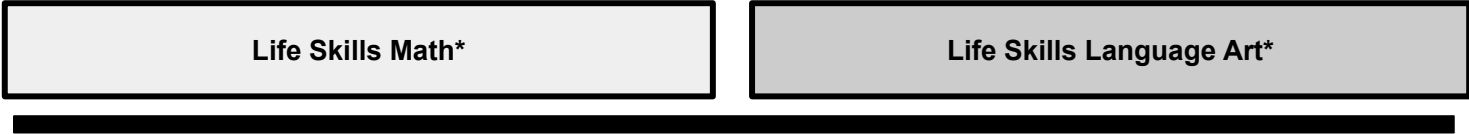
### ALTERNATE SPECIAL EDUCATION PROGRAM (ASEP)

ASEP is a special education program for students who require a more intensive, highly structured setting with a low student-to-staff ratio in order to make effective progress within the high school setting. The program provides identified students with intensive educational, behavioral, and emotional support that stresses academic, social, emotional, and behavioral growth.

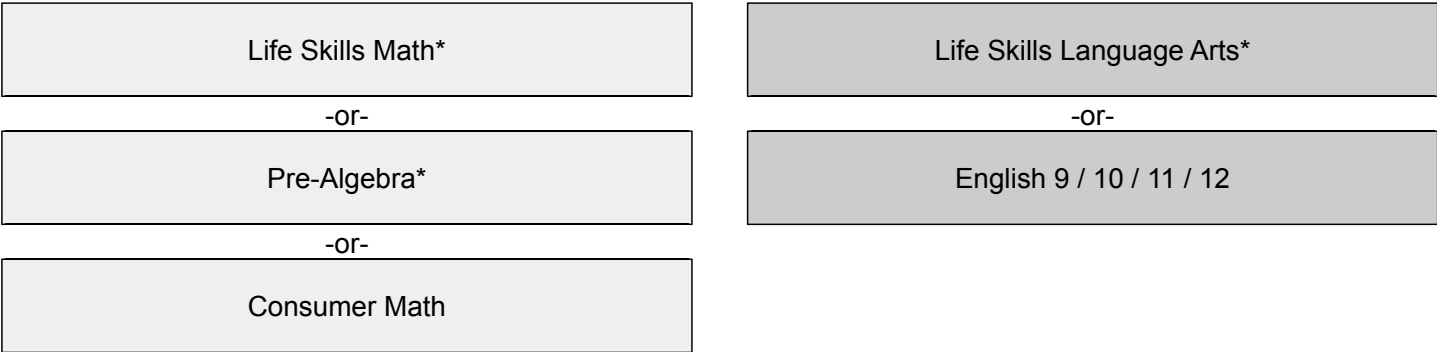
**ACTIVITY BASED LEARNING PROGRAM (ABL)**

An activity-based learning program is available for students whose performance is enhanced through community field trips and practical, repetitive, hands-on classroom activities. Students participating in this program may have specialized instruction in the following areas: Reading, Math, Science/Social Studies, and Independent Living.

**Special Education - Course Selection Flow Chart**



Moving from one level of a special education course (designated by \* at the end of the course name) to another, or from special education to a general education course, is a Planning and Placement Team (PPT) decision and part of a student's Individualized Education Plan (IEP).





## WORLD LANGUAGES

The Vernon Public Schools World Language Department is invested in cultivating global citizens by:

- Providing the tools to develop effective communication that leads to language proficiency;
- Equipping students with the cultural lenses to promote appreciation and understanding;
- Encouraging self-discovery and empowerment to expand their communities and grow as lifelong language learners.

The study of another language and culture enriches the students' understanding of their own language and culture, helps increase SAT scores and provides critical life skills to function in our global and interconnected society. Guided by a proficiency-based approach to instruction, the department encourages all students not only to begin the study of another language, but also to continue to study their language of choice for a minimum of three years. In order to achieve high levels of proficiency, students should study the same language for as many years as possible. Students are also encouraged to study an additional world language at RHS.

Department expectations: For success in all languages and at all levels, students should be prepared daily. They are expected to actively participate in all aspects of class (listening, speaking, reading, writing, and cultural studies) as appropriate to their target language.

Graduation requirement: Students are required to earn two credits in World Languages to earn a high school diploma from Rockville High School.

### FRENCH I – S1 & S2

#### COLLEGE

Weight 1.00

(3305A & 3305B)

#### HONORS

Weight 1.05

(3406A & 3406B)

One Semester each      Credit 0.50 each

This beginner course is recommended for students who may need a review of the material covered in the middle school program or those who are new to the language. Through active participation, level one students begin to communicate in French as they learn to understand, speak, read, and write in this useful language with an emphasis on oral and written forms of communication. The students also become familiar with the culture of the French-speaking world through readings, movies, taped recordings, and discussions. Students are required to do homework and spend time reviewing and preparing for tests outside of class. Daily preparation, organization, and time management skills are essential to being successful in this course.

### FRENCH II – S1 & S2

#### COLLEGE

Weight 1.00

(3306A & 3306B)

#### HONORS

Weight 1.05

(3407A & 3407B)

One Semester each      Credit 0.50 each

Prerequisite: Prior successful completion of French I or VCMS 7<sup>th</sup> and 8<sup>th</sup> grade French.

The level two course begins with a review of vocabulary, grammar and verb usage. Continuing from level one, the students strengthen their skills of listening, speaking, reading, and writing through active participation. The students increase their knowledge of the culture of the French-speaking world through related readings, videos, and recordings. Students are required to do homework, use the target language, and spend time reviewing and preparing for tests outside of class. Organizational and time management skills are essential to being successful in this course. Students in the honors level participate in all skills areas in greater depth and at an accelerated rate.

### FRENCH III – S1 & S2

#### COLLEGE

Weight 1.00

(3307A & 3307B)

#### HONORS

Weight 1.05

(3408A & 3408B)

One Semester each      Credit 0.50 each

Prerequisite: Successful completion of French II. The students review and continue to develop proficiency in listening, speaking, reading, and writing. This level continues to stress the use of the French language in class by the student and by the teacher in order to build and reinforce useful vocabulary, to practice language skills, and to discuss a variety of cultural topics. Students should demonstrate a commitment to increasing their knowledge of French. Students are required to do homework and spend time reviewing and preparing for tests outside of class. Organizational and time management skills are essential to being successful in this course. Students in the honors level participate in all skill areas in greater depth and at an accelerated rate.

**FRENCH IV – S1 & S2****COLLEGE**

Weight 1.00

(3314A &amp; 3314B)

**HONORS**

Weight 1.05

(3409A &amp; 3409B)

One Semester each      Credit 0.50 each

Prerequisite: Successful completion of French III. This course promotes achievement and higher levels of proficiency in the French language and an increased awareness and understanding of France and the French-speaking world. Through an understanding of a variety of prepared and authentic materials, students build their accuracy in the four language skills areas. Vocabulary related to professions and certain fields of work such as health, education, travel, and other trades may be reviewed. Tasks may involve conversation, audio and video taping, skits, composition writing, and extended readings, in addition to regular classroom activities. This class is conducted exclusively in French.

**FRENCH V – S1 & S2****COLLEGE**

Weight 1.00

(3317A &amp; 3317B)

**HONORS**

Weight 1.05

(3410A &amp; 3410B)

One Semester each      Credit 0.50 each

Successful completion of French IV. This course provides students with the continued opportunity to develop their skills in French with an emphasis on essay and composition in preparation for college level work. Areas of study may include topics of special interest to the students: the culture of the French-speaking world, contemporary France; reading selections by French literary masters; and authentic audio and videos. Grammar and vocabulary are reviewed in context and/or as needed. Students are encouraged to participate actively in all discussions and activities.

**SPANISH I – S1 & S2****COLLEGE**

Weight 1.00

(3301A &amp; 3301B)

**HONORS**

Weight 1.05

(3401A &amp; 3401B)

One Semester each      Credit 0.50 each

This beginner course is recommended for students who may need a review of the materials covered in the middle school program or those who are new to language and who have an interest in learning the language and culture of the Spanish-speaking world. Emphasis is placed on developing listening, reading, writing, and speaking skills in Spanish. Students also become familiar with the culture of the Spanish-speaking world through readings, movies, recordings, and discussions. This course calls for students to be active participants and listeners and be consistently prepared with homework and class materials. Students will need to spend time reviewing and preparing for tests outside of class. Organizational and time management skills are essential to being successful in this course.

**SPANISH II – S1 & S2****COLLEGE**

Weight 1.00

(3302A &amp; 3302B)

**HONORS**

Weight 1.05

(3402A &amp; 3402B)

One Semester each      Credit 0.50 each

Prerequisite: Spanish I or VCMS 7<sup>th</sup> and 8<sup>th</sup> grade Spanish.

The emphasis of this course is to strengthen and expand the students' knowledge of the basic material of Spanish I through conversation, composition, and short readings that provide insight into the culture of the Spanish-speaking world. Emphasis is placed on developing listening, reading, writing, and speaking skills in Spanish. Thematic units may include but are not limited to popular sports in the Spanish speaking world, coming of age celebrations, TV and media, homes in Spanish speaking countries, natural disasters and emergencies. This course calls for students to be active participants and listeners and be consistently prepared with homework and class materials. Students are expected to spend time outside of class preparing for tests and reviewing new concepts and to use the target language in the classroom. Organizational and time management skills are essential to being successful in this course. Students in the honors level participate in all skills areas in greater depth and at an accelerated rate.

**SPANISH III – S1 & S2****COLLEGE**

Weight 1.00

(3303A &amp; 3303B)

**HONORS**

Weight 1.05

(3403A &amp; 3403B)

One Semester each      Credit 0.50 each

Prerequisite: Successful completion of Spanish II.

The students review vocabulary and grammar and continue to develop proficiency in listening, speaking, reading, and writing. This level continues to stress the increased use of the foreign language in class by the students and the teacher in order to build vocabulary and to practice language skills. A variety of cultural topics are discussed. This class calls for students to be active listeners and active participants. Students are required to do homework and spend time reviewing and preparing for tests outside of class. Organizational and time management skills are essential to being successful in this course. Daily preparation is essential to being successful in this course. Students in the honors level participate in all skill areas in greater depth and at an accelerated rate.

**SPANISH IV – S1 & S2****COLLEGE**

Weight 1.00

(3304A &amp; 3304B)

**HONORS**

Weight 1.05

(3404A &amp; 3404B)

One Semester each      Credit 0.50 each

Prerequisite: Successful completion of Spanish III.

This course assists students in developing greater proficiency in the four skills of listening, speaking, reading, and writing through vocabulary & language activities. Cultural material is presented through readings, videos, and other prepared materials. Topics may include but are not limited to traveling, professions, camping and art. This class requires that students be active participants and listeners. Students are required to do homework, use the target language, and spend time reviewing and preparing for tests outside of class. Organizational and time management skills are essential to being successful in this course. Students in the honors level participate in all skill areas in greater depth and at an accelerated rate.

**SPANISH V – S1 & S2****COLLEGE**

Weight 1.00

(3315A &amp; 3315B)

**HONORS**

Weight 1.05

(3405A &amp; 3405B)

One Semester each      Credit 0.50 each

Prerequisite: Successful completion of Spanish IV.

This course offers advanced practice in speaking and writing and will be conducted in Spanish. Also, the course continues the study of Spanish-speaking people, their roots and their present, through reading selected works by the recognized masters of Spanish and Latin American literature. Depending on enrollment, this class will run concurrently with the ECE course. They are expected to spend extra time outside of class preparing for tests and reviewing new concepts and to use the target language. Daily preparation is essential to being successful in this course.

**SPANISH V – ECE - S1 & S2**

(3505EA &amp; 3505EB)

**University of Connecticut Early College Experience\***

One Semester each      Credit 0.50 each      Weight 1.10

Prerequisite: Successful completion of Spanish IV is required.

This Early College Experience course is the Spanish 3178 and Spanish 3179 courses at the University of Connecticut. Spanish V-ECE will combine these courses to include "Intermediate Spanish Composition," which provides a thorough review of literature, grammar and composition leading to command of grammar, and "Spanish Conversation: Cultural Topics," an in-depth development of speaking skills through cultural readings, group discussions and oral presentations on selected topics concerning the Spanish-speaking world. This course will be conducted in Spanish and students will use Spanish at all times in the classroom.

\*Students who successfully meet the expectations of the Early College Experience requirement will have the opportunity to earn 6 college credits from the University of Connecticut. Students are charged per UCONN credit plus a processing fee per course. Billing is handled by UCONN.

World Language - Course Selection Flow Chart

