IRONDEQUOIT HIGH SCHOOL

Course Catalog

2026-2027

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Counseling Department

Students are assigned to counselors alphabetically in grades 9 through 12. Students and parents are encouraged to contact them with any questions or concerns they may have. Appointments may be made by stopping by the Counseling Center or by calling 336-2921 between 7:45 a.m. and 3:45 p.m.

The West Irondequoit CSD has a comprehensive school counseling program throughout grades K-12, that culminates at Irondequoit High School. Our program transitions students from Dake, holistically targeting students' career, social/emotional and academic growth. Annually, all students are scheduled for individual and group experiences as they go through school. The focus of these activities is on realistic decision making as it relates to post-high school planning.

Academic: Develop and monitor each student's academic program, including students with special needs.

Career: Assist each student with the decision-making and development of appropriate career goals by identifying approaches for achieving those goals.

Social/Emotional: Assist and support each student in the development of self-awareness and how it relates to the world around him/her.

College and Career Center

At Irondequoit High School, the College and Career Center is an important resource for the career development of our students. It is a place where students and parents can examine career opportunities and obtain information on college visits, scholarships, financial aid, the military and emerging occupations. The Center contains resources for PSAT, SAT, ACT and ASVAB testing dates. It is a place where a student can learn about job shadowing, career exploration, field trips and work experience programs that could potentially lead to earning school credit. Students also can get additional help on career readiness such as resume writing and interview skills and learn about volunteer opportunities. Students are free to visit the Career Center to explore career materials or to discuss individual career plans with your Counselor. Parents and community members are also welcome to use the College/Career Center.

Naviance

Naviance is a Web-based post high school and career research planning tool for students, parents, and counselors. This is a resource that students will use throughout high school.

Course Selection Information

When selecting courses for the 2026-2027 school year, keep in mind your interests, aptitudes, and goals. Also, consider the following:

- Select subjects which are challenging and in which you can expect to do reasonably well if you make a good effort. Your teacher's recommendation can help you in this regard.
- Select subjects that will develop your strengths. For example, if you have high ability in mathematics, elect as many math courses as are available, and develop your ability to a high level of proficiency. Keep in mind, however, that subjects that are not your strongest may be needed for what you may choose to study in the future. Work hard in all subjects to be sure that you do not close any doors that may be important to your future, and that you develop a well-rounded background.
- Select the subjects required for admission to the field of work or the institution of higher education you may wish to enter following graduation from high school.
- Discuss your future plans with your parents and with your counselor. Your counselor will assist you in determining the requirements for the various career paths that interest you.
- Students should not be discouraged from taking a course because of its cost (e.g., AP, DECA, Dual Credit). If financial need exists, please discuss this with a counselor, teacher, or administrator.

How to Use the Course Selection Guide

1. This catalog includes important information and school policies related to course selection and graduation requirements. All students and families are encouraged to review it carefully.
2. Students/parents may use their portal account to enter course requests prior to their student meeting with the school counselor. The portal will open in early December and close to families prior to winter break.
3. Counselors will schedule an individual meeting with each student to select courses during January and February.
4. Following the counselor meeting, students course selection sheets will be emailed home to families. Parents should feel free to contact their current school counselor with any questions they may have.
5. Final schedules will be available in IC in August. If you have any questions, please contact the school counselor directly prior to the first day of school. Schedule changes after the school year begins may be limited. Please see our Add/Drop policy that starts on page 13.

Achieving High Standards

At West Irondequoit, we seek Peak Performance for all students through the mastery rigorous course outcomes and high standards. Throughout this catalog, you can access the NYS Learning Standards for each content area. West Irondequoit has also integrated 21st Century Skills to prepare students for success in both college and career pathways. Our comprehensive curriculum represents the skills, content, and competencies each student must reach to achieve their diploma. At Irondequoit High School, we seek to enable everyone to meet or exceed standards and achieve their full potential.

As you develop your four-year graduation plan with your counselor, teachers, and family, keep in mind these keys to success:

- **Take a full course load** (at least 5½ credits each year). Colleges and employers want people who have a strong work ethic.
- **Maximize your senior year.** This should be the most challenging year of high school, not a "year off," especially for those students preparing to enter college. Competitive colleges look for students who have taken four credits of math, science, and a foreign language. You need to maintain the study habits and critical thinking skills you've developed throughout high school.
- **Take electives!** One advantage of IHS is our comprehensive programs, as you can tell from this catalog. We encourage **all** students to explore areas of interest in the core subject areas, the arts, and occupational education by taking electives.
- **Seek academic support services when needed.** Your counselor can help explain the range of support available for students who are having difficulty in a class. These range from informal "drop-ins" for help from a teacher in a department center, to peer tutors, to more frequent support "classes" that assist with basic skills and review.

Advanced Placement & Dual Enrollment Programs

Students are encouraged to challenge themselves by taking full advantage of Irondequoit's nationally recognized Advanced Placement program. We offer a wide variety of AP classes (see chart on page 12). Although these classes are college-level and require a substantial commitment of time and effort, they provide an opportunity to pursue college credit and to develop rigorous habits of mind. Although the AP exams carry a fee (approximately $96), no student will be denied participation in the AP program for financial reasons. Once the school year has begun, it is recommended that students continue to challenge their thinking and remain in the AP or advanced coursework. Consult the course teacher and your school counselor for support and additional resources if you need it. In addition, dual enrollment course offerings provide a high level of challenge in more specialized or technical fields. Challenge yourself with these outstanding courses!

College Credit

Irondequoit High School offers a variety of college credit opportunities for students who wish to challenge beyond the high school curriculum. In addition to our nationally recognized Advanced Placement (AP) program, students can elect to earn dual credit in a variety of courses through arrangements with Monroe Community College, Rochester Institute of Technology, and other colleges. Both AP and dual-enrollment credits may be transferred to colleges and universities throughout the nation.

ADVANCED PLACEMENT COURSES

AP is an international standard, and a score of 3 out of 5 generally indicates mastery of the subject and the granting of college credit. However, individual colleges make their own decisions about granting credit, depending on the student's major and other factors.

COST: AP exams take place in May, and there is a fee associated with each test taken.

English	**Social Studies**	**Science**
English Language and Composition	AP Government & Politics	Biology
English Literature and Composition	Macroeconomics	Chemistry
	Psychology	Physics 1
Math	US History	Physics C *(2 exams – AP-C Mechanics and AP-C Electricity and Magnetism)*
Calculus AB	World History	
Calculus BC		**Music**
Computer Science Programming	**Languages**	Music Theory
Computer Science Principles	French	
Statistics	German	**Art**
	Spanish	Art and Design

DUAL CREDIT COURSES

Dual credit enrolls students in college courses while they are still in high school, allowing them to earn credit for both. Dual enrollment courses are offered in the classes/programs listed below. Students may elect to take up to 11 dual credits from any one institution per semester.

COST: There is a fee that must be paid to the college granting credit for each class. Fees vary based on the college and number of credits.

Business Education	**Languages**	**Eastern Monroe Career Center**
Career and Financial Management	French 4, 5	Auto Services
College Accounting	German 4, 5	Cisco Networking
College Business Law	Italian 4, 5	Collision Report and Technology
Personal Investment	Spanish 4, 5	Construction Trades
Virtual Business Management		Criminal Justice
	Technology	Culinary Arts
Science	Advanced Auto Services	Emergency Services
College Physics	Architectural Engineering	Engineering Fabrication
Optics	Drawing & Design for Production (DDP)	Laboratory Technology
	Electricity & Alternative Energy	New Visions Medical
Other	Principles of Engineering	PC Report/Network Cabling
The Art of Teaching	Robotics & Automation	

Intervention Supports

TIER 1

Classroom Instruction

Tier 1 instruction in the classroom is built upon a guaranteed and viable curriculum in which the teacher identifies essential standards and then provides high quality, research-based instruction aligned to those standards. Teachers utilize assessment data to proactively plan and differentiate to meet the diverse needs of students. Most students can meet success from tier 1 instruction alone, while some require small group or individualized interventions to meet success.

Department Centers

Students in any grade level can access department centers for English, social studies, math, and/or world languages. The purpose of the department center is to provide academic support in specific content areas where a student is struggling. Department centers are staffed every period by a teacher who teaches within the department and teachers are available to assist students with assignments, study support, exam make-up, and/or exam preparation. Students may be scheduled into a department center based on recommendations from teachers, counselors, and/or administrators, and can also access department centers during a study hall or free period.

TIER 2

In addition to targeted remedial instruction within the classroom setting (i.e. small group review instruction, pre-teach and re-teach opportunities, before and after school support, etc.), the following settings provide intensive academic support to close learning gaps. Communication pathways and opportunities for transfer skills between the classroom and support are essential.

Supplemental Courses (English, Reading, Math)

Students who are identified as having literacy and/or mathematics skill gaps and would benefit from small group (≤ 5-8 students) instruction in these areas may be scheduled into a supplemental course. Teachers within supplemental supports plan instruction to target skill and content deficits and support proficiency with current coursework through pre-teaching and re-teaching. Students are recommended for supplemental courses by teachers based on grades, coursework, and exams. Students in supplemental courses are reviewed quarterly to determine the need for continued support.

Math Lab (Algebra I, Geometry)

Students who are identified as having significant mathematical skills gaps and would benefit from targeted, small group (≤ 12 students) instruction that links directly to their current coursework may be scheduled into Math Lab. Students have the same teacher for Math Lab that they have for their Algebra I or Geometry course, which allows teachers to develop strong relationships and knowledge of student needs. Teachers plan instruction that makes explicit links to current content in the Algebra I or Geometry course, while closing skill gaps needed to be successful with classroom content. Students are recommended for Math Lab by teachers based on grades, coursework, and exams. Students in Math Lab are reviewed quarterly to determine the need for continued support.

Support Study

Support Study supports students who struggle with academic achievement primarily due to difficulties with executive functioning skills and/or emotional needs. Students receive small group (≤ 8 students) support from a teacher aide, who also provides a level of case management by communicating with teachers, counselors, social workers, administrators, and parents. Students are recommended for Support Study by counselors, teachers, and/or administrators. Students in Support Study are reviewed quarterly to determine the need for continued support.

Intervention Supports

IHS Academic Policies

COURSE LOAD: All students, including seniors, are expected to enroll in at least 5.5 credits each year, including Physical Education. Exceptions can be made with Principal's approval.

COURSE CHANGES/ADD-DROP PROCEDURES: School counselors have an individual course registration meeting with students every year. These thoughtful conversations, involving multiple stakeholders' input, lead to schedules being created. As a result, schedule changes after the school year begins may be limited.
To Add a Course: An add, of any course, must occur within the first two weeks of the course (a signature from the teacher of the class being added may be required).
To Drop a Course: No course drops will be allowed until a student has attended the class for four school days. After this, schedule changes **may** be allowed. Signatures of approval are required by the teacher, parent and counselor. If dropping a class, students must still maintain the required minimum course load (5.5 credits). No drops will be allowed after the first quarter grade of a class has been posted to a report card. Level changes in the same course (for example, Advanced to Regents level) follow the same guidance as dropping a course.
Please note, course changes will not be made for the reason of teacher selection.

COURSE CREDIT: Course credit is determined by the successful completion of course requirements within the required time frame. Units of credit toward high school graduation are recorded on report cards and transcripts. Transfer credit from other schools is awarded, subject to approval by the principal.

CREDIT RECOVERY or REGENTS EXAMS: Students who fail a Regents exam should see their counselor as soon as possible to make arrangement to prepare to re-take the exam. Students are encouraged to re-take a Regents exam multiple times to improve their performance. Only the highest score will appear on the transcript.

- If a student passes the course but fails the Regents exam, the student does not need to repeat the course but will need to commit to a plan to prepare to re-take the exam, which may include an exam prep class in their schedule.

When a student repeats a course, both the original and new course grade will appear on the transcript.

SUMMER SCHOOL: The decision to enroll and grant credit for summer school rests with the school, and students will be registered by their counselor. Students will be considered for summer school based on their end of year grades and performance.

New Courses: Irondequoit High School does not recognize "new" summer school courses as the academic equivalent of courses in the regular program. Summer school is intended for courses that need to be repeated due to failure. **Students may not take "new" summer school courses to avoid taking required courses during the school year.** Students who are behind in graduation credits may request to take new courses in summer school to get back on track for graduation. Requests to take new courses in summer school will be reviewed on a case-by-case basis and must be approved by the principal. Students considering this option should discuss it with their counselor.

IHS Academic Policies

SUMMER EXAM PREP: Students who have failed a Regents exam may enroll in an exam preparation course prior to retaking the exam in August. Please consult with your counselor for more information.

INDEPENDENT STUDY: Students may pursue an Independent Study to enhance the study in a subject area or to pursue an area of interest that is not a current course offering. Students must find a teacher who is willing to sponsor the study, and they should be self-directed learners capable of designing and carrying out the goals established in cooperation with the sponsored teacher.

Students should consult with their counselor and sponsor teacher to develop goals, a timetable, and the amount of course credit, all of which should be specified in an Independent Study contract.

An Independent Study cannot be used to fulfill a core course required for graduation unless the student is on a credit program and is in jeopardy of not graduating on time. This requires the Principal's approval.

AUDITING/PASS-FAIL OPTION: A student may audit or take a course pass/fail under the following guidelines:

- Teacher approval is required.
- Students are limited to one class per year on a pass/fail or audit basis.
- Students must have met all graduation requirements in the standards area to be eligible to audit or take a course pass/fail. Exceptions may be considered by the principal.
- Approval is subject to space being available in the class.
- Students can be dropped from the class at any time for truancy.
- Students are expected to complete the same homework, tests, projects, etc., that are required of credit-earning students in the course.
- Audits will appear on the student's transcript as an audit (AUD with no credit). Pass/fail will appear on the transcript as a "P" or "F," with elective credit earned.

PARTICIPATION IN GRADUATION: A student is eligible to participate in graduation if he/she has met all the graduation requirements for his/her cohort (including all credits, Physical Education, and all required exams.
Participation in graduation is a privilege, and students must be in good standing academically and behaviorally.

Seals

CTE Seal

Interested in learning more about Business before you declare it as a major? Curious on ways to become more marketable to colleges and employers? Consider working to attain your CTE endorsement in business. In this experience you will build your financial literacy, develop entrepreneurial skills, deepen your understanding of a range of business and marketing models, and even have access to work-based learning experiences!

For more information about the specifics of earning this endorsement, see page 26 of this program.

Seal of Biliteracy

Show that you are literate in TWO languages right on your diploma!

The New York State Seal of Biliteracy is a graduation designation for students who have studied and performed strongly in a world language course through Level 5. Successful candidates are recognized with a seal on their diplomas, indicating that they are literate in English and another language.

Attainment of the Seal of Biliteracy is a way for students to make themselves stand out and be more marketable to colleges, scholarships and employers!

For more information on how to attain the Seal of Biliteracy, see page 67 of this program.

Seal of Civic Readiness

The New York State Seal of Civic Readiness is a graduation seal for which IHS seniors are eligible. To earn this seal, students will demonstrate how they have met the criteria over the past four years through course credits, regents' credits, extracurricular endeavors, research projects and community services as well as a 12th grade Capstone Project, which is completed through Participation in Government and AP Government courses. Students who meet the seal requirements through the Capstone Project will give a brief presentation in the winter or spring. Students who plan to meet the seal requirements through a different pathway will submit their portfolio to the Seal of Civic Readiness committee. Upon completion of seal requirements, the student will be awarded the seal on their diploma.

Individual Arts Assessment Pathway (IAAP)

The Individual Arts Assessment Pathway (IAAP) is an exciting 4+1 graduation option that allows students to fulfill one of their Regents exam requirements through the Arts. Instead of taking a fifth Regents exam, students complete a locally developed, three-unit sequence (six ½ credit courses) in Visual Arts and submit a curated portfolio of original creative work. This portfolio must demonstrate artistic growth over time and meet the High School II Accomplished Performance Indicators outlined in the NYS Learning Standards for the Arts.

To earn the IAAP credential, students work closely with arts educators over multiple years to select, refine and reflect on five to six creative pieces. These works are accompanied by self and peer assessments, journal entries, and reflections that show depth of understanding and personal connection to the artistic process. The IAAP not only satisfied a graduation requirement – it also empowers students to explore their passions, build professional-level portfolios, and prepare for future opportunities in the arts. Learn more about the IAAP by visiting the New York State Education Department's IAAP page https://www.nysed.gov/standards-instruction/individual-arts-assessment-pathway-iaap.

Minimum Graduation Requirements

These are minimum diploma requirements, as set forth by the Board of Regents and the West Irondequoit Board of Education. Students are encouraged to challenge beyond the minimum standard.

Regents Diploma **

REQUIRED COURSES

English	4
Social Studies	4
Math	3*
Science	3*
World Language	1**
Art/Music	1
Health	.5
Electives	3.5
Physical Education	2.0
	TOTAL – 22 credits

REQUIRED REGENTS EXAMS (passing score of 65 or above)
English Language Arts
Math Exam
Science Exam
Social Studies Exam
One additional Math, Science or Social Studies exam

Regents Diploma with Advanced Designation

REQUIRED COURSES

English	4
Social Studies	4
Math	3*
Science	3*
World Language	3***
Art/Music	1
Health	.5
Electives	1.5
Physical Education	2.0
	TOTAL – 22 credits

REQUIRED REGENTS EXAMS (passing score of 65 or above)
English Language Arts
Algebra 1, Geometry and Algebra 2
Global History
US History or Chemistry or Physics
Two Science (Living Environment, 1 Physical Science)
World Language *** ^

*	An integrated course in science/technology/engineering/math may be used as the third required unit of credit in either mathematics or science when the course is taught by a certified STEM teacher, and it meets the commencement level of the NYS standards for Math, Science, and Technology. Courses that meet this requirement are noted in this catalog in the Technology Education section.
**	Students are required to earn one (1) credit in World Language by the end of their freshman year either by passing the Level I course and final exam in Grade 8 or the course in Grade 9.
***	Students may fulfill this requirement by earning 5 units of credit in Art, Music, Business, Technology or Career and Technical Education. All students are encouraged to complete at least three units of a World Language in high school.
^	State Regents exams are no longer offered in Languages. Students are required to pass the West Irondequoit Level III final exam to earn a Regents Diploma with Advanced Designation.
****	For a Regents diploma, the WICSD follows the NYS Guidance relative to the 4+1 Pathways option. See http://www.p12.nysed.gov/ciai/multiple-pathways/ for more information.

NCAA Courses Available at IHS

English	Social Studies
Eng 09 Adv	Glbl Hst 1
Eng 09 Rgt	Glbl Hst 2
Eng 10 Adv	AP World History
Eng 10 Rgt	World History 1 Advanced
Eng AP-Lang	US Hist/AP
Eng 11 Rgt	US Hist & Gvt
Eng AP-Lit	Prt Gvt Sem
Eng/Hum 12	Econ
Creative Writing	AP Economics – Macroeconomics
Diverse Voices in Literature	Psychology
Journalist 21st Century A	Sociology
	Psych/AP
	AP Government & Politics
	History of Warfare
Mathematics	**Science**
Algebra 1	Earth Science Regent
Adv Algebra 1	Environmental Science
Geometry	Living Environment Regent
Geometry Adv	Chemistry Rgt
Algebra 2	College Physics
Algebra 2 Adv	AP Physics 1
Calc AB AP	Phys C/AP
Calc BC AP	Physics Rgt
Stat AP	Biology/AP
Mth Analys	Chem AP
Pre-Calc	Insights in Chemistry
Adv Computer Science	Optics
AP Computer Science	
AP Computer Science Principles	
Dscrt Mth 12	
Stat 12	
World Language	
French 1, 2, 3, 4, 5A, AP	
German 1, 2, 3, 4, 5A, AP	
Italian 1,2, 3, 4, 5A	
Latin 1,2, 3, 4, 5A	
Spanish 1, 2, 3, 4, 5A, AP	

Please note: Intermediate Algebra and Real World Communication are not NCAA approved courses.

Student/Counselor Assignment

Art

The Art Department offers a variety of courses designed to meet the interests of all students. To meet the minimum New York State requirement for Art, students must take one unit of study in Fine Arts (art, music, or some technology classes). To maintain a sequence in art, students need to complete **Studio in Fine Art** plus 4.5 other units of study in Art. For a New York State Regents and Advanced Designation diploma with an Art sequence you must also take **Portfolio in Art** as part of your senior art coursework.

Grade Level	Pathways			
	Studio in Fine Arts	Photography	Sculpture and Mixed Media	Studio in Graphic Design
9-12	Studio in Fine Arts ↓ Drawing and Painting 1 ↓	Photography 1 ↓ Photography 2 ↓	Sculpture and Mixed Media 1 ↓ Sculpture and Mixed Media 2 ↓	Studio in Graphic Design 1 ↓ Studio in Graphic Design 2 ↓
10-12	Drawing and Painting 2 ↓ Drawing and Painting 3 ↓	Photography 3 ↓ Photography 4 ↓	Sculpture and Mixed Media 3	
11-12	College Art Portfolio ↓ AP Art and Design *Drawing or 2D Design*			

Art

"Art washes from the soul the dust of everyday life." ~ Pablo Picasso

The Art Department offers a variety of courses designed to meet the interests of all students. To meet the minimum New York State requirement for art students must take 1 unit of study in fine arts (art, music, or *some technology* classes). To maintain a sequence in art students, they need to complete **Studio in Fine Art** + 4½ other units of study in art. For a New York State Regents with Advanced Designation diploma with an art sequence you must also take **Portfolio in Art** as part of your senior art coursework.

LEARNING STANDARDS FOR THE ARTS

NYS Learning Standards for Visual Arts: http://bit.ly/NYSArtsStandards

Creating

- Generate and conceptualize artistic ideas and work.
- Organize and develop artistic ideas and work.
- Refine and complete artistic work.

Performing/Presenting/Producing

- Analyze, interpret, and select artistic work for presentation.
- Develop and refine artistic work for presentation.
- Convey meaning through the presentation of artistic work.

Responding

- Perceive and analyze artistic work.
- Interpret intent and meaning of artistic work.
- Apply criteria to evaluate artistic work.

Connecting

- Synthesize and relate knowledge and personal experiences to make art.
- Relate artistic ideas and work with societal, cultural, and historical context to deepen understanding.

Art

STUDIO IN FINE ART (60100)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
A comprehensive foundation course designed to stimulate and encourage creative growth and to foster a healthy curiosity as students explore visual expression. Assignments help students to identify their own aesthetic tastes and learn to appreciate works of art. Hands-on activities cover a wide range of topics and materials including drawing, painting, sculpture, and digital media, as well as a strong focus on the Elements of Art and Principles of Design. Please note that Studio in Fine Arts is a prerequisite for Drawing and Painting and Art Portfolio AP. Evaluation is based on craftsmanship design, pursuit, invention, and expression.

STUDIO IN GRAPHIC DESIGN I (60150)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
Studio in Graphic Design I is a computer art survey course that integrates visual art and digital media to introduce students to many of the skills needed for Graphic Design careers. It serves to give a background in the history, movements and expanding technologies needed in commercial art, along with an understanding of advertising and consumer perspectives. Students will create digital projects utilizing Adobe Illustrator and Photoshop to create designs and logos that demonstrate typography and layout skills. Most projects include client and artist scenarios providing real life experiences. Evaluations are based on craftsmanship, design, pursuit, invention, and expression.

STUDIO IN GRAPHIC DESIGN II (60151)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: Intermediate
Prerequisite*:* Studio in Graphic Design I
Studio in Graphic Design II is an intermediate level computer art course that integrates visual art and digital media to build and expand upon many of the skills needed for Graphic Design careers. It serves to give a deeper background in history, movements and expanding technologies needed in commercial art, along with an understanding of advertising and consumer perspectives. Students will create multimedia projects utilizing the Adobe Creative Suite (Illustrator, Photoshop, In Design), to create poster and product designs that demonstrate efficient typography and layout skills. Most projects include client and artist scenarios providing real life experiences. Evaluations are based on craftsmanship, design, pursuit, invention, and expression.

Art

DRAWING AND PAINTING (60200)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: Studio in Fine Art
This course helps the beginning level student to develop the focus needed to improve basic drawing skills from direct observation and increase capacity to create conceptual work. Activities center around the process of "seeing" and applying learning in a variety of materials and techniques while also encouraging students to actively engage in creative experimentation to get more comfortable taking risks with authentic imagery. Students are evaluated on design, expression, craftsmanship, pursuit, and invention. All students are required to have a spiral bound sketchbook that will be evaluated on a regular basis.

DRAWING AND PAINTING II & III (60300/60400)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: Intermediate
Prerequisite: Prior Level Course(s)
An intermediate level course for students with established interest and demonstrated art skills. Studies come from reality, still life compositions and extended observation. A few high-quality pieces based on the processes, techniques and artists examined are evaluated by individual critiques. All students are required to have a spiral bound sketchbook that will be evaluated on a regular basis.

DRAWING AND PAINTING IV (60500)
Grade(s): 11-12
Duration/Credit: Semester - 1/2 Unit
Level: Advanced
Prerequisite: Prior Level Course(s)
Students electing to take this course are usually pursuing an art sequence, seeking to develop their portfolio and/or considering college-level work in the arts. Instruction is oriented to the individual student and their personal growth, through sketchbook assignments, finished drawings and painting studies. Students will focus on a chosen area of thematic study to create a series of works to be included in a portfolio to demonstrate depth and breadth of visual inquiry.
This course is designed for students who wish to deepen their artistic skills and personal expression. Students will build on foundational techniques to explore and develop a more independent and thoughtful approach to the creative process.

Art

ART PORTFOLIO: COLLEGE (62500)
Grade: 12
Duration/Credit: Semester - 1/2 Unit
Level: Advanced
Prerequisite: 3-5 full units of Art, including Drawing and Painting I and II or approval of Coordinator and Instructor
This advanced level class has been designed for students who have taken at least 6-10 art classes (including Drawing and Painting A and B) to develop and present professional looking portfolios that showcase sophisticated use of technical and conceptual skills. Many of these students will be preparing to submit portfolios to colleges who may require them for admission as a major or minor in the visual arts. Students will need to include between 12-20 pieces of selected artwork in a variety of forms, including approximately 6-10 pieces of drawing from direct observation. Students will work intensively on refining drawing skills for half the semester to produce quite a few high-quality pieces. The remainder of the semester will be spent documenting the body of work in digital format, organizing, and arranging visual documentation, compiling a table of contents and writing a personal artist statement to accompany the visuals. Final evaluation will require a formal presentation of student portfolios where students discuss and defend their artwork. Please note that Portfolio is a prerequisite and companion to the AP Art and Design course (see course description).

AP ART AND DESIGN (60101) (Photo, Drawing or 2D Design)
Grade: 12
Duration/Credit: Semester - 1/2 Unit
Level: Advanced
Prerequisite: Portfolio or approval of Coordinator and Instructor
Please contact your counselor and the Art Coordinator if you are interested in challenging the AP Art and Design (which can focus on drawing, design and/or photo). AP Art and Design students will need to determine whether they are challenging the AP Drawing or the AP 2-D Art and Design (Photo or Graphic Design based) exam. All exams contain two sections. The Sustained Investigation (15 pieces) requires students to conduct an inquiry guided investigation of one big idea through art research, practice, experimentation, and revision. The Selected Works section (5 pieces) will demonstrate skillful synthesis of materials, processes, and ideas. Both sections of the portfolio will require written explanations about the work. There is an examination fee.

SCULPTURE AND MIXED MEDIA I (61300)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
Students are taught the basic skills of 3-Dimensional design as they explore basic building methods including additive, subtractive modeling, and construction. Students will work with cardboard, plaster, clay, and found/altered objects. The sculptures from other cultures will be explored, as well as theme development within visual communication. Evaluation is based on craftsmanship, design, pursuit, invention, and expression of works produced, as well as knowledge of processes taught.

Art

SCULPTURE AND MIXED MEDIA II & III (61400/61500)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: Intermediate
Prerequisite: Prior Level Course(s)
Intermediate and advanced students will continue to explore sculpture methods in clay, plaster, cardboard, metals, and mixed media. This course offers an extension of techniques and processes learned in Sculpture and Mixed Media I. Evaluations are based on craftsmanship, invention, expression, design, and pursuit.

PHOTOGRAPHY I (60900)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
This is an entry-level photography course that covers a vast amount of technical information on the D-SLR camera, using Adobe Bridge & Photoshop programs to select and enhance imagery, and how to manage hundreds of files in different file formats. Students will learn how to manually shoot a D-SLR, compose, process, manipulate, print, and mount their own digital photographs. They will also learn numerous computer skills from uploading files, changing file formats, submitting files, and using Adobe programs. Student work is evaluated according to mastery of technical skills as well as quality of pieces produced.
Supply List 2025: Students need *their own* digital camera for the course (any point and shoot or D-SLR is okay, Smartphones are NOT acceptable) and a folder for notes.

PHOTOGRAPHY II*, III*, & IV* (61000/61100/61200)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: Intermediate
Prerequisite: Prior Level Photography Classes
After learning fundamental skills in Photography I, students work at an accelerated pace incorporating the study of studio lighting, special effects and more conceptual based projects; each adding to the abilities to create sophisticated, artistic photographs. Students will also look at varied photographic images throughout history, explore their meanings, and learn to critique works of art. Evaluations are based on quality of work and skills mastered.
**NOTE:* Students need *their own* digital camera for the course (any point and shoot or D-SLR is okay, Smartphones are NOT acceptable) and a folder for notes. Sixty plus digital cameras will be available for semester sign-out on the first day of class for students to use at home. Students will have access to D-SLR cameras in class for demos.

Art

INDEPENDENT STUDY/INTERNSHIP IN ART
Grade(s): 11-12
Duration/Credit: Credit for Independent Study by contract (available upon approval of instructor)
Level: Advanced
Prerequisite: Prior Demonstration of Skill/Interest

These are unique opportunities for **advanced**, independent research or work (under advice from the Art department coordinator or teacher) in an area of your own interest. Typically, students are preparing a portfolio for submission to colleges and/or art schools. Contracts and proposals can vary, and evaluations are determined by student/teacher conferences. See your school counselor, the Art department coordinator, or the Career Connections coordinator (for internships).

Business

MARKETING STRAND	FINANCE STRAND	LAW STRAND	INFORMATION TECHNOLOGY STRAND
Virtual Business Management **½ unit *** **3 College Credits**	**Career & Financial Management** **½ unit** **3 College Credits**	**Personal Law** **½ unit**	**Entertainment Businesses** **½ unit *** **20 COLLEGE CREDITS**
Sports Marketing **½ unit ***	**College Accounting** **1 unit *** **8 College Credits**	**College Business Law** **1 unit *** **3 College Credits**	**E-Commerce** **½ unit**
Entrepreneurship **½ unit ***	**Personal Investing** **½ unit** **3 College Credits**		

DECA dues *

DECA and IHS Business Education

DECA is a co-curricular student run organization that has many lessons embedded in a number of business courses at IHS. DECA prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe. The high school division includes 200,000 members in 3,500 schools and provides competitive and leadership experiences for students involved.

At Irondequoit High School, courses such as Sports Marketing, College Accounting, Virtual Business Management, Entrepreneurship and Entertainment Business connect with DECA in the classroom to make DECA a co-curricular activity. Visit www.deca.org for more information or talk to any Business teacher.

Business

EARN A GOLD SEAL ON YOUR DIPLOMA AND GRADUATE WITH ADVANCED DISTINCTION

- **MAKE YOURSELF MORE MARKETABLE TO COLLEGES & EMPLOYERS.**
- **LEARN ABOUT BUSINESS BEFORE DECLARING IT AS A MAJOR.**

HOW TO EARN THE GOLD SEAL
Complete the form below with your counselor.

Required Courses:	**Electives** **College Credit Available*	**Industry Standard Assessment**
Career & Financial Mgmt (1/2 cr)** ***Virtual Business Mgmt (1/2 cr)** **Sports Marketing (1/2 cr)** **Entrepreneurship (1/2 cr)** ***2.0 Credits required from this section **Work Based Learning Requirement:** **Participated in and/or completed one OR more:** • **Job Shadow** • **Career Co-op** • **Internship** • **Work Study** **Employability Profile Completed**	***College Accounting (1 cr)** ***College Business Law (1 cr)** **Personal Law (1/2 cr)** ***Personal Investing (1/2 cr)** **E-Commerce (1/2 cr)** **Entertainment Business (1/2 cr)** **Career Co-op (1/2 – 1 cr)** **Work Study (1/2 – 1 cr)** ***Any combination of 3.0 credits from this section.***	**Written & Performance Assessment:** Exploring Business & Marketing Test **Local Assessment:** (Resume/Job Interview completed in Entrepreneurship Class) **5 Total Credits, Work-Based Learning Experience, Performance Assessment and Passing the Industry Standard Assessments are required to earn the CTE Endorsement**

Business

CAREER & FINANCIAL MANAGEMENT (57400)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
This course is designed to provide the necessary day-to-day skills that students will need when they are living on their own and working full-time. These skills and traits include the use of credit (loans/credit cards), checking/banking, completing a tax return, personal finances, taxes, health/dental/life/car insurance, benefits, retirement, and career planning. Students take an exam at the end of the course. If passed, students earn a financial literacy certificate. **THREE COLLEGE CREDITS** may be earned as an option for those students who wish to enroll in a dual-credit program through MCC (tuition required - savings of over $2,500 compared to a private college). *Any student interested in obtaining a Business CTE Diploma with distinction needs to complete this course*.

SPORTS MARKETING (58600)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
This course will have an emphasis on employing the basic marketing concepts through simulation, case studies and authentic experiences. The course will utilize a problem-solving approach using a computer simulation program that teaches students about all the decisions of running a sports organization. Students will also be charged with a real-life marketing problem by a local sports team that they will solve and present to the team. And finally, students will be given responsibility to promote a real sports event through all the marketing strategies they were taught. As a part of the course, students build their resumes through their involvement in the national student organization DECA by applying what they have learned. Dues are collected by mid-October. *Any student interested in obtaining a Business CTE Diploma with distinction needs to complete this course*.

ENTERTAINMENT BUSINESS (56505)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
This course is designed to give students a basic understanding of how to solve business problems in many of the entertainment industries. Students will utilize computer programs to simulate business situations and make virtual decisions to enhance classroom learning. The class will closely study the restaurant, hotel, and fashion industry. The course is designed to take students behind the scenes of these growing career fields. As a part of the course, students build their resumes and research a career field through their involvement in DECA by applying what they have learned. Dues are collected by mid-October.

Business

VIRTUAL BUSINESS MANAGEMENT (57000)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
An online business simulation program will be used in this class to explore all the concepts of business management today. Using a "hands on" retail simulation, students manage a convenience store, a sporting goods store, and an electronics store. Introductory topics such as financing, market research, promotion, merchandising, pricing, promotion, security, location, and human resources, will be explored. **THREE COLLEGE CREDITS** may be earned as an option for those students who wish to enroll in a dual-credit program through MCC. As part of the course, students build their resumes through their involvement in the national student organization DECA by applying what they have learned. Dues are collected by mid-October. *Any student interested in obtaining a Business CTE Diploma with distinction needs to complete this course*.

E-COMMERCE APPLICATIONS (56600)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
E-commerce, F-commerce, and M-commerce are growing industries that small to large businesses need to understand to meet the online shopping needs of today's consumer. As consumers shop online and consume more online advertising, students are exposed to digital marketing techniques used to get consumers to buy more and higher prices. Students will study how businesses can successfully incorporate e-commerce strategies into their marketing plan. Students will research and plan hands on projects in web design, logo creation, online ad creation and placement, blogging, podcasting, and social media marketing. The focus of the class is using social media platforms to successfully market products and services to consumers and evaluate the metrics to improve their performance and success rate for a simulated online business.

PERSONAL INVESTING (57402)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
You will learn the "ins" and "outs" of investing in stocks, bonds, and mutual funds. You will simulate investing using current market data to manage a portfolio of stocks, bonds, and mutual funds. Stock market competitions are introduced to enrich the classroom lessons. Learn to use tax advantaged methods of investing, such as 401K plans and IRAs to help your money grow. Additional investment choices will be examined, including real estate, options, and collectibles. **THREE COLLEGE CREDITS** may be earned as an option for those students who wish to enroll in a dual-credit program through MCC (tuition required savings of over $2,500 compared to a private college).

Business

ENTREPRENEURSHIP (58800)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: Advanced
Prerequisite: None
Designed for those interested in learning how to start and manage a small business. It begins by defining and explaining the nature of small businesses in today's international economy and entrepreneurs in the context of the free enterprise system. The topics include small business opportunities, legal forms of ownership, starting a new venture, sources of financing, developing marketing strategies, international business strategies and human resource management. Students will also learn the key components of a business plan, review case studies, and undertake a project. As a part of the course, students build their resumes through their involvement in DECA by applying what they have learned. Dues collected by mid-October. *Any student interested in obtaining a Business CTE Diploma with distinction needs to complete this course.*

COLLEGE ACCOUNTING (56000)
Grade(s): 10-12
Duration/Credit: Full Year – 1 Unit
Level: Advanced
Prerequisite: None
Students will learn a wide variety of accounting principles including the accounting cycle, managerial accounting practices, and accounting procedures for sole proprietorships, partnerships, and corporations. Students are expected to keep up with independent practice assignments, participate in classroom discussions, and prepare accounting journals and ledgers. Computer applications will supplement unit topics when appropriate. Evaluation of this course will be based on quizzes, tests, homework, and a local final exam. As a part of the course, students build their resumes through their involvement in the national student organization DECA by applying what they have learned. Dues are collected by mid-October. **EIGHT COLLEGE CREDITS** may be earned as an option for those students who wish to enroll in a dual-credit program through MCC (tuition required – savings of over $7,500 compared to private college).

Business

COLLEGE BUSINESS LAW (55200)
Grade(s): 10-12
Duration/Credit: Full Year – 1 Unit
Level: Advanced
Prerequisite: None
Studying Business Law enables students to understand their legal rights and responsibilities as applied to contractual obligations, sales agreements, financial matters, buying and selling real estate, and general consumer issues. Students will be introduced to the U.S. legal system and court procedures. Students will have exposure to community experts on wills, insurance, banking, and minors and contracts. Students will be expected to engage in readings, and class discussions. Evaluation will consist of unit/chapter exams, written class assignments and case studies, law-related projects, and a local final. As a part of the course, students build their resumes through their involvement in the national student organization DECA by applying what they have learned. Dues are collected by mid-October. Students may also enroll as an MCC student and earn an additional **THREE COLLEGE CREDITS** for Law 101 with no additional exam (tuition required).

PERSONAL LAW (57700)
Grade(s): 9-12
Duration/Credit: Semester – 1/2 Unit
Level: All
Prerequisite: None
Students interested in careers involving law enforcement, criminal justice, corrections, political science, or legal journalism should consider this elective. Legal issues covered include the court system, trial procedures, civil law, torts, crimes, juvenile justice, family law, domestic violence, drug laws, and incarceration. The course is team-taught by community experts who bring credibility to the topics explored. These experts include the Irondequoit Police Department, lawyers, judges, the Monroe County District Attorney's office, and juvenile justice authorities. Students actively engage in their own learning by competing in an in-class mock trial and orally debating legal issues. The program is highlighted by field trips to the Hall of Justice and/or the Irondequoit Police Department.

Career Connections

The West Irondequoit Central School District offers an exciting program of experiential learning through the Career Connections Program. Recognizing that students should have the opportunity to experience the work that they may be pursuing as a career tomorrow, the Career Connections Program links students with the real world of business and industry. Students are encouraged to stop into the Career Connections office (adjacent to the IHS Counseling Center) for more information. We offer work-based learning programs and career awareness opportunities. Follow us on Twitter @ihscareercenter.

CAREER AWARENESS OPTIONS

EXPLORER POSTS
Grade(s): 9-12
Duration/Credit: One semester or less – None
Prerequisite: None
Exploring is a co-ed program of the Otetiana Council that offers a hands-on approach to investigating a particular career or hobby.
There are more than 115 Explorer program options, and each one is unique in the way it uses the resources of its host organization. Exploring can often be the first step in identifying career and hobby interests.
Explorer programs are flexible enough to fit in with a student's other activities. Most meet twice a month, in the evening, for a portion of the school year. The experience the student gains can be extremely valuable in giving a jump start on career options. Check out exploring.org.

SHADOWING
Grade(s): 10-12
Duration/Credit: None
Prerequisite: None
Students who have a serious interest in a particular field will have an opportunity to spend 1/2 or one day with an individual actively engaged in a profession.
A student can gain tremendous insight into a career by following a professional's "typical day." Questions as to appropriate high school and college curriculums are frequently addressed.

WORK BASED LEARNING PROGRAMS

CO-OP WORK EXPERIENCE
Grade(s):
Duration/Credit: Semester/Full Year - .5 – 1.0
Prerequisite: Related Instruction
Co-Op is a real-life career specific paid or unpaid hands-on experience that focuses on employability skills as related to the student's program of study and career interest. A specific job training plan is developed for the student worker and quarterly performance evaluations are done by the job mentor. CO-OP students complete related instruction. Registered CO-OP New York State Work Based Learning Program.

Career Connections

INTERNSHIPS
Grade(s): 9-12
Duration/Credit: Semester/Full Year - .5 – 1.0
Prerequisite: Application
Students make formal applications to the Career Connections Coordinator to enter a non-paid, credit bearing, extended internship in a given career area. The student is partnered with a mentor and commits to approximately 54-100 hours of guided observation, training, and eventual participation in the chosen field of work. Students opting for an internship become keenly aware of the educational and personal requirements of a given career. They will rotate through a variety of learning experiences as their exploratory training continues. **Registered CEIP New York State Work-Based Learning Program.**

GENERAL WORK STUDY PROGRAM
Grade(s): 10-12
Duration/Credit: Semester/Full Year - .5 – 2.0
Prerequisite: Seminar
The Work Study Program offers students the opportunity for paid, supervised, part-time work experience which earns school credit. The student works a designated number of hours weekly, and is evaluated quarterly by the employer and coordinator, and can earn up to two full credits for 600 hours of employment. Students are required to complete job-related coursework connected to career plans, and on the job experiences. Skill development, labor trends, legal issues and performance appraisals are also discussed. To qualify for the Work Study Program, students must be enrolled in five courses plus Physical Education. This is an excellent opportunity to gain valuable work experience and have real world performance appraisals incorporated into a student's permanent record. **Registered GEWEP New York State Work Based learning program.**

English

Our mission is to ignite a passion and desire for lifelong reading and writing by creating a welcoming and safe space for students to think critically and globally about themselves and the literature they read. Within this space, we will maintain high expectations for all students as we develop a collaborative community of learners who challenge ideas, problem-solve, and engage in discourse.

According to NYS Education Regulations, students must earn 4 credits in English as well as pass the Common Core English Regents Examination to fulfill graduation requirements in English. Throughout these 4 credits of English, students will be challenged to think critically by experiencing deep and thoughtful engagement with high-quality literary and informational texts that builds knowledge, enlarges experience, and broadens worldviews.

Course Sequence:

English 9	
9 Regents	9 Advanced

English 10: World Literature	
10 Regents	10 Advanced

English 11	
11 Regents: American Literature	Advanced Placement English Language & Composition

English 12		
English 12 Humanities	Advanced Placement English Literature Composition	Credit-Bearing Electives (listed on page 31)

Over the four years your child is enrolled in an English course at IHS, they will have the opportunity to engage with a diverse range of texts, which could include **MacBeth, The Odyssey, Night, The Narrative of the Life of Fredrick Douglass,** and **Dante's Inferno.**

English

English Electives (credit bearing)	Grade Levels	Duration & Credit
Diverse Voices	**12**	**½ Year – ½ Unit**
Introduction to Theatre	9-12	Year – 1 Unit
Public Speaking & Media	10-12	½ Year – ½ Unit
Performance & Production	10-12	½ Year – ½ Unit
Script Writing	10-12	Year – ½ Unit
Actor's Studio	11-12	Year – ½ Unit
Journalism in the 21st Century	9-12	½ Year – ½ Unit
Creative Writing	12	½ Year – ½ Unit

English Support Classes (non-credit bearing)	Grade Levels	Purpose & Level of Support
Reading Supplemental	9-12	Enrolled concurrently with the core English class, reading supplemental offers intensive support for those students with reading and writing challenges.
Department Center	9-12	Enrolled concurrently with the core English class, the department center offers support with reading and writing assignments as needed.
Supplemental English	9-10	Enrolled concurrently with the core ELA class, ELA supplemental offers intensive support with ELA skills in the 9-10 complexity band.
Humanities Supplemental	11-12	Enrolled concurrently with the core English class, Humanities supplemental offers intensive support/prep with ELA regent's exam skills and practice.
TSP		Credit recovery.

English

ENGLISH OVERVIEW

The regular English program consists of four full-year courses. Each of these full-year courses requires reading and writing over the summer. At the end of the third year, students must take and pass the Common Core Regents Examination in English. English courses conclude with a final assessment, which may include a portfolio/personal anthology and an on-demand piece of writing. This assessment will be incorporated into the final course grade.

ENGLISH 9 ADV (00100)
Grade: 9
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: English 8 and Departmental Recommendation

English 9A welcomes students capable of above average reading and writing skills. These students should easily understand the basics of grammar, spelling mechanics and sentence structure; be ready to challenge themselves to learn and practice more sophisticated sentence structure and vivid verbs; have the patience to examine their writing one sentence at a time and to revise papers numerous times; and be self-motivated readers who are willing to tackle difficult texts. Students will engage with a range of diverse texts, including novels, non-fiction narratives, essays and poetry. Students will also read, analyze, and discuss poems, essays, short stories, non-fiction selections and film. Students will engage in many rigorous reading and writing opportunities, as well as work independently and collaboratively.

ENGLISH 9 RGT (00200)
Grade: 9
Duration/Credit: Year – 1 Unit
Prerequisite: English 8

The English 9 curriculum is structured using a combination of thematic and genre units. The themes may be woven through a variety of genres, such as short stories, choice novels, poetry, non-fiction, and drama. Students will engage with a range of diverse texts, including novels, non-fiction narratives, essays and poetry. In addition, students will choose books for literature circles from approved texts. Students write extensively and in various modes and will use revising and editing strategies. Emphasis is placed on helping students to develop strategies for substantiating a central argument through facts, details, and examples. Students are given experiences in group and individual oral presentations.

English

ENGLISH 10 ADV (00500)
Grade: 10
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: English 9 and Departmental Recommendation
English 10A is an advanced course in literature and composition that continues the work begun in English 9A in critical reading and thoughtful writing. In literature, students will refine their ability to read with perception and critical understanding while developing increased awareness of literary styles, techniques, and rhetorical devices. Students will engage with a range of diverse texts, including novels, non-fiction narratives, essays and poetry. Poetry and non-fiction readings within each unit expand thematic analysis and establish relevancy. In composition, students will vary their writing style to suit different tasks and audiences, to support an argument, and to perform close textual analysis. Students will also continue to develop the ability to write with coherence and style in various modes, and to evaluate sources during research-based projects.

ENGLISH 10 RGT (00600)
Grade: 10
Duration/Credit: Year – 1 Unit
Prerequisite: English 9
We are global citizens. The whole world is available to us: we just need to tap a screen or open a book to travel somewhere new. English 10R is a world literature course that allows students to explore what it means to be an empowered member of our global community. In this course, students will use literature as both a window and a mirror, promoting their understanding of stories as reflections of society, culture, and lived experience. Students will understand how certain literary themes are universal, and how an author's use of language empowers them. Throughout the course, students write in analytical, persuasive, and artistic modes, with emphasis on revising drafts and experimenting with more sophisticated stylistic, rhetorical, and organizational choices. The argumentative essay, text-based response, and informative speech are examples of key writing projects. Students will engage with a range of diverse texts, including novels, non-fiction narratives, essays and poetry. Students will also be expected to read choice literature independently. Finally, students are exposed to a variety of Regents-style learning experiences to better prepare them for the Regents exam at the culmination of eleventh grade. By the conclusion of the year, students will be able to confidently use their voices to speak out about the global issues of import to them as empowered humanitarians.

English

ADVANCED PLACEMENT ENGLISH: LANGUAGE AND COMPOSITION (00900)
Grade(s): 11 or 12
Duration/Credit: Year – 1 Unit
Level: Advanced Placement
Prerequisite: English 10 and Departmental Recommendation
Advanced Placement English, Language and Composition, is a seminar in composition and language study on the college level for highly motivated students whose skills in writing and analyzing language use are well above average. Study concentrates on American literature with an emphasis on rhetorical strategies in prose, especially non-fiction. Students will refine their ability to read prose perceptively and to express themselves in a variety of rhetorical modes. Major readings include selected essays, ***The Great Gatsby, The Narrative of the Life and Times of Frederick Douglass, Walden Pond, The Things They Carried***, selected short stories, and several opportunities for outside reading. Research skills are also one of the major components of the course. The course leads to the Advanced Placement Examination in Language and Composition (fee required). Students will also take the Comprehensive Regents Examination in English to satisfy graduation requirements for a Regents high school diploma.

ADVANCED PLACEMENT ENGLISH: LITERATURE AND COMPOSITION (01300)
Grade(s): 11 or 12
Duration/Credit: Year – 1 Unit
Level: Advanced Placement
Prerequisite: English 11 and Departmental Recommendation
Advanced Placement English, Literature and Composition, is a seminar in composition and literature on the college level for highly motivated students whose skills in writing and literary analysis are well above average. Through close reading of selected works, students will refine their ability to read literature perceptively and to express themselves in precise, graceful, and well-organized prose. In addition to careful study of short stories, poems, novels, and plays, the course also includes exercises in literary discrimination and judgment and work in both expository and critical writing. Students will also complete a year-long author project that culminates in a literary research paper. Major readings typically include ***Hamlet, Winesburg, Ohio, Wuthering Heights, Invisible Man, Gulliver's Travels, Their Eyes Were Watching God*** and ***The Awakening***.

English

ENGLISH 11 RGT (01000)
Grade: 11
Duration/Credit: Year – 1 Unit
Prerequisite: English 10
English 11 combines various elements of American literature: significant literary periods; the cultural, political, and artistic development of the nation; the ethnic and racial influences that contribute to the distinctly American "voice"; and the pursuit of the American dream as chronicled from early settlers to contemporary authors. Throughout this course, students will read, interpret, critique, and respond to assorted selections of American literature and non-fiction. The written assignments vary, with presenting and defending an argumentative viewpoint as a major focus. Additionally, students focus on refining their writing style, especially diction, sentence structure, and voice. Students also learn ease and confidence in addressing a group through public speaking, sharing of written work, and presentations. Extensive exposure to and rehearsals for the Regents exam are also integral components of the eleventh-grade experience as well as gathering and using specific information to support a thesis. Students will engage with a range of diverse texts, including novels, non-fiction narratives, essays and poetry.

ENGLISH 12 HUMANITIES (01405)
Grade: 12
Duration/Credit: Year – 1 Unit
Prerequisite: English 11
While studying trends in literature, visual arts, film, music and philosophy, students will hone universal 21st century skills such as persistence, metacognition, questioning and communicating clearly. The works studied are both classical and modern, ranging from Gregorian Chant to Bolcom in music; from Koiros to Pollock in art; from Dante to Shakespeare in literature; and selections from film. Composition instruction extends students' skills in creative, informational, interpretative, persuasive, and analytical writing. Students conduct class discussions and explore their own thinking abilities. Students will also read several books of their own choosing to augment class discussion of literature. The year culminates with a humanities thesis in which students demonstrate their speaking, writing, and performing skills.

English

JOURNALISM 21ST CENTURY A (02167)
Grade(s): 12 (9-11 as elective credit)
Duration/Credit: ½ Year – ½ Unit
Level: Mixed
Journalism is a half year course designed to ignite students' passion about current issues in society, while helping students to develop an understanding of the First Amendment and ethical issues associated with modern media. The engaging classroom environment will focus on critical thinking, creativity, and intellectual independence. In addition, students will develop multi-disciplinary skills such as communication, collaboration, and technology. This course is designed to teach students how to use rhetorical devices effectively in writing and to understand their audiences. It also requires students to rely on sources, pull information from those sources and use that information effectively in crafting written pieces. Topics/units include: What is news? How do stories become news? How is news structured? How do reporters capture news? What techniques do journalists use to make their stories come alive? Students will leave the course equipped with the 21st Century skills needed to be a productive and thoughtful member of society.

JOURNALISM 21st CENTURY B (02168)
Prerequisite: Journalism A
An intermediate level journalism course.

INTRODUCTION TO THEATRE (02120)
Grade(s): 9-12
Duration/Credit: Year - 1 Unit
Level: Mixed
Prerequisite: None
This participatory course is intended to broaden a student's basic knowledge of theatre and the dramatic arts. Students will learn and practice basic elements of acting and technical theatre production. Students will be given performance and production opportunities involving voice and movement, improvisation, monologues, and scene work. The course also includes an overview of the history of theatre, famous dramatic personalities, types of theatre, and theatre criticism. Topics/Units include basic stagecraft and ensemble work, introduction to voice and public speaking, scene study/analysis I & II, and performance, theatre history, introduction to the musical, production elements, production specialization, theatrical productions and culture. For success in this course students should have a creative spirit and a willingness to take creative risks.

English

PERFORMANCE AND PRODUCTION (02140)
Grade(s): 10-12
Duration/Credit: 1/2 Year - 1/2 Unit
Level: Mixed
Prerequisite: Successful completion of Introduction to Theatre course or proficiency on a placement assessment.

Performance and Production is a half year course of study (1/2 unit of credit) with a more intensive examination of theatre arts and acting that builds upon the foundation obtained through Introduction to Theatre. Students will improve their acting talent and technical skills through repeat performances with a focus on growth in craft. The course will examine in depth the art of acting, including methods, dramatic structure, script analysis, and criticism. The course includes scenes, improvisation activities, and culminates with a full-class production. Topics/Units include scene work, performances of specific styles and periods, theatre analysis using film, Shakespeare, long-form improvisation performances, scriptwriting, and live performance critiques. For success in this course students should possess a love of the performing arts and a willingness to take artistic risks.

REAL-WORLD COMMUNICATIONS (02141)
Grade(s): 10-12
Duration/Credit: 1/2 Year - 1/2 Unit
Level:
Prerequisite: None

Real-World Communications is a half-year course that focuses on the development of both written and verbal skills that will allow students to prepare for a range of scenarios they will encounter in their everyday lives outside of high school. Students will utilize research, the job application process, various writing tasks (e.g., emails, cover letters, resumes), presentations and more as they practice effectively expressing ideas and relaying information. Specifically, students will refine their presentation skills by determining what type of information should be included in slides versus spoken, as well as build their capacity to use Canva, Sway, PowerPoint and other technology tools to expand their presentation repertoire. They will apply such skills to mock interviews and other authentic experiences. Students will exit the course with a completed resume and cover letter, interview experience and knowledge of professional email writing, presentation development and speaking skills.
NOTE: This course was built to align with the Career Management expectations outlined in the NYS Career and Financial Management modules.

English

SCRIPT WRITING (02160)
Grade(s): 10-12
Duration/Credit: Year - 1/2 Unit
Level: Mixed
Prerequisite: None
Script writing is a half-credit course offered on alternate days opposite Actor's Studio. It provides instruction and practice in the art of moving words from the page to the stage. It is a course which focuses upon process: the process of generating an idea, the process of expanding, restructuring, and revamping that idea, the process of refining that idea through an active exchange with actors and directors in rehearsal, and the process of evaluation through the presentation before an audience. During the second half of the year, the class will be engaged frequently with the Actor's Studio to facilitate the process.
There is no prerequisite for this course except a love of the word, a crying desire to have one's voice heard, and the daring to place it before the eyes of others.

ACTOR'S STUDIO
Grade(s): 11-12
Duration/Credit: Year – 1/2 Unit
Level: Mixed
Prerequisite: Introduction to Theatre (or appropriate equivalent)
Actor's Studio is a half-credit course scheduled on alternate days, opposite the Script Writing class. It is designed for the serious student of theatre who would like an in depth and highly creative immersion in the theatrical process. It will include advanced scene study, directing techniques and opportunities, an improvisational theatre company, and examine the creation of new material and the staging of those materials. This class will work closely with student script writers in the process of producing an evening of student one act plays. **Students must have taken Intro to Theatre (or the appropriate equivalent) to enroll or receive instructor approval.**
The creative challenges of this course will be significant, but so too will be the rewards.

CREATIVE WRITING (02122)
Grade(s): 12 (10-11 as elective credit)
Duration/Credits: ½ Year – ½ Unit
Level: Mixed
Creative Writing provides students with opportunities to develop their literary talents by focusing on expression through writing as a form of art and personal expression. This course includes a study of varied forms of prose and poetry and gives students the experience to write creatively in different genres. In this course, the target of college and career readiness is developed with a standards-based approach and a focus on reading, writing, speaking, and listening. In addition, students will contribute to publications such as *Chickenscratch*. The goal is to become a community of writers who experiment, craft, revise and finalize work.

English

DIVERSE VOICES IN LITERATURE (02124)
Grade: 12 (11 with approval process)
Duration/Credits: 1/2 Year - 1/2 Unit
Level: Mixed

The goals of this course are to engage high school students in perspectives through literature that resemble the global and diverse community to which they belong, and in which they will become active citizens. In this course, the target of college and career readiness is developed with a standards-based approach and a focus on reading, writing, speaking, and listening. This course is aimed at providing students with a historical approach to understanding literature written by diverse and marginalized authors and will afford students an opportunity to determine exploratory questions and content pieces through a collaborative process with the teacher. Writing emphasizes student analysis as outlined by facets of the West Irondequoit Essential Standards: narrative, expository, research-based, and argumentative. Students will also develop skills in critical thinking, effective discussion and listening methods, collaboration, and Language standards.

Health

HEALTH AND PHYSICAL EDUCATION LEARNING STANDARDS

- Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.
- Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.
- Students will understand and be able to manage their personal and community resources.

HEALTH EDUCATION* (84100)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
***Completion of 1/2 unit of Health Education is <u>required</u> for graduation.**
Students often feel overwhelmed with stress, worried about relationships or wished they knew what the impact of their decisions would likely be with regards to drugs and sex. Students also wonder how to communicate their ideas more clearly and need encouragement for self-improvement. To assist them in these and other areas is the goal of health education.
Everyday students must make personal life-style choices, which influence their wellness - physically, mentally, and socially. Without their health, students cannot reach most of their life goals.
This course challenges students to update their health information, learn more about themselves, and practice skills which encourage positive health behaviors.* Discussions center on wellness, mental health issues, nutrition, relationships, sexuality, abstinence, reproduction, drugs and stress management to name a few of the areas of study. The course offers something for everyone who brings an open mind and positive attitude.
The students will focus on the skills of self-management, relationship management, communication, stress management, decision making, planning and goal setting, and advocacy.

HUMAN DEVELOPMENT (84200)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: Health Education
Students who enjoy working with kids or are considering a career involving children should enroll in Human Development. The course focuses on the developmental changes which occur during prenatal stages, early childhood years and adolescence.
This course will help you to see where you fit into the scheme of things as an adolescent. You will learn about yourself and ways of coping with various stressors and problems as well as how to deal effectively with those around you – peers, family members, younger children, and other adults. You will have opportunities to investigate and discuss issues facing teens today plus explore career possibilities and identify personal characteristics necessary for these careers. As the semester progresses, pregnancy is examined from the perspective of the developing baby and its needs as well as the changes and demands on the future parents. The course will follow the child through birth and into early childhood, focusing on the transitions that will occur and the parenting skills that will promote a happy and well-adjusted child.

Math

MATH OVERVIEW

The program of study in mathematics is designed to provide all students with the opportunities to acquire problem-solving and critical thinking skills requisite for functioning in an information-based society. Course offerings address important societal goals including the preparation of mathematically literate workers, lifelong learning, communication using symbolism and mathematical concepts, opportunity for all, and an informed electorate.

The departmental philosophy reflects the importance of mathematical literacy for all students so that they will learn to value mathematics. Students will be expected to obtain mastery in study at each level to become confident in their ability to do mathematics and become competent problem solvers before progressing to the next level of study. Those students wishing to challenge themselves further will be encouraged to do advanced level work.

Graduation Requirement Information: All students are required to earn three credits of Math course credit and to pass a NYS Regents exam to graduate. Students wishing to earn a Regents Diploma with Advanced Designation also need to successfully complete the Algebra, Geometry and Algebra 2 courses and Regent's examinations. Recognizing the importance of mathematics in our society, all students are encouraged to pursue four credits of mathematics.

Math

Grade Level	Math Pathways			
	Advanced	Accelerated	Regents	Regents with Supports
8	Advanced Algebra 1 ↓	Advanced Algebra 1 ↓	Math 8 ↓	Math 8 ↓
9	Advanced Geometry ↓	Geometry ↓	Algebra 1 ↓	Algebra 1 (with Algebra Lab or Algebra Supplemental) ↓
10	Advanced Algebra 2 ↓	Algebra 2 ↓	Geometry ↓	Geometry (with Geometry Lab or Geometry Supplemental) ↓
11	Math Analysis ↓	Pre-Calc ↙	Algebra 2 ↓	Intermediate Algebra ↓
12	AP Calc BC or AP Calc AB or AP Statistics		Pre-Calc or AP Statistics or Discrete/Statistics	Algebra 2 or Discrete/Statistics

How to read the chart:

- Downward arrows (↓) represent the most likely pathway when meeting proficiency.
- Unless restricted by prerequisites (e.g. College Board or NYS Ed) students are not limited to these sequences. Parent or student may request to follow a different pathway.
- Not all scenarios are represented in this diagram. Please contact your child's school counselor for more information.

Student supports:

- IHS offers a variety of supports for students that include but are not limited to:
  - Algebra and Geometry Lab
  - Supplemental
  - Department Center

AP Calculus AB and BC:

- The College Board recommends students have a very specific set of mathematical skills to take Calculus. These prerequisites are met by taking Pre-Calculus or Math Analysis. Students who show high levels of mastery may still access Calculus through other pathways. Please contact your school counselor for more information.

Computer Science:

- While not represented in the sequence, students may also earn additional math credits through the following electives:
  - AP Computer Science Principles (Full year)
  - Introduction to Programming (Semester Course)
  - Advanced Computer Science (Semester Course)
  - AP Computer Science A (Semester Course)

Math

ALGEBRA 1 (30100)
Grade: 9
Duration/Credit: Year - 1 Unit
Level: Regents
Prerequisite: None

Algebra 1 is the first mathematics course in high school, and the focal point is functions; specifically linear, quadratic, and exponential functions. This course will include content from the NYS Next Generation Mathematics Learning Standards including:

- Analyzing and explaining precisely the process of solving an equation
- Explore many examples of functions represented graphically, numerically, symbolically, and verbally, translate between representations, and understand the limitations of various representations
- Linear, quadratic, and exponential functions
- Making sense of problems and persevere in solving them by choosing or producing equivalent forms of expression
- Reason abstractly and quantitatively by choosing and interpreting units in the context of creating equations in two variables to represent relationships between quantities
- Learning the terminology specific to polynomials and understanding that polynomials form a system analogous to that of integers

Throughout, an emphasis on reasoning and problem solving to address real-life connections/applications will be stressed, as well as developing the ability to effectively communicate results and their meaning. Instruction will be enhanced using technology, including the graphing calculator.

The Regents examination in June, "Algebra 1", is required for graduation.

Math

GEOMETRY (30200)
Grade: 10
Duration/Credit: Year – 1 Unit
Level: Regents
Prerequisite: Algebra 1
Geometry is the second course in the three-year Regents mathematics sequence for high school students. This course will include content from the NYS Next Generation Mathematics Learning Standards including:

- Attributes and relationships of two- and three-dimensional geometric shapes that can be applied in diverse contexts
- Concepts of congruence, similarity, and symmetry
- Proving theorems about triangles, quadrilaterals, and other geometric figures
- Definitions of sine, cosine, and tangent for acute angles are founded on right triangles and similarity, along with the Pythagorean Theorem and are fundamental in many mathematical situations
- Prove and apply basic theorems about circles and study relationships among segments on chords, secants, and tangents as an application of similarity

Students use the traditional tools of compass and straightedge as well as dynamic geometry software to assist in investigations. Throughout the course algebra is embedded to maintain and expand algebraic skill for future mathematical study.
The Regents examination in June, "Geometry", is one of the three mathematics examinations that must be passed to be eligible for an Advanced Regents Diploma.

ADVANCED GEOMETRY (30210)
Grade: 9
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Advanced Algebra 1 or Departmental Recommendation
Advanced Geometry is an enriched second course in the three-year advanced sequence in mathematics. This course will cover content from the NYS Next Generation Mathematics Learning Standards. Students will have the opportunity to make conjectures about geometric situations and prove them in a variety of ways, both formal and informal. Congruence and similarity of triangles will be established using appropriate theorems. Transformations including rotations, reflections, translations, and glide relationships and coordinate geometry are used to establish and verify geometric situations. Properties of triangles, quadrilaterals, and circles receive particular attention. Students use the traditional tools of compass and straightedge as well as dynamic geometry software to assist in these investigations. Throughout the course advanced content (including algebra) is embedded to expand mathematical skills for future study in the advanced sequence.
The Regents examination in June, "Geometry", is one of three mathematics examinations that must be passed to be eligible for an Advanced Regents Diploma.

Math

ALGEBRA 2 (30370)
Grade: 11
Duration/Credit: Year - 1 Unit
Level: Regents
Prerequisite: Geometry
Algebra II is the capstone course of the three high school mathematics courses and is a continuation and extension of the two courses that precede it. This course will include content from the NYS Next Generation Mathematics Learning Standards including:

- Building knowledge of functions to include polynomial, rational, radical, and trigonometric functions
- Expand ability to model situations and to solve equations, including solving quadratic equations over the set of complex numbers, and solving exponential equations using the properties of logarithms
- Model periodic phenomena with trigonometric functions and begin to build fluency with the values of sine, cosine, and tangent
- Statistics and probability

Throughout, an emphasis on reasoning and problem solving to address real-life connections/applications will be stressed, as well as nurturing the ability to effectively communicate results.
The examination in June, "Algebra 2" is one of the three mathematics examinations that must be passed to be eligible for an Advanced Regents diploma.

ADVANCED ALGEBRA 2 (30380)
Grade: 10
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Advanced Geometry or Departmental Recommendation
Advanced Algebra 2 is the enriched third course in the three-year advanced mathematics sequence. This course will include content from the NYS Next Generation Mathematics Learning Standards. In addition, this course will employ an intensive approach to the study of algebra, functions (especially Exponential, Logarithmic, and Trigonometric), probability and data analysis using pattern/property recognition, and a variety of multiple representations in both a visual/graphic and analytic style. Several additional topics from Pre-Calculus may also be explored. Throughout, an emphasis on reasoning and problem solving to address real-life connections/applications will be stressed, as well as nurturing the ability to effectively communicate/justify results. Successful completion of the course leads to Math Analysis during the next school year. This advanced sequence culminates with Advanced Placement Calculus BC during their senior year.
The Regents examination in June, "Algebra 2", is one of three mathematics examinations that must be passed to be eligible for an Advanced Regents Diploma.

Math

INTERMEDIATE ALGEBRA (30366)
Grade(s): 10-12
Duration/Credit: Year – 1 Unit
Level: All
Prerequisite: Minimum complete of one year of high school level mathematics.
Students enrolled in this course will explore content from Algebra and Geometry. Some of the topics include linear functions, polynomial functions, systems of equations, Pythagorean Theorem, distance formula, and circle. In addition to paper and pencil work, students will use technology (graphing calculator/computer) to explore mathematical concepts. Throughout the course an emphasis on reasoning and problem solving to address real-life connections/applications will be stressed, as well as nurturing the ability to effectively communicate results. This course concludes with a local final exam.

MATH ANALYSIS – Advanced Pre-Calc (32000)
Grade: 11
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Advanced Algebra 2 or Departmental Recommendation
This is an intensive pre-calculus course for juniors intending to pursue Advanced Placement Calculus during their senior year. This course introduces students to extensive topics from advanced algebra, graphical transformations, analytic geometry, trigonometry, number theory, sequences and series, functions, theory of equations, polar coordinates, and an introduction to calculus.

PRE-CALCULUS (32100)
Grade: 12
Duration/Credit: Year – 1 Unit
Level: Regents
Prerequisite: Algebra 2
This is a course designed to provide students with the prerequisites for the study of calculus. Selected topics from regents' math are extended and new topics are introduced. These topics can include advanced algebra, analytical geometry, and the elementary functions, including theory of equations, curve sketching, analytical geometry of straight-line and conic sections, polar coordinates, polynomial and rational functions. Major emphasis is placed on advanced algebra and trigonometry.

DISCRETE MATHEMATICS (33000)
Grade: 12
Duration/Credit: Semester – ½ Unit
Level: ALL
Prerequisite: Algebra 2 or successful completion of three years of high school level mathematics
Discrete Mathematics is the mathematics of decision making in real world settings. Topics studied have many applications in business, computers, and the physical and social sciences. Some of the topics studied include exponential growth and decay, solving systems of equations, graph theory and linear programming. Unifying themes in the course include modeling and the use of mathematics in analysis and decision making.

Math

STATISTICS (33400)
Grade: 12
Duration/Credit: Semester – ½ Unit
Level: ALL
Prerequisite: Algebra 2 or successful completion of three years of high school level mathematics
Statistics is an introductory course in descriptive and inferential statistics with an emphasis on the practical application of these concepts to fields such as business, biology, the social sciences, and engineering. Topics studied include measures of central tendency and dispersion, random variables, probability and probability distributions, z-scores and the normal curve, confidence intervals, correlation, and regression.

Math – Advanced Placement

AP STATISTICS (31900)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Algebra 2
The purpose of the Advanced Placement course in Statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data: Observing patterns and departures from patterns; Planning a Study: Deciding what and how to measure; Anticipating Patterns: Producing models using probability and simulation; Statistical Inference; Confirming models. Students are required to take the Advanced Placement Examination in Statistics (fee required).
Note: Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college statistics course.

AP CALCULUS AB (31500)
Grade: 12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Math Analysis or Pre-Calculus
This course includes the study of topics in elementary functions as well as differential and integral calculus as outlined in the College Board Advanced Placement Calculus syllabus. Fundamental concepts including limits, derivatives, integrals, continuity, maxima/minima, and transcendental functions are developed intuitively with applications to finding areas and volumes, maximizing, and minimizing, curve sketching and rectilinear motion. Students are required to take the Advanced Placement Examination in Calculus AB (fee required). Students may be permitted to take this course concurrently with Pre-Calculus with the approval of the department supervisor. The study will include the use of a graphing calculator.
Note: Students who successfully complete the course and the Advanced Placement Examination in Calculus AB may receive credit for one semester of college level calculus.

AP CALCULUS BC (31600)
Grade: 12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Math Analysis
This is a full-year college-level course that includes the study of topics in elementary functions, differential and integral calculus as outlined in the College Board Advanced Placement Calculus syllabus. Fundamental concepts include limits, differentiation, related rates, theory of extrema, indefinite integrals, Riemann sums, areas & volumes, arc length, techniques of integration, L'Hôpital's Rule, infinite series, improper integrals, parametric, and differential equations. Students may be required to complete a summer problem set prior to the start of the course and will be required to write the Advanced Placement Examination in Calculus BC (fee required). The study will include the use of a graphing calculator.
Note: Students who successfully complete the course and the Advanced Placement Examination in Calculus BC may receive credit for one or two semesters of college level calculus.

Math – Computer Science

AP COMPUTER SCIENCE PRINCIPLES (32600)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Prerequisite: Algebra or Advanced Algebra
This course is designed to be an entry level computer science course for students not majoring in computer science but interested in an introduction to the central ideas of computer science. Students will engage in activities that show how computing changes the world and impacts daily lives. Students will develop step-by-step written solutions to basic problems and will be required to implement these solutions on a computer using a programming language. The topics of study will include digital information, the internet, App design/programming, algorithms, data, and cybersecurity/global impacts.
This course will focus on providing time to complete the AP Computer Science Create Task as well as preparing for the written AP exam. The Computer Science Principles course can lead to AP credit through completion and submission of the Create Task and successful completion of the AP exam. The Create Task focuses specifically on the creation of a computer program, accompanied by video and written responses.
Note: Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college computer science course for non-majors.

INTRODUCTION TO PROGRAMMING (32200)
Grade(s): 10-12
Duration/Credit: Semester – ½ Unit
Level: ALL
Prerequisite: Completion of two years of high school level mathematics
This course serves as an introduction to programming in JAVA. Topics studied include JAVA methods, syntax, data types, selection statements, strings, arrays, logic, and iterative statements.

ADVANCED COMPUTER SCIENCE (32300)
Grade(s): 11-12
Duration/Credit: Semester (Fall) – ½ Unit
Level: All
Prerequisite: Introduction to Computer Programming
This course focuses on topics outlined in the College Board Advanced Placement syllabi for Computer Science A including object-oriented design, primitive data types, Boolean expressions/if statements, and iteration. In addition, students will begin work on the AP Computer Science A Labs.
Dual registration is strongly suggested with AP Computer Science.

Math – Computer Science

AP COMPUTER SCIENCE (PROGRAMMING) (32700)
Grade(s): 11-12
Duration/Credit: Semester (Spring) – ½ Unit
Level: All
Prerequisite: Advanced Computer Science
This course focuses on topics outlined in the College Board Advanced Placement syllabi for Computer Science A including arrays, Array Lists, two-dimensional arrays, inheritance, and recursion. In addition, students will continue to work on the AP Computer Science A Labs. Students enrolled in this course are required to take the Advanced Placement Examination in Computer Science A (fee required).
Note: Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college computer science course.

Music

Music Overview

The Music department offers a variety of courses designed to meet the interests of all Irondequoit students, through the band, orchestra (strings) and vocal programs. Students can meet the state graduation requirement in Fine Arts by earning 1 unit of study in a music performance course. They can also earn a Regents Diploma with Advanced Designation by completing a 5-credit sequence in music, which includes at least 4 credits of performance courses and 1 credit of AP Music Theory.

LEARNING STANDARDS FOR MUSIC

Create

- Generate and conceptualize artistic ideas and work.
- Organize and develop artistic ideas and work.
- Refine and complete artistic work.

Perform

- Select, analyze, and interpret artistic work for presentation.
- Develop and refine artistic techniques and work for presentation.
- Convey meaning through the presentation of artistic work.

Respond

- Perceive and analyze artistic work.
- Interpret meaning of artistic work.
- Apply criteria to evaluate artistic work.

Connect

- Relate and synthesize knowledge and personal experiences to inspire and inform artistic work.
- Investigate ways that artistic work is influenced by societal, cultural, and historical context and, in turn, how artistic ideas shape cultures past, present and future.

Music

CHORALE (72900)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Placement by Assessment
This advanced ensemble sings at the highest possible level for high school students. Dedicated, hard-working musicians who want to sing a challenging variety of repertoire will feel a sense of accomplishment and satisfaction performing in this group.
The choir meets daily during the school day. In addition, each student participates in a sectional once per cycle on a rotating basis (a different period for each 6-day cycle). During these rehearsals and sectionals, members learn and develop proper vocal technique while they prepare for performances. The evening concerts scheduled for the groups are required as part of the course. Evaluation is based on attendance, participation and performance in rehearsals, sectionals and concerts, and individual assessments. Independent practice outside of rehearsals is expected of all members. Placement assessments take place in the spring. Chorale is a mixed choir (soprano, alto, tenor, and bass). Auditions are open to anyone in grades 9–11. However, previous high school choir experience is strongly recommended.

CHAMBER SINGERS/CHORISTERS (73000)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Level: All
Prerequisite: Open Enrollment
Chamber Singers and Choristers perform three, four and five-part music including the opportunity to sing in different voicings (treble, bass, and mixed treble/bass). Members will perform a variety of moderate and challenging music in various styles ranging from pop to classical, and from all time periods. Correct vocal technique and music reading skills are stressed at daily rehearsal.
The choir meets daily during the school day. In addition, each student participates in a sectional once per cycle on a rotating basis (a different period for each 6-day cycle). During these rehearsals and sectionals, members learn and develop proper vocal technique while they prepare for performances. The evening concerts scheduled for the groups are required as part of the course. Evaluation is based on attendance, participation and performance in rehearsals, sectionals and concerts, and individual assessments.
Enrollment in these ensembles is open to any high school student. Both groups are mixed (treble and bass).

Music

JAZZ CHOIR (73400)
Grade(s): 10-12
Duration/Credit: Year – ½ Unit
Level: All
Prerequisite: Placement by Assessment Only
Jazz Choir focuses its attention on jazz music, history, style, vocal improvisation, and the theory that makes jazz unique. Independent practice outside of rehearsals is expected of all members.
Members must perform at all the concerts scheduled. Individual progress, musicality, rehearsal techniques and concert attendance will be taken into consideration when grading. This group performs approximately 6-8 engagements per year.
Jazz Choir meets every other day for one period. Placement assessment is held after midterms and is open to anyone currently in grades 9-11. Previous choir experience is strongly recommended.

MUSIC THEORY AP (73600)
Grade(s): 10-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Music Reading Literacy
This course is designed to provide serious music students with the opportunity to study the foundation, fundamentals, and construction of music. Students will investigate the principles of form, melodic structure, harmonic progressions, counterpoint, modulation, analysis, compositional techniques, and cadential relationships. In addition, students will develop the aural skills necessary to meet the needs of the Advanced Placement Exam.
Homework, quizzes, class participation, and the College Board Advanced Placement Exam are the basis of evaluation and grading procedures.
Students who successfully complete this course will earn a “music knowledge” credit, which in combination with “music performance” credits will yield a sequence in music. All students taking this course must take the Advanced Placement Examination in Music Theory (fee required).

Music

SYMPHONIC ORCHESTRA (72605)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Level: All
Prerequisite: Open Enrollment

This ensemble is for students who play orchestral, stringed instruments. Repertoire is chosen from various historical periods, from Bach to Mozart to 20th Century compositions. In addition, students will study music skills as defined by the New York State Standards for Music. These include the study of history, theory, ear training and listening.

The Orchestra performs several evening concerts throughout the school year. Concert attendance is required as part of this course. The evaluation will be based on performance, effort and progress. In addition, students are required to attend once-per-cycle sectionals. These sectionals take place on a rotating basis (e.g. Week #1 – period 1, week # 2 – period 2, etc.).

Orchestra is an open enrollment course. This course meets for one (1) period every day. Students receive one (1) unit of credit.

PHILHARMONIC ORCHESTRA (72600)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Placement by assessment, previous orchestra experience

This advanced ensemble performs at the highest possible level for high school students. Dedicated, hard-working musicians who want to perform a challenging variety of repertoire will feel a sense of accomplishment and satisfaction performing in this group.

The orchestra meets daily during the school day. In addition, each student participates in a sectional once per cycle on a rotating basis (a different period for each six-day cycle). During these rehearsals and sectionals, members learn and develop proper string techniques while they prepare for performances. The evening concerts scheduled for the group are required as part of the course. Evaluation is based on attendance, participation and performance in rehearsals, sectionals, and concerts. Independent practice outside of rehearsal is expected of all members.

Music

SYMPHONIC BAND (72800)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Participation in a band or lesson group in or outside of the district
This ensemble for wind and percussion players is designed to provide the advancing student musician the opportunity to heighten their performance abilities while becoming exposed to more difficult levels of music. Musical styles will include overtures, marches, popular and contemporary music, plus selections from the more traditional band repertoire.
Symphonic Band will present several evening concerts at school throughout the year, as well as community performances. Concert attendance is required as part of this course. Evaluation will be based on performance, effort, and progress. In addition, attendance at once-a-week sectionals is part of this course. These sectionals take place on a rotating basis (e.g., week #1 - period 1, week # 2 - period 3, etc.). Band rehearsals and sectionals will provide introductory lessons in music history, music theory and ear training. Prior experience playing a band instrument is expected.

WIND ENSEMBLE (72700)
Grade(s): 9-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Junior and/or Senior High band experience, placement assessment
This advanced group, with specific instrumentation, will yield pride and satisfaction for the dedicated and serious performer of woodwind, brass, and percussion instruments. Repertoire for this ensemble is based on the standard literature for band. The difficulty level of the music performed will require dedication and practice.
The Wind Ensemble presents several evening concerts throughout the year in addition to performing at the high school commencement exercises. Concert attendance is required as part of this course. Evaluation will be based on performance, effort, and progress. In addition, attendance at once-a-week sectionals is part of this course. These sectionals take place on a rotating basis (e.g., week # 1 - period 1, week # 2 - period 3, etc.).
Appointment to this musical ensemble is by placement assessment. The instrumentation for this ensemble includes piccolo, flutes, oboes, clarinets, saxophones, bassoons, trumpets, French horns, baritones, trombones, tubas, and percussionists.

Music

JAZZ ENSEMBLE (73300)
Grade(s): 9-12
Duration/Credit: Year – ½ Unit
Level: ALL
Prerequisite: Placement assessment and concurrent membership in a performing ensemble

This ensemble is designed to provide the advanced student performer of saxophones, trumpets, trombones, drum set, bass, keyboard, and guitar the opportunity to perform jazz and contemporary literature.

The Jazz Ensemble will present several evening concerts throughout the year. Concert attendance is required as part of this course. Evaluation will be based on performance, effort, progress and improvisation.

The appointment to this musical ensemble is by placement assessment by the Jazz Ensemble director. The instrumentation for this ensemble includes alto saxophones, tenor saxophones, baritone saxophones, trombones, trumpets, keyboardist, guitarist, bassist, drummer, and percussionists.

The Jazz Ensemble meets for one period every other day.

Physical Education

HEALTH AND PHYSICAL EDUCATION LEARNING STANDARDS

- Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.
- Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.
- Students will understand and be able to manage their personal and community resources.

9th and 10th PHYSICAL EDUCATION
Grade(s): 9-10
Duration/Credit: Year – .25 credit/semester (.5 credit/year)
Level: ALL
Prerequisite: None
The emphasis of this program is to develop lead-up skills to enhance performance, gain knowledge of rules, strategies, and fitness concepts, and to expand students' appreciation of movement experiences in a variety of areas. Students are assessed on knowledge, interaction with others and performance of specific skills.

11th and 12th PHYSICAL EDUCATION
Grade(s): 11-12
Duration/Credit: Year – .25 credit/semester (.5 credit/year)
Level: ALL
Prerequisite: None
At this level, students choose lifelong activities, which contribute to a healthy and energized lifestyle. Students will acquire an understanding and appreciation of movement activities. Students are assessed on knowledge, interaction with others and performance of specific skills.

UNIFIED PHYSICAL EDUCATION
Grade(s): 9-12
Duration/Credit: Year – .25 credit/semester (.5 credit/year)
Level: ALL
Prerequisite: None
This program is designed to meet the needs of students with intellectual and physical disabilities. All activities are adapted to meet the needs of our Unified PE students. This allows for joint PE experience between PE students and their Peer Partners.

Physical Education

EQUIVALENT PROGRAM OPTION
Grade(s): 11-12
Duration/Credit: Year – .25 credit/semester (.5 credit/year)
Level: ALL
Prerequisite: See below

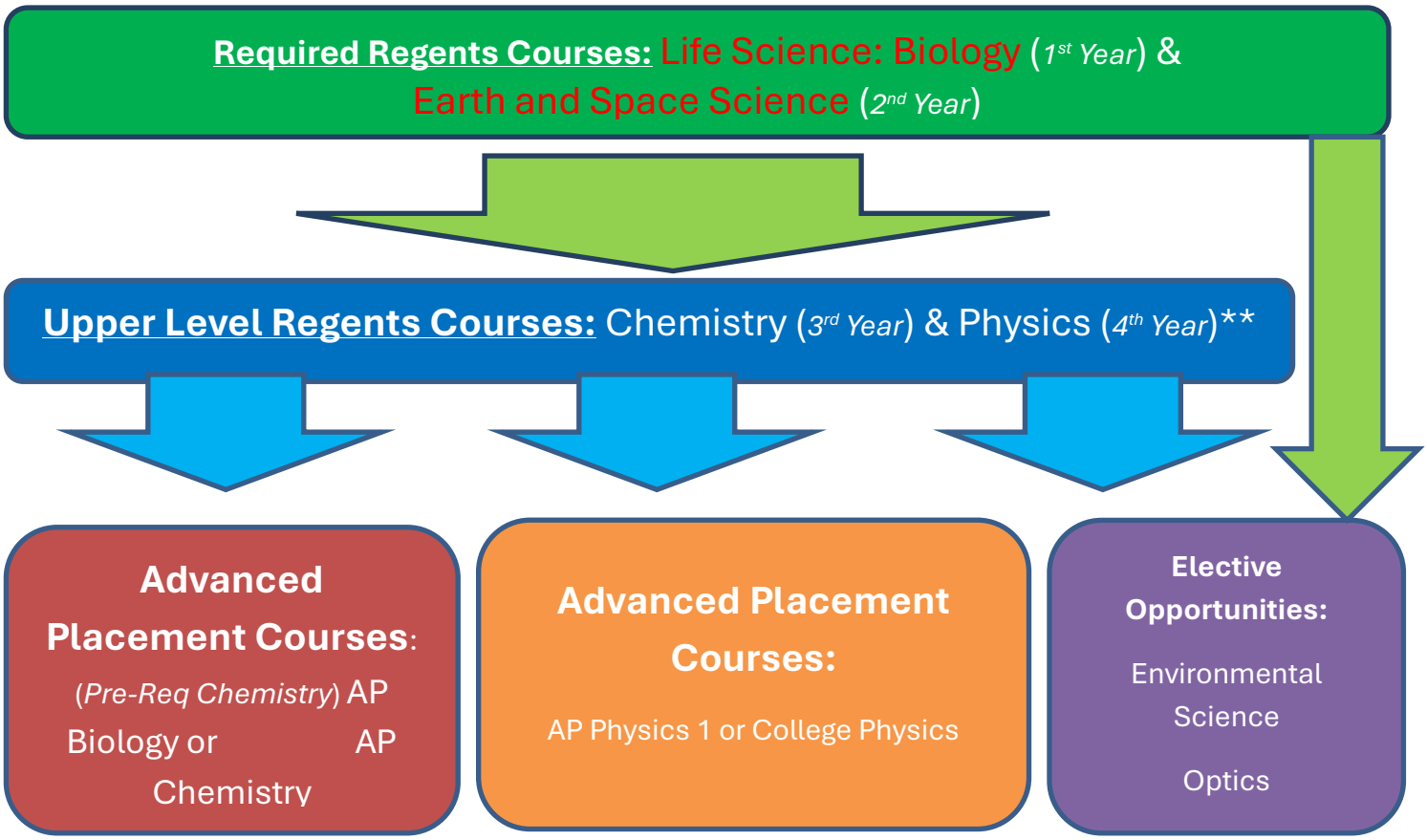
11th or 12th grade students who are currently with their physical education credit and have met the requirements are eligible for this program. An interscholastic sport or an approved outside activity may qualify a student to opt out of physical education class for a quarter. No more than two quarters per year for scholastic sports and only one quarter per year for an outside activity.

Science

Helpful Information:

- Incoming students must successfully complete **3 credits** in science to satisfy graduation requirements (1 Regents exam for a Regents Diploma, 2 Regents exams for a Regents Diploma with Advanced Designation).
- We recommend at least **4 credits of science** for ***all*** students, with experience in all four core science disciplines (*Earth and Space Science, Life Science: Biology, Chemistry, and Physics*).
- Acceleration in 8th grade is ***not*** a requirement for participation in AP® science coursework.
- All Regents level courses require the successful completion of **1200 minutes of laboratory work** to sit for the Regents Exam. ***The lab requirement must be met for students to be eligible for participation in summer tutorial or test prep programs.***
- All science courses culminate in a Regents or AP® examination with the following exceptions:
    - ***Environmental Science, Optics (0.5)*** and ***Insights in Chemistry (0.5)*** are local level courses with a comprehensive final exam and/or a portfolio assessment.
    - Participation in ***Independent Research*** could include competition in the New York State Science Congress. All participants are expected to present the results of their work at a public symposium at the conclusion of the school year.

A Typical Sequence Includes:



Science

LIFE SCIENCE: BIOLOGY RGT (40500)
Grade(s): 9 (10-12)
Duration/Credit: Year – 1 Unit
Prerequisite: None
This course provides a comprehensive exploration of biology concepts and principles, aligned with the New York State Science Learning Standards (NYSSLS). Students will engage in an in-depth study of the living world, focusing on the structure, function, growth, origin, evolution, and distribution of living organisms. Students will develop a deep understanding of biological concepts and their applications, as well as conduct scientific investigations and experiments to explore biological phenomena. Students will be asked to analyze and interpret data to draw evidence-based conclusions as they explore real-world biological problems. The Life Science, Biology course includes a required Regents exam and the successful completion of three required state labs. Students will need to complete 1200 minutes of laboratory work.

EARTH & SPACE SCIENCE RGT (40000)
Grade(s): 10 (9,11,12)
Duration/Credit: Year – 1 Unit
Prerequisite: None
This course aligns with the New York State Science Learning Standards (NYSSLS) and provides students with a comprehensive understanding of the fundamental concepts and practices in Earth and space sciences. Students will engage in the study of key topics which include space systems, history of Earth, Earth's systems, weather and climate, and human sustainability. Students will develop and use models to understand these complex systems, and construct explanations and design solutions based on scientific evidence. Students will analyze and interpret data to make informed decisions and engage in argumentation from evidence to support scientific claims. The Earth & Space Science course includes a required Regents exam and the successful completion of three required state labs. 1200 minutes of laboratory work is required.

CHEMISTRY RGT (40900)
Grade(s): 11 (10, 12)
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Life Science: Biology and Algebra 1
Chemistry is an important course for students planning a career in science, engineering, science education, health-related fields, or any other area requiring knowledge of chemicals.
Students will spend at least one day per class cycle in the laboratory. Through the experiments conducted, students will be introduced to the chemical principles, which form the foundation of this field of science. Students will develop skills in making observations, analyzing data, and drawing conclusions. The focus of this course will be devoted to the study of these major areas: atomic theory, mole concepts, kinetic theory, atomic structure, chemical bonding, and principles of chemical reactions. The Regents examination in Chemistry is required. 1200 minutes of laboratory work is also required.

Science

PHYSICS RGT (41300)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Life Science: Biology and Algebra 1, successful completion of Algebra 2 (or concurrent enrollment)

This is a Physics course that follows state guidelines in content and achievement level. This college preparatory course is considered a prerequisite for most four-year college programs. Students will study problem solving techniques and participate in laboratory activities in mechanics, heat, electricity and magnetism, waves and optics, and modern physics. The skills and concepts developed will help prepare students for the demands of our ever-growing technical society. It is a course that is enjoyed by all and is necessary for those who want a well-rounded science background. The Regents examination in Physics is required. 1200 minutes of laboratory work is also required.

Science – Advanced Placement

BIOLOGY AP (41300)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Life Science: Biology and Physical Science/Chemistry
For students pursuing careers in the health sciences, it is recommended that Physics also be part of your four-year, comprehensive plan.
Advanced Placement Biology is designed to prepare students for a career in any field of science. This course will challenge students to attain a depth of understanding of biology based on the Four Big Ideas of: Evolution, Cellular Processes (including energy production and usage as well as communication), Information Transfer (with a genetic focus), and Interactions at the molecular, cellular, organismal, and ecosystem levels. Advanced Placement Biology is also designed to be the equivalent of the introductory biology course usually taken during the first year of college. Students interested in examining the facts, principles and processes of modern biology while receiving college credit, should enroll in Biology AP.
AP Biology requires completion of a multi-part summer assignment involving text-based and hands-on investigations. Additional details will be provided by the instructor within a brief summer meeting at the end of the current school year.
All students taking this course must take the Advanced Placement Examination in Biology (fee required).

CHEMISTRY AP (41600)
Grade: 12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Physical Science/Chemistry, as well as completion of or concurrent enrollment in Regents or AP-1 Physics/College Physics
Chemistry AP is for students considering a career in science or engineering who want to receive college credit for a high school course. The Advanced Placement Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students in this course will attain a depth of understanding of fundamentals and competence in dealing with chemical problems. Topics of study will focus on 6 Big Ideas: Atomic Structure and Reactivity, Chemical Bonding and Phases of Matter, Chemical Reactions and Energy Changes, Chemical Kinetics, Thermodynamics, and Chemical Equilibrium. Class activities are supplemented with inquiry-based lessons and laboratory activities.
All students taking this course must take the Advanced Placement Examination in Chemistry (fee required).

Science – Advanced Placement

AP PHYSICS 1 (41100)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Earth and Space Science, Life Science: Biology, Physical Science Chemistry and Geometry
AP Physics 1 is an excellent choice for students considering future studies or careers in science, technology, engineering, or mathematics (STEM) fields. AP Physics 1 is a rigorous high school course designed to provide students with a foundational understanding of fundamental principles in physics through inquiry-based hands-on experiences. Students explore topics such as mechanics, kinematics, dynamics, and fluids. The course prepares students for the AP Physics 1 exam, offering an opportunity to earn college credit (three credits) and equipping them with the analytical and quantitative skills essential for success in STEM fields. All students taking this course must take the Advanced Placement Examination in Physics 1 (fee required).

COLLEGE PHYSICS (41150)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Earth and Space Science, Life Science: Biology, Physical Science Chemistry and Geometry, Algebra 2
College Credit: MCC Dual Enrollment
College Physics is an excellent choice for students considering future studies or careers in science, technology, engineering, or mathematics (STEM) fields and would like to experience the level of rigor of an introductory college level science class. College Physics is designed in collaboration with MCC faculty to provide students with a foundational understanding of a broad range of fundamental principles in physics. Students explore topics such as mechanics, kinematics, dynamics, optics, modern physics, electricity and magnetism. This course offers optional dual credit through MCC in the fall and spring semesters. Students may earn up to eight credits (four in the fall and four in the spring). Students will be provided with registration information in the fall.
All students taking this course must take the Advanced Placement Examination in Chemistry (fee required).

Science – Advanced Placement

Important consideration when selecting AP Physics 1 or College Physics course.

Rigor and preparation for AP Physics C: AP Physics 1 and College Physics share fundamental principles in mechanics but differ in depth, pace, and expectations. AP Physics 1 is tailored to high school students and covers a broad range of topics, including kinematics, dynamics, and energy, with a focus on algebra and trigonometry. While it provides a strong foundation and engages students in quantitative analysis and hands-on experiments, the pace of the course is not as high as that required in college physics. The College Physics course, on the other hand, covers a wider variety of topics including electricity and magnetism, which are not covered in AP Physics 1. Students who are interested in taking AP Physics C as seniors may take either course, but will be most prepared for AP C, if they take College Physics.
Financial Considerations: Earning college credit in AP Physics 1 or College Physics requires payment for exam enrollment or college tuition fees. AP Physics 1 exam fee is generally less expensive than the tuition cost for MCC college credit each semester. Financial assistance is available for those who qualify. Be sure to discuss your options with your school counselor and/or AP/MCC Coordinator.

Post Secondary Plans: *Colleges and Universities may have different policies when awarding credit for AP or MCC credits. Be sure to consult with your counselor and college websites for more information on their policies.*

PHYSICS C-AP (41200)
Grade: 12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of AP-1 Physics and Calculus AB or BC (concurrently)
This is a second college physics course designed for potential engineering and science majors in college. Mechanics, electricity, and magnetism are covered with an emphasis on problem solving. This course will prepare a student for a first-year college engineering course (with calculus).
AP Physics C requires completion of a short math skills review packet so that students can begin the year familiar with key skills required for success in the course, such as algebraic manipulation, geometry, trigonometry, and graph analysis.
All students taking this course must take two Advanced Placement examinations- AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism. (fee required).

Science

ENVIRONMENTAL SCIENCE (40700)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Prerequisite: Successful completion of Life Science: Biology and Earth and Space Science or with permission from Science Supervisor
Environmental Science is a course designed to stimulate students to investigate current environmental issues through the lens of scientific inquiry. The topics explored in Environmental Science build upon the basic interactions between the physical environment and living organisms that are taught in our Earth Science and Living Environment courses. Students will also research environmental issues of local and global significance with an emphasis on applying scientific inquiry skills to the analysis of current environmental issues. Environmental Science is intended to serve the needs of students who desire to complete a three-year science sequence at IHS or who wish to extend their science experience beyond our Regents and Advanced Placement level course offerings. Students who study Environmental Science are encouraged to continue their program of study in science by registering for Regent's chemistry or physics as a fourth year of science. Students who enroll in Environmental Science will be expected to complete a portfolio of student work as part of their assessment in the course.

OPTICS (40410)
Grade(s): 11-12
Duration/Credit: Semester – 1/2 Unit
Prerequisite: Successful completion of Life Science: Biology and Earth and Space Science or with permission from Science Supervisor
***Can be combined with Insights in Chemistry as a full year, 1.0 credit in Physical Science**
College Credit: MCC Dual Enrollment
How is a hologram made? How does the FBI use optics to find criminals? What do optics and photonics have to do with the operation of my cell phone? Find answers to these questions and more within this physical science course designed to develop your understanding of light and its' applications to everyday life. This class will provide hands-on opportunities for students to learn about the behavior of light, how we measure light, and how light is used in technology and industry. Career options will be explored.
Optics/Insights in Chemistry is intended to serve the needs of students who desire to complete a three-year science sequence at IHS or who wish to extend their science experience beyond our Regents and Advanced Placement level course offerings. Students who study Optics/Insights in Chemistry are encouraged to continue their program of study in science by registering for Regent's chemistry or physics as a fourth year of science.
OPTICS: This course is also available for optional dual credit through MCC. Upon registration and successful completion of this half-year course, students will earn credit toward a 2-year associate degree or 1-year certificate in Optical Systems Technology at MCC.

Science

INSIGHTS IN CHEMISTRY (40920)
Grade(s): 11-12
Duration/Credit: Semester – 1/2 Unit
Prerequisite: Successful completion of Life Science: Biology and Earth and Space Science or with permission from Science Supervisor
***Can be combined with Optics as a full year, 1.0 credit in Physical Science**
This is a hands-on course in which students will have the opportunity to explore concepts related to Chemistry, including but not limited to relevant historical and current events in the field, "real-world" applications, decision-making and safety, and the exploration of career opportunities.
Insights in Chemistry/Optics is intended to serve the needs of students who desire to complete a three-year science sequence at IHS or who wish to extend their science experience beyond our Regents and Advanced Placement level course offerings. Students who study Insights in Chemistry/Optics are encouraged to continue their program of study in science by registering for Regent's chemistry or physics as a fourth year of science.

INDEPENDENT SCIENCE RESEARCH PROJECT (40710)
Grade(s): 9-12
Duration/Credit: Year - 1 Unit OR Semester– 1/2 Unit
Prerequisite: Requires approval of science supervisor
This course is designed to offer an opportunity to individual students in grades 9-12 to design and conduct a scientific investigation in a field of interest, without replacing the normal course of study in the sciences. Students will work with a faculty advisor and a mentor from the scientific community. In addition, students are expected to write a research report and present their work to a forum of faculty, students, and the community.

Social Studies

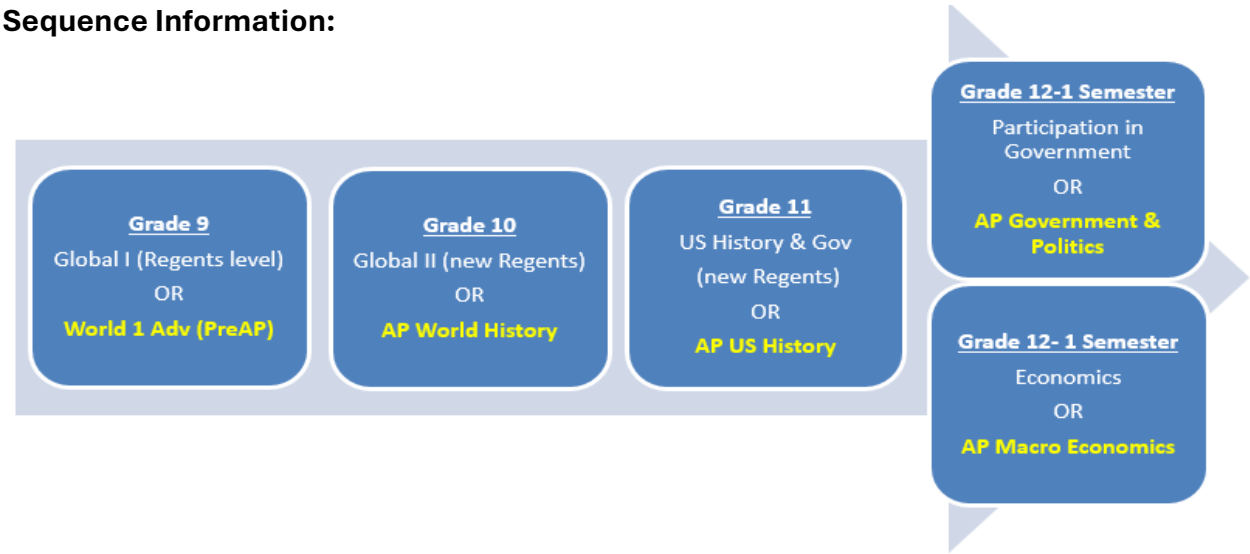
Department Mission: *Challenging students to question the world around them and appreciate diversity as they become engaged citizens in a global community.*

The New York State K-12 Social Studies Framework has enabled our curriculum to make the necessary shifts to ensure all students are learning essential 21st century knowledge and skills to construct a meaningful understanding of the world's history and its impact on today. Standards can be found on https://www.nysed.gov/sites/default/files/programs/curriculum-instruction/ss-framework-9-12.pdf. The Standards are divided into two sections for high school Social Studies: the 9-12 Social Studies Practices, which identify the essential reasoning, reading, and content specific skills, and the content standards, which identify the conceptual understandings and content necessary for understanding today's world within a historical context.

Graduation Requirement Information: Students are required to take and pass 5 Social Studies courses: Global History & Geography I, Global History & Geography II, US History & Government, Participation in Government (1 semester), and Economics (1 semester). Two of these courses have Regents Exams, Global History & Geography (10th Grade) and US History & Government (11th grade), passing at least one of which is required for graduation.

Department Requirements: All seniors will have the opportunity to participate in a Citizenship Conference in January or May, and complete an accompanying portfolio targeting the essential question, "What does it mean to be an active and engaged citizen?" In addition to required course work, students can earn the NYS Seal of Civic Literacy.

Course Sequence Information:



Course Offerings – ELECTIVES	UNIT	GRADE LEVEL			
		9	10	11	12
Psychology	**1/2**		*	*	*
Sociology	**1/2**		*	*	*
AP European History	**1**			*	*
AP Psychology	**1**			*	*
History of Warfare	**1/2**			*	*

Social Studies

GLOBAL HISTORY I (20160)
Grade: 9
Duration/Credit: Year - 1 Unit
Level: Regents
Prerequisite: 8th grade Social Studies
This chronological study of global history examines the eras from ancient times through the Age of Nationalism as outlined in the NYS Social Studies Framework. This course focuses on analyzing enduring issues through history as students consider the economic, political, social, and geographic development of the world, beginning in Ancient Times through the Age of Exploration. Reading, writing, speaking, thinking, and study skills are emphasized. Additionally, students will also consider the often-marginalized voices in history as they craft their understanding of the historical narrative of the world. Student progress is assessed in a variety of ways including performance tasks, essays, research, project based learning, seminars, and tests as well as locally developed midterm and final exams which are modeled on the NYS Global History Regents (which is taken after the second year of the course and only assess 10th grade material). The final exam for this course is locally designed and administered.

WORLD HISTORY I ADV (20502)
Grade): 9
Duration/ Credit: Year - 1 Unit
Level: Advanced
Prerequisite: Grade 8 Social Studies and teacher recommendation
Summer Project: Yes
This course focuses on developing students' abilities to think conceptually about World History from approximately 8000 BCE to 1750 and apply historical thinking as they learn about the past. There are five themes of equal importance that provide areas of historical inquiry for investigation throughout the course. These five areas include environment, cultures, state-building, economic systems and social structures. World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe and Oceania, with special focus on historical developments and processes that cross multiple regions.
The program prepares students for intermediate and advanced college courses by gradually moving towards making similar cognitive demands upon students to foster their abilities to think like historians, most notably to analyze evidence about the past and to create persuasive historical arguments.
All course summative assessments are locally developed and administered, including the Final Assessment in June.

Social Studies

GLOBAL HISTORY II (20500)
Grade: 10
Duration/Credit: Year - 1 Unit
Level: Regents
Prerequisite: 9th Grade Social Studies
Global History 2, the second part of the chronological Global History curriculum, examines modern world history, starting from the Age of Revolutions to the issues facing the world today. Chronologically, these eras include such major events as the Industrial Revolution, imperialism and later decolonization, World War I and II, Cold War and subsequent global developments, globalization, and current events. Enduring themes in history, such as human rights, environmental issues, development of technology, and conflict and interdependence are also deeply considered throughout this course. There is a continued focus on skill development, critical thinking, cooperative skills, gathering, processing, and analyzing information to apply historical concepts and develop evidence-based arguments and interpretations. Additionally, students will also consider the often-marginalized voices in history as they craft their understanding of the historical narrative of the world.
Assessments for the course include performance tasks, such as a research paper, tests and seminars and a midterm exam. Students will take the Global History Regents Exam in June. Successful completion of the examination is required for graduation.

AP WORLD HISTORY (20501)
Grade: 10
Duration/ Credit: Year - 1 Unit
Level: Advanced
Prerequisite: Grade 9 Social Studies and teacher recommendation
Summer Project: Yes
College Credit: AP* ***(fee required)***
Exam: AP and NYS Global History Regents Examination
AP World History is a full year introductory college course, providing students with opportunities to develop the analytic skills and content knowledge necessary to think critically about enduring issues in history. Students will learn to think like historians, analyzing evidence from the past to create persuasive historical arguments. The course focuses on the time period of 1200 CE to present day. There are five themes of equal importance that are analyzed throughout the course: environment, cultures, state-building, economic systems and social structures. These themes of historical significance are considered within five major regions studied throughout the course: Africa, the Americas, Asia, Europe, and Oceania. Special focus is on developments and processes that cross multiple regions. Students will be expected to challenge college-level texts and clearly express evidence-based arguments in their writing.
The final examination will be a Regents Examination in Global History in June. Successful completion of this examination is required for graduation. Additionally, students are also expected to sit for the AP World History examination in May.

Social Studies

U.S. HISTORY & GOVERNMENT (20900)
Grade: 11
Duration/Credit: Year - 1 Unit
Level: Regents
Prerequisite: Global Studies 2 or equivalent
This course focuses on the history of our country and the development of the American democratic government. Throughout this course, students will tackle the central issues in American history, beginning in colonial America and stretching into the modern day. In addition to exploring familiar concepts such as separation of powers and the causes of industrialization, students will also consider the often-marginalized voices in history as they craft their understanding of the historical narrative of the United States.
The final examination will be a Regents Examination in United States History and Government. Successful completion of this examination is required for graduation.

US HISTORY AP (20750)
Grade(s): 11-12
Duration/Credit: Year - 1 Unit
Level: Advanced
Prerequisite: Global History 1 & 2
Summer Project: Yes
College Credit: AP* (fee required)
This course focuses on the history of our country and the development of our democratic government through seven major historical units, including Unit I: Constitutional Foundations for the United States Democratic Republic; Unit II: Industrialization of the United States; Unit III: The Progressive Movement: Responses to the Challenges Brought About By Industrialization and Urbanization; Unit IV: At Home and Abroad: Prosperity and Depression, 1917 - 1940; Unit V: The United States in an Age of Global Crisis: Responsibility and Cooperation; Unit VI: 1950 to Present. The theme of geography is taught throughout the year. The course includes a variety of assessment tools including writing tasks that develop historical thinking skills.
The final examination will be a Regents Examination in United States History and Government. Successful completion of this examination is required for graduation. Additionally, students are also expected to sit for the AP U.S. History examination in May.

Social Studies

ECONOMIC (21600)
Grade: 12
Duration/Credit: Semester - 1/2 Unit
Level: Regents
Prerequisite: United States History and Government
Economics is a required semester course emphasizing the basic principles, relationships, and institutions characteristic of the modern American economy. Included in the curriculum are essential concepts such as supply and demand, measurements of economic performance, monetary and fiscal policy, and the globalization. Special attention is directed to the consumer economics and international trade. Practical skills, simulations, case studies, data analysis, seminars, and performance assessments, designed to enhance the students understanding of concepts, are an integral part of the economics program.

AP ECONOMICS – MACROECONOMICS (21630)
Grade: 12
Duration/Credit: 1/2 Year- 1/2 Unit
Level: Advanced
Prerequisite: United States History and Government and Algebra 2/Trigonometry or equivalent
Summer Project: Yes
College Credit: AP* ***(fee required)***
Exam: AP Exam
This AP course will cover basic microeconomics concepts of scarcity, opportunity costs, comparative advantage and the tools of supply and demand. The course will also include macroeconomics topics of measurement of economic performance, national income, monetary and fiscal policy, inflation, and unemployment. In the course we will examine the role of government in correcting market failure, redistribution of income, and analyze issues of inflation and unemployment. Students will discuss public policy issues related to economic topics facing our nation.
Students will be required to one Advanced Placement Macroeconomics Examination in the Spring (fee required). College credit may be received based on the policy of the college and the grade earned on the exam. Students planning to attend college should consider this course to earn college credit while meeting graduation requirements in Social Studies. This course will meet the requirements for Economics through the completion of a required cumulative exam.
*Students enrolled in this course must also be enrolled in AP Government & Politics.

PARTICIPATION IN GOVERNMENT (21400)
Grade: 12
Duration/Credit: Semester - 1/2 Unit
Level: Regents
Prerequisite: United States History & Government
Participation in Government examines the role of the citizen in a democracy. Students will explore our structure of government, analyze and evaluate current public policy issues that face the nation and the world including the role of political parties, media, and interest groups. Students are required to provide regular written expressions of their ideas, analysis, evaluation, and solution to the topics of study throughout the course. This is a required semester course.

Social Studies

AP GOVERNMENT & POLITICS (21635)
Grade: 12
Duration/Credit: 1/2 year - 1/2 Unit
Level: Advanced
Prerequisite: United States History & Government R, or AP United States History
Summer Project: Yes
College Credit: AP* ***(Fee required)***
AP Government and Politics is a college-level introduction to key political concepts, ideas, interactions, policies, institutions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Throughout the course, you will read and analyze U.S. foundational documents, with a specific focus on the Constitution, and key Supreme Court decisions, as you grapple with the questions central to understanding how liberty and justice exist in American society. You will find a unique and rigorous opportunity to immerse yourself in the analysis of issues and ideas that are pivotal in our democratic government and society. In this course, you will be expected to read and interpret data, develop evidence-based arguments, and engage in an applied civics or politics research-based project, providing you with the key conceptual understandings that will prepare you to be an active and engaged citizen.
Those who enroll will be required to sit for the AP Exam in May. This course will also meet the requirements for Participation in Government.
*Students enrolled in this course must also be enrolled in AP Economics-Macroeconomics.

SOCIOLOGY (21800)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None
Sociologists study the interactions between groups of people and the influence they have on each of us. In Sociology, students will focus on the cause of deviance in our society, the reasons for child abuse and the growing impact of cults on young people's lives through a study of research as well as through several relevant and hands-on experiences. Sociology will help students to look at the world around them through class activities and discussions, expert speakers, and the interesting course material itself.
Final assessment will consist of an examination and/or authentic assessment portfolio which will demonstrate the level of student overall achievement in Sociology.

Social Studies

HISTORY OF WARFARE (22102)
Grade(s): 11-12
Duration/ Credit: Semester– 1/2 Unit
Level: All
Prerequisite: None

Always wished your history class had more time to look at the actual battles and military leaders of different wars, not to mention the sacrifices of common soldiers. Then this is your class. This course will mainly focus on the wars that the U.S. had been involved in starting with WWI through Iraq and Afghanistan, while at times looking at other conflicts at different time periods. We start with understanding foundational principles of warfare, mainly through the teachings of Sun Tzu, who many believe to be the greatest military strategist of all time. You will learn about strategies, tactics, logistics, attack and defense measures, various weaponry and how they apply to the different battles we will discuss. In addition, you may have at one time or another said, "Thank you for your service" to a veteran. By the end of the course, you will have the opportunity to explain what that phrase may individually mean to you from what you have learned throughout the course on what soldiers may experience in war. We, as a society, must never forget those who have served and given their lives for the freedoms and ideals of this country. Student evaluation will be based on unique research projects, group activities, assessments, mini presentations and homework completion.

PSYCHOLOGY
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Level: All
Prerequisite: None

The purpose of the course is to give students an introductory overview of psychology. Content includes the study of each of the following topics in psychology: personality theory; abnormal psychology (clinical applications); developmental psychology, cognitive psychology, social psychology, and brain research. Evaluation is based on class participation, assignment completion, project performance and a series of quizzes and unit exams.

Social Studies

PSYCHOLOGY AP (22100)
Grade(s): 11-12
Duration/Credit: Year - 1 Unit
Level: Advanced
Prerequisite: None
Summer Project: No
College Credit: AP* ***(fee required)***
The Advanced Placement program in psychology is tailored to introduce students to the systematic and scientific study of human behavior and mental processes. Students learn about the psychological principles as well as the methods psychologists use in their practices. AP Psychology is a survey course emphasizing the history of psychology as a science, the different explanations of human behavior, and the modern research methods utilized by psychologists. Stress is given, though not limited to, the following areas of psychology: neuroscience, developmental psychology, sensation and perception, personality theory, cognition, motivation and emotion, abnormal psychology, and social psychology. Lastly, students will gain understanding of the importance of ethics in both scientific research and the practice of psychology.
College credit may be received based upon the policy of the college and the grade earned on the required Advanced Placement Examination in Psychology (fee required).

THE ART OF TEACHING 1 (21710)
Grade(s): 9-10
Duration/Credit: Year - 1 Unit
Level: Advanced/Dual Credit
Summer Project: No
College Credit: MCC Dual Enrollment
Curious about the education field? Wondering if education is the field for you? This is a yearlong, pre-collegiate course for high school students, grades 9 and 10. This dual-credit course explores the basic principles of education, including classroom management, pedagogies of teaching, history of our educational system and the problems within, culturally responsive and sustaining education, and more! Throughout the class, students will engage in dialogue, practice creating lessons, consider various issues in education, and learn from experts in the field.

Social Studies

THE ART OF TEACHING 2 (21712)
Grade(s): 11-12
Duration/Credit: Year - 1 Unit
Level: Advanced/Dual Credit
Pre-requisites: The Art of Teaching
Summer Project: No
College Credit: MCC Dual Enrollment

If you are looking to expand your understanding of the field of education, this is the next step in your path! Art of Teaching 2 builds on the learning from Art of Teaching. You will enhance the foundations learned in Art of Teaching including experiences for applying understanding of instructional pedagogy to lesson planning, engaging with students in a classroom setting, deepening awareness of social-emotional learning, and culturally responsive and sustaining practices. Additionally, students will explore the many roles within the educational field in addition to teachers. Students will synthesize the roles these principles play in the modern field of education and develop their own philosophy of education.

Technology

DID YOU KNOW?

- **Five different Technology Education classes can count toward a third unit of MATH or SCIENCE credit?**
- **You can receive COLLEGE credit for many Technology classes: DDP, POE, Architectural Engineering, Robotics & Automation and Electricity and Alternative Energy.**
- **You may choose to complete a TECHNOLOGY sequence for an Advanced Regents Diploma.**

See your Tech Teacher for details!

START HERE if you are interested in taking a TECHNOLOGY EDUCATION class:

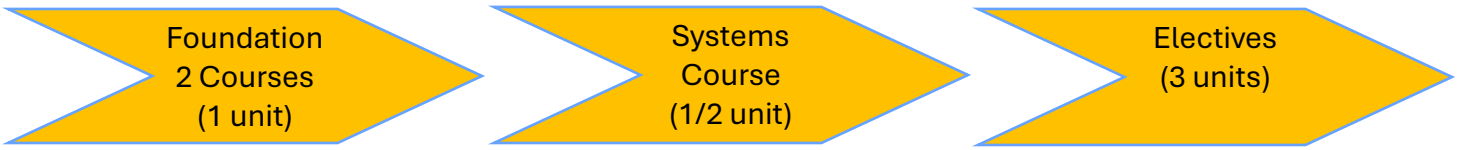
AUTO Service	BUILDING TRADES	DESIGN AND DRAWING
Land, Sea and Air Transportation Auto Service Modern Power Technology Consumer Auto Essentials	Furniture and Cabinet Making Modern Residential Structures Building Trades Electricity and Alternative Energy	Design and Drawing for Production (DDP) Engineering Drawing **INFORMATION TECHNOLOGIES** Communication Systems Graphic Communications

Prior experience needed before taking the following courses:

Advanced Auto Service – previous automotive course
Advanced Building Trades – previous building trades course
Architectural Engineering – DDP
Principles of Engineering – DDP
Robotics and Automation – DDP

Technology Overview

TECHNOLOGY EDUCATION: 5 Unit Sequence



• Electricity and Alternative Energy (1/2 unit) • Auto Service (1/2 unit) • Modern Residential Structures (1/2 unit) • DDP (1 unit) (1/2 unit Foundation, 1/2 unit Elective) *In addition, Career and Financial Management is required (1/2 unit)*	• Furniture and Cabinet Making (1/2 unit) • Communication Systems (1/2 unit) • Land, Air and Sea (1/2 unit) *In addition, Career and Financial Management is required (1/2 unit)*	• Modern Power Tech (1/2 unit) • Consumer Auto Essentials (1/2 unit) • Advanced Auto Service (2 units) • Building Trades (1/2 unit) • Advanced Building Trades (2 units) • Engineering Drawing (1/2 unit) • Principles of Engineering (1 unit) • Robotics and Automation (1 unit) • Architectural Engineering (1 unit) ***Any Foundation or Systems Course not completed previously.***

TECHNOLOGY EDUCATION CLUBS

Construction Club in room 1000 = The Building Trades Shop
If you like working with wood, then the Construction Club might be for you. Additionally, there are always miscellaneous wood projects that you could work on.

Torque Club in room 1013 = The Auto Shop
If you like working on cars, motorcycles, or boats, or if you just like tinkering with mechanical devices, this is the club for you. If you like working with your hands and don't mind getting dirty, come and see us in room 1013!

Makerspace in room 1010 = The Engineering Lab
A makerspace is a place where students can gather to create, invent, tinker, explore and discover using a variety of tools and materials. Please stop down to room 1010 every Thursday if you like to tinker. All students and staff are welcome - make your ideas a reality. Engineering focused.

Technology

LAND, SEA and AIR TRANSPORTATION (82500)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
This course will provide the student with the opportunity to explore how boats float, why planes fly and how automobiles get their power. Students will construct models to demonstrate how these devices work. Evaluation is based on class activities with the emphasis on quality and quantity of hands-on work. This course is designed for all students interested in transportation devices.

AUTO SERVICES (82600) ***(Basic Auto Repair)***
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
This activity-based course is an introductory course for automotive service. Activities and lessons will center on understanding the major systems and components of the automobile. Live work will be accomplished on student, faculty, or shop cars. Evaluation is based on assignments, tests, worksheets, and hands-on work. Course emphasis will be placed on giving the student many different auto repair scenarios and the proper methods, tool usage and economics of each repair.

MODERN POWER TECHNOLOGY (80300)
(Engines and Drivetrain)
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None - Land, Sea, and Air Transportation and/or Auto Service are suggested
This course will focus on engine operation, performance, service, and alternative energy transportation. Within this course students will analyze and service the inner workings of internal combustion engines. Students will explore different modes of alternative energy transportation from electric to hydrogen and beyond. Additionally, modern drivetrain systems and their relation to various vehicle power sources will be explored.

Technology

ADVANCED AUTO SERVICE (80500) (This course can count toward a 3rd unit of Science credit)
Grade(s): 11-12
Duration/Credit: Year, double period - 2 Units
Prerequisite: Prior courses in Automotive
College Credit: MCC Dual Enrollment
This course is designed for students with a greater than average interest in the automobile. Advanced Auto Service will involve 75% of the students' time in diagnosis and repair of automotive systems. Emphasis is placed on quality diagnosis and accurate repair. Parts ordering and communication with the customer are included in the daily activities. Work will be concentrated on vehicles with the focus of attention on computer-controlled systems. Students selecting this course are those that are considering employment in the field of automotive, the automotive industry or have a strong hobby interest in automobiles. Evaluation is based on assignments, tests and quality of work accomplished. Students can elect to take this course for college credit through MCC.
*Students may take this course for 2 units of Technology credit **or** 1 unit of Technology and 1 unit of Science credit. Students should consult their counselor to discuss appropriate options.*

CONSUMER AUTO ESSENTIALS (81905)
(Auto operation, maintenance & ownership)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
This course is designed for the person who is or will be the owner of a car. This is a survival course for those who do not understand the operation of the automobile and wish to become a more knowledgeable consumer. Work will center around the repairs and maintenance of a vehicle. Class discussion will involve normal maintenance and repair that can be accomplished by the vehicle owner. Evaluation will involve worksheets, tests, and student involvement in lad activities. This course is for any student who wishes to know more about the operation and maintenance of a car.

FURNITURE AND CABINET MAKING (82700)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
Carpentry Systems will focus on furniture making and modern cabinetry making methods. Students will create a unique individual project of their own design, while learning traditional furniture making basic carpentry skills. Students with an artistic and creative flair are encouraged to take this course.

Technology

MODERN RESIDENTIAL STRUCTURES (82750)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
Modern Residential Structures will explore the initial planning, to final site completion of a residential dwelling. Students will design and construct models applying current building codes and design the parameters of their residential structure. Material selection for construction will highlight green technology and low environmental impact.

BUILDING TRADES (80700)
(Plumbing, Heating and Ventilation)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
Building Trades will explore the finishing steps to a residential structure which includes insulation, drywall, tile, flooring and all related sub-systems. Students will develop an understanding of the use of green materials for a sustainable product and their part in modern construction. In addition, students will learn how to make provisions for materials to complete finish work in a structure.

ADVANCED BUILDING TRADES (80800)
(This course can count toward a 3rd unit of Math credit)
Grade(s): 10-12
Duration/Credit: Year, double period - 2 Units
Prerequisite: Prior courses in Building Trades
This course is a study of how wood frame structures are built, remodeled, and maintained. Plenty of experience using the tools and equipment of the carpenter is gained through the actual building of a wood frame structure such as a gazebo or a work/storage shed, deck or patio.
Students are exposed to techniques, materials and methods that are in common practice today. The course could serve some students as a springboard to a career in carpentry. Students will be able to develop skills with the transit, tape measure, water level, power saws, drills, and a multitude of hand tools.
*Students may take this course for 2 units of Technology credit **or** 1 unit of Technology and 1 unit of Math credit. See your counselor to discuss appropriate options.*

Technology

ELECTRICITY & ALTERNATIVE ENERGY (81700)
Grade(s): 9-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: None
College Credit: MCC Dual Enrollment
Electricity and Alternative Energy will provide students with an introduction to electricity, electrical circuits and alternative forms of energy including wind, solar and hydro. Students will construct electrical circuits to power electrical equipment of various designs. Green technologies will be explored. Conservation concepts such as reducing our demand on electrical consumption will be a focus of students' work.
Students who pass this course have been pre-approved to receive college credit for ELT 130 from Monroe Community College. They must co-register and pay tuition to MCC at a reduced rate. Forms and information will be available at the beginning of the school year.

DESIGN AND DRAWING FOR PRODUCTION (DDP) (80600)
(This satisfies the Art/Music graduation requirements)
Grade(s): 9-12
Duration/Credit: Year - 1 Unit
Prerequisite: None
College Credit: MCC Dual Enrollment
This course is the starting point for all engineering students. By working through a variety of technical drawing problems and product design activities, students will master the output of 2-D drawings while creating 3-D solid models on the computer. Students will leave this class with a basic understanding of the manufactured world and the important communication role that designers and drafters have. All work is done on high performance computers using Autodesk Inventor software. Evaluation is based both on the quantity and quality of the drawings completed and the work is often self-paced. This course is a must for anyone interested in engineering, design, manufacturing, or other technical careers. *Students who pass this course have been pre-approved to receive college credit for MET 101 (first year drafting) from Monroe Community College. They must co-register and pay tuition to MCC at a reduced rate. Forms and information will be available at the beginning of the school year.*
**NOTE: This course may be used to fulfill the entire graduation requirement in art/music. Students should consult their counselor to discuss appropriate options.*

Technology

PRINCIPLES OF ENGINEERING (80900)
(This course can count toward a 3rd unit of Math or Science credit)
Grade(s): 10-12
Duration/Credit: Year - 1 Unit
Prerequisite: Drawing and Design for Production - math, science, and computer interest helpful
College Credit: RIT Dual Enrollment
So, you think you want to be an engineer? What better way than to take an engineering course in high school? This survey course examines many of the diverse opportunities available in this dynamic field. Students will research engineering schools and areas of specialty, to help better their college selection process. If you like to solve problems, tinker and experiment, then the hands-on format of this class is for you. Students will construct ballistic launchers, mouse trap powered race cars and VEX robotics projects to name a few of the performance-based activities. If you need a math or science unit to graduate, then you are in the right place. Even better, how about going to college already having earned some credit? Students can choose to take this course for RIT credit to get a head start on their college careers. *Please note, this is an upper-level Project Lead the Way (PLTW) course.*
*Students may take this course for 1 unit of Technology credit **or** 1 unit of Math **or** Science credit. Students should consult their counselor to discuss appropriate options.*

At IHS, we are proud to offer a comprehensive Technology Education program. While we offer traditional Technology Education courses, we are also affiliated with Project Lead the Way (PLTW). We offer five PLTW courses: DDP, POE, Digital Electronics, Architectural Engineering and Robotics and Automation. PLTW has developed a sequence of courses which, "when combined with college preparatory mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering and engineering technology prior to entering college." Students may receive college credit for any of the PLTW classes offered and for several of our traditional Technology classes as well.
For more information about PLTW, please visit **PLTW.org**.

ENGINEERING DRAWING (80601)
Grade(s): 10-12
Duration/Credit: Semester - 1/2 Unit
Prerequisite: Design and Drawing for Production (DDP)
An advanced drawing course aimed at students who were previously successful in DDP and will continue in engineering. Students will focus on the technical aspects of the drafting field such as dimensioned working drawings and technical illustrations. Students will learn skills in communicating with design teams and groups while also performing reverse engineering tasks. The class will be taught in the main engineering classroom, allowing the students to be exposed to 3-D printing, CNC machining and laser engraving. Inventor will continue to be the drawing software of choice.

Technology

ROBOTICS AND AUTOMATION (83100)
(This course can count toward a 3rd unit of Math credit)
Grade(s): 10-12
Duration/Credit: Year - 1 Unit
Prerequisite: Drawing and Design for Production
College Credit: RIT Dual Enrollment
This course applies principles of robotics and automation. The course builds on computer solid modeling skills developed in Design and Drawing for Production. Students will learn to use and program precision computer-controlled machines such as a CNC Mill, CNC Lathe, and CNC Robotic arms equipment to produce actual models of their three-dimensional designs. Students will develop an understanding of fundamental concepts used by engineers of robotics used in automated manufacturing systems. In this course, students will take a project all the way through the production process from design analysis and production. *This course meets Project Lead the Way Computer Integrated Manufacturing requirements*. Students may take this course for 1 unit of Technology credit **or** 1 unit of Math credit. *Students should consult their counselor to discuss appropriate options*.
Students may choose to take this course for college credit from RIT.

ARCHITECTURAL ENGINEERING (81300)
(This course can count toward a 3rd unit of Math or Science credit)
Grade(s): 10-12
Duration/Credit: Year - 1 Unit
Prerequisite: Design and Drawing for Production
College Credit: RIT Dual Enrollment
Architectural Engineering is the study of Civil Engineering and Architecture (CEA.) This course includes an introduction to many of the varied factors involved in building designs and construction. This includes building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.
The major focus of Architectural Engineering course is to expose students to the design and construction of residential and commercial building projects. Students will work independently and in design teams as they explore and apply communication methods specific to the CEA profession. Teamwork is essential as students engage in activity-project-problem-based learning. Students will analyze and electronically design structures and build physical models of residential and commercial facilities.
This course meets Project Lead the Way Civil Engineering and Architecture requirements.
*Students may take this course for 1 unit of Technology credit **or** 1 unit of Math **or** Science credit. Students should consult their counselor to discuss appropriate options*.
Students may choose to take this course for college credit from RIT.

Technology

Technology

REQUIRED FOR ANY TECHNOLOGY SEQUENCE

CAREER AND FINANCIAL MANAGEMENT (57400)
Grade(s): 10-12
Duration/Credit: Semester – 1/2 Unit
Prerequisite: None
College Credit: MCC Dual Enrollment
This course is designed to provide the necessary day-to-day skills that students will need when they are living on their own and working full-time. These skills and traits include the use of credit (loans/credit cards), checking/banking, completing a tax return, personal finances, taxes, health/dental/life/car insurance, benefits, retirement, and career planning. Students take an exam at the end of the course. If passed, a certificate is made and provides evidence of financial literacy. THREE COLLEGE CREDITS may be earned as an option for those students who wish to enroll in dual-credit program through MCC (tuition required – savings of nearly $1800 compared to a private college). Any student interested in obtaining a sequence in Business needs to successfully complete this course.

ALTERNATIVE OPTION

INDEPENDENT STUDY – TECHNOLOGY
Grade(s): 11-12
Duration/Credit: One quarter to a year – 1/4 Unit to 1 Unit
Prerequisite: Instructor's approval
This is an opportunity for students to do an in-depth technological student or to work in an area where the technology teacher may aid you in activities outside the formal curriculum. Independent Study may be taken in any one of the curriculum areas offered by the technology education department.

World Languages - Overview

SEQUENCES and LEVEL DESCRIPTIONS

FRENCH GERMAN ITALIAN SPANISH Each level upon completion = 1 credit				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5 or AP**
• Introductory level. • Basic language skills (reading, writing, listening, speaking) and vocabulary. • Cultural analysis and comparison. • Students must pass the Level 1 course and final to earn a Regents diploma.	• Continued focus on development of basic skills with emphasis on writing, speaking, listening, reading. • More sophisticated methods of communication. • Regional exploration, cuisine, holidays.	• Greater flexibility with language. • Deeper understanding of culture. • Students must pass West Irondequoit Level 3 final exam to earn a Regents diploma with Advanced Designation.	• Increased sophistication of communication. • Real life applications. • Wide variety of texts. • Dual credit offered.	• Highest levels of language offered. • Geared to prepare students for advanced and collegiate studies. • Opportunities for travel abroad. • Opportunity for Seal of Biliteracy. • Dual credit or AP offered.

THE NEW YORK STATE SEAL OF BILITERACY!

Show that you are Literate in two languages, RIGHT ON YOUR DIPLOMA!

The New York State Seal of Biliteracy is a graduation designation for students who have studied and performed strongly in a world language course through level 5. Successful candidates are recognized with a seal on their diplomas, indicating that they are literate in English and another language.

Attainment of the Seal of Biliteracy is a way for students to make themselves stand out and be more marketable to colleges, scholarships and employers!

Today, most colleges and universities require *a minimum* of two years of high school foreign language instruction for admission.

The West Irondequoit School District is one of the few districts of its size in the NATION to offer **4 languages and 1 non-traditional language EACH YEAR!**

World Languages

DEPARTMENT FLOW CHART

Dake	**Dake**	**Dake**	**Dake**
German 7 (Grade 7)	Spanish 7 (Grade 7)	Italian 7 (Grade 7)	French 7 (Grade 7)
German 1 (Grade 8)	Spanish 1 (Grade 8)	Italian 1 (Grade 8)	French 1 (Grade 8)
↓	↓	↓	↓
IHS	**IHS**	**IHS**	**IHS**
German 2 (Grade 9)	Spanish 2 (Grade 9)	Italian 2 (Grade 9)	French 2 (Grade 9)
German 3 (Grade 10)	Spanish 3 (Grade 10)	Italian 3 (Grade 10)	French 3 (Grade 10)
German 4 (Grade 11)	Spanish 4 (Grade 11)	Italian 4 (Grade 11)	French 4 (Grade 11)
German 5 or German AP	Spanish 5 or Spanish AP	Italian 5 (Grade 12)	French 5 (Grade 12)

World Language
1/2 Credit Elective
Changes Every Year

World Languages

EARN COLLEGE CREDIT THROUGH MCC DUAL ENROLLMENT - 1/3 THE COST OF MCC - TRANSFERRABLE

DUAL ENROLLMENT COURSES IHS/MCC	
COURSE	**Transferrable MCC Credits**
French 4	3-5 credits
French 5	3-5 credits
Italian 4	3 credits
Italian 5	3 credits
Spanish 4	3-5 credits
Spanish 5	3-5 credits

EARN COLLEGE CREDIT THROUGH
ADVANCED PLACEMENT (AP)
SPANISH * GERMAN

Only **9% of Americans are bilingual** compared with a rate of 65% in the rest of the world.

Only **5.6% of the world's total population speaks English** as a primary language.

Unique 1/2 credit elective!

WORLD LANGUAGE: TBD for 2026-2027

Discover a non-traditional language and culture alongside your teacher!
Past courses include Greek, Japanese, Arabic, Mandarin, Russian and even Swahili!

World Languages

In a world made small by sophisticated technology, we can no longer afford to ignore the way people of other countries think and live. The study of foreign languages is the key to understanding others and living peacefully with them. In addition, the knowledge of another language is a positive asset for career preparation, especially when combined with a specialization in fields such as engineering, business, law, medicine, etc. On a purely individual level, there is great personal satisfaction in being able to converse with others in their native languages.

LEARNING STANDARDS

- Students will be able to use a language other than English for communication.
- Students will develop cross-cultural skills and understanding.

MODERN LANGUAGE LEVEL 1
(French, German, Italian, Spanish)
Grade(s): 8-12
Duration/Credit: Year - 1 Unit
Level: All
Prerequisite: None
These courses are designed to provide students with an introduction to the particular language and culture, including the development of the skills basic to second language acquisition: listening/understanding, speaking, reading and writing. Cultural and historical factors will be examined in the context of the language learning experience. Communication will focus on a variety of topics centered around family, school, and everyday life. Evaluation will be based on quizzes, tests, individual/group projects, and homework participation. New York State no longer offers Regents exams in foreign languages. Successful completion of this level is required of all students for high school graduation.

MODERN LANGUAGE LEVEL 2
(French, German, Italian, Spanish)
Grade(s): 9-12
Duration/Credit: Year - 1 Unit
Level: All
Prerequisite: Level 1 or departmental recommendation
These courses are designed to provide students with the second level of instruction in language and culture, including the continued development of the skills basic to second language acquisition: listening/understanding, speaking, reading, and writing. Cultural factors will be examined in the context of the language learning experience. Communication will focus on an ever-increasing variety of topics discussed in the present, past and future. Evaluation will be based on quizzes, tests, individual/group projects, homework participation and a local final exam.

World Languages

MODERN LANGUAGE LEVEL 3
(French, German, Italian, Spanish)
Grade(s): 9-12
Duration/Credit: Year - 1 Unit
Level: All
Prerequisite: Level 2 or departmental recommendation
These courses are designed to provide students with an ever-greater flexibility in the usage of the foreign language and a wider familiarity with its culture. Communication will focus on a variety of topics designed to bring the students closer to fluency. Evaluation will be based on quizzes, tests, individual/group projects and homework participation. Regents' exams are no longer offered in foreign languages. Students are required to pass the West Irondequoit Level 3 final exam to earn a Regents diploma with Advanced Designation.

MODERN LANGUAGE LEVEL 4
(French, German, Italian, Spanish)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Level 3 or departmental recommendation
College Credit: MCC Dual Enrollment (French, Spanish, Italian)
This course is designed for students continuing their study of language past the Level 3 requirement for a Regents Diploma with Advanced Designation. The overall goal of each course is for students to be able to understand, speak and write about a variety of topics with detail. Students will also be able to write in a more sophisticated way, using more nuanced vocabulary and increasingly complex language structures. Instructional materials may include current periodicals, authentic taped lectures, poetry, short stories, music, films and videos. Students in French, Italian and Spanish may opt to enroll for dual credit through MCC (fee required).

World Languages

MODERN LANGUAGE LEVEL 5 & AP
(French, German, Italian, Spanish)
Grade(s): 11-12
Duration/Credit: Year – 1 Unit
Level: Advanced
Prerequisite: Level 4 or departmental recommendation
College Credit: MCC Dual Enrollment

These courses are designed to increase sophistication and complexity with the language studied, and to prepare students for continued language study in college. The overall goal of this course is to prepare students to understand, speak and write about a variety of topics, including those that are unfamiliar, with detail. Students will also be able to write in a more sophisticated way, using more nuanced vocabulary, as well as complex language structures. Instructional materials include more authentic sources. Students who complete a Level 5 course with an 85% or higher and complete portfolio requirements will be eligible to receive the Seal of Biliteracy designation on their high school diploma, distinguishing them as literate in both English and the language studied. Seniors in German and Spanish who take Advanced Placement are required to take the AP exam (fee required). All languages offer a dual enrollment option at this level of language study.

Advanced Placement Courses - summer work, is either required or highly recommended. Please see the teacher before the end of the school year for more details.

WORLD LANGUAGE COURSE (54502)
Target Language for 2025-2026: TBD
Grade(s): 9-12
Duration/Credit: Semester or Year - 1/2 Unit (course offering subject to enrollment and staffing)

This course is designed to give students and a "teacher-coach" the opportunity to explore together, at an introductory level, a language and culture not taught in the regular modern language program. The "teacher-coach" will have the unique role of learning together with students. The course will have an inter-disciplinary approach, rather than a foreign language learning approach. Integration of other disciplines will be a major focus, as students explore the many aspects of the culture, history, art, music, economics, traditions, etc. of the language. This course may be offered on alternating days (ACE or BDS) throughout the year or every day for one semester.

EASTERN MONROE CAREER CENTER

West Irondequoit recognizes the Eastern Monroe Career Center (EMCC) vocational programs as a complement to our comprehensive high school program for students who have a strong interest in a specialized vocational or career field. EMCC programs provide high school students the opportunity to develop the skills and attitudes they will need to succeed in their chosen career. EMCC combines real-life learning experiences, academic skills, and business and industry partnerships to prepare graduates for future education and employment endeavors.

Students attend a half-day session every school day. Schedules are designed so you can still take courses at IHS and participate in extracurricular activities. Three credits are earned for each course. The West Irondequoit Central School District pays for tuition and busing. Certain EMCC courses require uniforms and safety equipment. There may be an additional cost for college credit. Consult your IHS counselor with any questions.

Students who successfully complete an approved career and technical education program earn a Career and Technical Education endorsement on their Regents diploma by:

- completing all high school graduation requirements, including Regents examinations
- passing a state or national technical assessment
- completing a work-based experience and employability profile.

EMCC Enrollment Process

1. Individual meeting with school counselor to discuss progress toward graduation and possibility of EMCC program in relation to career goals. Some EMCC programs require pre-requisites completed at IHS.
2. Visit EMCC program.
3. Return completed EMCC Enrollment Application with parent/guardian signature to Mrs. Cook in the College and Career Center no later than February 2026.
4. Applications are reviewed by a committee that considers application completion/quality, progress toward graduation, current grades and attendance/behavior using a rubric that is found on the reverse side of the application.
5. Students and parents are notified of committee decision by April. ***Please note that all approvals are dependent on space availability in the EMCC program.***
6. Attend parent/guardian Orientation Night at EMCC in June.

Please use this link EMCC Program Guide 2024-2025 to find out all the courses offered through EMCC including information about College Credit Options, Articulation Agreement and Dual Credit.

New Visions Programs

EMCC offers a selective medical and education program for seniors. There is a separate application process which is reviewed by a committee at EMCC.