

# **MEXICO ACADEMY & CENTRAL SCHOOL**

*Inspiring Excellence and Leadership in All!*



## High School Course Guide 2024-2025



## Table of Contents

| <b><u>TOPIC</u></b>                      | <b><u>PAGE</u></b> |
|--|--------------------|
| Mexico Pride                             | <b>3</b>           |
| High School Directory                    | <b>4</b>           |
| Academic Policies, Services and Programs | <b>5</b>           |
| College Level/AP Courses                 | <b>6</b>           |
| Graduation Requirements                  | <b>9</b>           |
| Course Descriptions:                     |                    |
| Art                                      | <b>12</b>          |
| English                                  | <b>16</b>          |
| Family and Consumer Science              | <b>20</b>          |
| Mathematics                              | <b>22</b>          |
| Music                                    | <b>25</b>          |
| Physical Education                       | <b>28</b>          |
| Science                                  | <b>31</b>          |
| Social Studies/Leadership                | <b>36</b>          |
| Technology                               | <b>41</b>          |
| World Language                           | <b>45</b>          |
| CiTi                                     | <b>53</b>          |



# **Mexico Pride**

## **Vision:**

Recognized as a school district that inspires excellence and leadership in all!

## **Mission:**

Educate and motivate our students to be successful, responsible citizens.

## **Core Beliefs:**

We put students first.

All students can learn.

We provide a safe, secure environment for all.

Collaboration among students, staff, families, and the community is essential to our success.

Our schools are the heart of our community.

We value creativity and innovation.

We lead with honesty and integrity.

Our supportive and rigorous learning environment nurtures the whole child.

All are treated with dignity, respect, and compassion.



## High School Directory

### **Telephone:**

315-963-8400

Main Office x5118

Assistant Principal's Office x5317

Athletic Director's Office x5019

Student Services Office x5109

Technology Office x5419

### **Student Services:**

315-963-8400

#### **Counselors**

Laura Hyde x5310

Caryn Muckey x5313

Carlie Morley x5311

#### **School Psychologist**

Victoria Galbraith x5312

### **Administrators:**

#### **Principal**

Chris Soluri x5319

#### **Vice Principal**

Brittany Wiley x5117

#### **School Social Worker**

#### **Director of Health/Athletics**

Andrew Gates x5317

#### **Director of Technology**

Candace Fitzgerald x5020

x5115

Melissa Terzulli x5141

#### **School-Based Mental Health Counselor**

Courtney LaVere X5252

Jamie Eipp X5116

#### **Sr. Typist/Registrar**

Kim Waldron x5109

Melissa Kempisty x5315

***Alma Mater***

*Near the blue Ontario's waters our Alma Mater dear- Awakens found ambitions in new hearts, year by year. Happiness, and hope, and friendship her children shall not lack-while guided by the spirit of the Orange and the Black.*



## **Academic Policies, Services, and Programs**

### **School Counseling Services:**

The School Counseling staff in Student Services assists students to develop an academic program, consider career options and helps in the areas of personal/social/emotional decision-making and problem solving. It is important that the student, teacher, counselor, and parent work closely together to develop an educational plan appropriate for each student. January to March each year, the school counselors meet individually with students to schedule for the next year based on interests, grades, and teacher recommendations. Parents are welcome to come at this time! After the meeting, students will bring home a completed copy of the proposed program for the upcoming year.

Parents are encouraged to contact the school counselor at any time for academic program, social, emotional and/or personal concerns, in addition to post-graduate goals.

Each year the school counselors meet with students in a class setting to explore career interests, do career interest surveys, and explore possible colleges and pathways, based on students' interests. Programs and assessments can be accessed at school AND at home!

### **Course Load Expectations:**

Students in grades 9 – 11 will be required to carry a minimum of 6.5 credits for the year, and seniors must be enrolled for a minimum of 5.5 credits for the year.

### **Course Changes, Adds and Drops:**

Students may request to add or drop a course within the first three weeks of its start. The final changes will occur after the student has met with his/her counselor and received written permission to make changes to his/her schedule from a parent. These changes are only allowed for changing classes, NOT FOR CHANGING A TEACHER.

The deadline for requesting an add/drop is the midpoint of the course (this would mean 10 weeks for a 20-week course and 20 weeks for a 40-week course). Any request for changes that occur beyond the three weeks start of the class and fall at the midpoint of the class will require written authorization from: student, parent, counselor, and teacher. However, any request to add/drop after the course's midpoint will require the principal's written authorization.



## Mexico High School College Level Courses

| <b>Mexico Dual Enrollment Courses</b> | <b>College Course Name</b>  | <b>College Course Credit</b> | <b>Tuition Required (Y/N)</b> |
|---------------------------------------|-----------------------------|------------------------------|-------------------------------|
| <b>Spanish 4**</b>                    | <b>OSW SPA 201</b>          | <b>3</b>                     | <b>Y</b>                      |
| <b>Spanish 5**</b>                    | <b>OSW SPA 202</b>          | <b>3</b>                     | <b>Y</b>                      |
| <b>German 4**</b>                     | <b>OSW GER 201</b>          | <b>3</b>                     | <b>Y</b>                      |
| <b>German 5**</b>                     | <b>OSW GER 202</b>          | <b>3</b>                     | <b>Y</b>                      |
| <b>French 4**</b>                     | <b>OSW FRE 201</b>          | <b>3</b>                     | <b>Y</b>                      |
| <b>French 5**</b>                     | <b>OSW FRE 202</b>          | <b>3</b>                     | <b>Y</b>                      |
| <b>Pre-Calculus**</b>                 | <b>CCC MAT 106</b>          | <b>3</b>                     | <b>N</b>                      |
| <b>Intro Environ Sci**</b>            | <b>Morrisville ENSC 100</b> | <b>3</b>                     | <b>Y</b>                      |
| <b>IED/DDP/PLTW**</b>                 | <b>--RIT PLTW-101</b>       | <b>3</b>                     | <b>Y</b>                      |
| <b>CIM/PLTW**</b>                     | <b>--RIT PLTW-105</b>       | <b>3</b>                     | <b>Y</b>                      |
| <b>POE/PLTW**</b>                     | <b>--RIT PLTW-102</b>       | <b>3</b>                     | <b>Y</b>                      |
| <b>DE/PLTW**</b>                      | <b>--RIT PLTW-103</b>       | <b>3</b>                     | <b>Y</b>                      |
| <b>Health**</b>                       | <b>CCC HEA 104</b>          | <b>3</b>                     | <b>N</b>                      |
| <b>English 12**</b>                   | <b>OCCEng103/104</b>        | <b>6</b>                     | <b>N</b>                      |
| <b>Digital Photography **</b>         | <b>CCC Art 253</b>          | <b>3</b>                     | <b>N</b>                      |
| <b>Advanced Painting</b>              | <b>CCC Art 104</b>          | <b>1</b>                     | <b>N</b>                      |
| <b>Weight Training / PE **</b>        | <b>CCC PE 130</b>           | <b>1</b>                     | <b>N</b>                      |
| <b>Weight Training Prac / PE **</b>   | <b>CCC PE 131</b>           | <b>1</b>                     | <b>N</b>                      |
| <b>Fitness Center 1 / PE **</b>       | <b>CCC PE 161</b>           | <b>1</b>                     | <b>N</b>                      |
| <b>Fitness Center II / PE **</b>      | <b>CCC PE 162</b>           | <b>1</b>                     | <b>N</b>                      |



## Mexico High School College Level Course Cont.

| <b>Mexico Distance Learning Courses</b> | <b>College Course Name</b> | <b>College Credit</b> | <b>Tuition Required</b> |
|---|----------------------------|-----------------------|-------------------------|
| <b>Intro to Psychology</b>              | <b>CCC PSY 101</b>         | <b>3</b>              | <b>N</b>                |
| <b>Intro to Justice Systems</b>         | <b>CCC CJ 111</b>          | <b>3</b>              | <b>N</b>                |
| <b>Intro Sociology</b>                  | <b>CCC SOC 101</b>         | <b>3</b>              | <b>N</b>                |
| <b>Criminology</b>                      | <b>CCC CJ 220</b>          | <b>3</b>              | <b>N</b>                |
| <b>American Sign Language I</b>         | <b>OCC ASL 101</b>         | <b>3</b>              | <b>N</b>                |
| <b>American Sign Language II</b>        | <b>OCC ASL 102</b>         | <b>3</b>              | <b>N</b>                |
| <b>American Sign Language III</b>       | <b>OCC ASL 201</b>         | <b>3</b>              | <b>N</b>                |
| <b>American Sign Language IV</b>        | <b>OCC ASL 202</b>         | <b>3</b>              | <b>N</b>                |
| <b>Intro to Cultural Anthro.</b>        | <b>OCC ANT 152</b>         | <b>3</b>              | <b>N</b>                |
| <b>Philosophy-Ethics</b>                | <b>OCC PHI 108</b>         | <b>3</b>              | <b>N</b>                |
| <b>Public Speaking</b>                  | <b>OCC COM 210</b>         | <b>3</b>              | <b>N</b>                |
| <b>General Biology I</b>                | <b>CCC BIO 103</b>         | <b>4</b>              | <b>N</b>                |
| <b>General Biology II</b>               | <b>CCC BIO 104</b>         | <b>4</b>              | <b>N</b>                |
| <b>Critical Thinking</b>                | <b>OCC PHI 103</b>         | <b>3</b>              | <b>N</b>                |
| <b>Personal Finance</b>                 | <b>CCC ECON 102</b>        | <b>3</b>              | <b>N</b>                |
| <b>Mexico On-Line Courses</b>           | <b>College Course Name</b> | <b>College Credit</b> | <b>Tuition Required</b> |
| <b>Personal Health</b>                  | <b>CCC HTLH 104</b>        | <b>3</b>              | <b>N</b>                |
| <b>Basic Nutrition</b>                  | <b>CCC BIO 209</b>         | <b>3</b>              | <b>N</b>                |
| <b>Principles of Business</b>           | <b>CCC BUS 103</b>         | <b>3</b>              | <b>N</b>                |
| <b>Human Communications</b>             | <b>CCC COMM 130</b>        | <b>3</b>              | <b>N</b>                |
| <b>Intro Psychology</b>                 | <b>CCC PSY 101</b>         | <b>3</b>              | <b>N</b>                |
| <b>Intro Sociology</b>                  | <b>CCC SOC 101</b>         | <b>3</b>              | <b>N</b>                |
| <b>Personal Finance</b>                 | <b>CCC ECON 102</b>        | <b>3</b>              | <b>N</b>                |

|                 |            |   |   |
|-----------------|------------|---|---|
| Web Page Design | CCC CS 235 | 3 | N |
|-----------------|------------|---|---|



## Mexico High School AP Course and Exams

| Mexico HS Courses | AP Exam                      |
|-------------------|------------------------------|
| English 12 AP     | English Lit and Composition  |
| English 12 AP     | English Lang and Composition |
| AP World History  | World History                |
| AP US History     | US History                   |
| AP Calculus       | Calculus AB                  |
| AP Music Theory   | Music Theory                 |
| AP Biology        | Biology                      |
| AP Chemistry      | Chemistry                    |
| AP Physics        | Physics                      |

### ***Students taking Advanced Placement Courses:***

- ***The AP examination offered in May is mandatory for all students enrolled in advanced placement courses.***
- ***A fee of approximately \$95.00 is required for this examination.***
- ***The granting of AP and college credit is determined by the individual policies of the post-secondary college the student plans on attending. Students should call the Admissions Office of the college to determine course acceptance.***





# Graduation Requirements

## Diploma Types

- Advanced Regents Diploma: 8 exams at 65+
- Regents Diploma: 5 exams at 65+
- Local Diploma
  - For students with disabilities who have an Individualized Education Program (IEP). See below for additional information.
  - For English as a New Language (ENL) learners who have taken the ELA exam at least twice and scored 55-59 on this exam can appeal. They can also appeal a 60-69 score on one additional exam. See below for the appeals process.
  - For any student who has passed 3 required Regents exams with a 65 or higher and 2 Regents exams with a score of 60-64 for which an appeal has been granted.

For students with disabilities, a minimum score of 55 on the five required examinations will be acceptable for local credit and a local diploma will be issued. There are several safety net options available to students with disabilities who do not score a 55 on the five required exams to graduate with a local diploma, including:

- Low-Pass Safety Net Option
- Low-Pass Safety Net Option with Appeal
- Compensatory Safety Net Option
- Superintendent Determination Option

Students should consult with their school counselor for eligibility.

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## Pathway Diploma Options

New York State has introduced new options to meet graduation requirements. The Regents exams that satisfy the testing requirements for a Regents and Advanced Regents Diploma remain. The state has also designated alternative “pathways” to satisfy diploma requirements, generally through a variation in required exams.

The school counselor and student will develop a program to meet the graduation requirements. Parents who have any questions about graduation requirements are strongly encouraged to contact their child’s counselor.



## Graduation Requirements Cont.

### Pathway Cont.

To meet the exam requirements, students must pass 4 exams + 1 pathway. All students must pass one Regents exam or Department-approved alternative in each of the four subject areas (English, Mathematics, Science, Social Studies), plus one pathway. Note: If students are not able to earn a passing score of 65 on the Regents exams, they may be eligible for Appeals, Safety Nets, and/or Superintendent Determination.

**Multiple Pathways...**allow students choice in the exams they pass to earn a diploma. To complete a pathway, students must:

Arts Pathway...Earn a passing score on a department approved pathway exam in the Arts to earn the Arts Pathway.

CDOS (Career Development and Occupation Studies) Pathway... Complete 216 hours of CTE coursework (about 2 courses) that includes 54 hours of Work Based Learning, complete a career plan and an Employability profile, or pass a department approved CDOS pathway exam.

CTE (Career and Technical Education Pathway)...Successfully complete a Department approved CTE program, including 3-5 CTE courses and earn a passing score on the 3-part technical exam (final exam).

Humanities Pathway...Earn a passing score on one additional Regents exam or Department approved alternative in English or Social Studies.

LOTE (Languages other than English) Pathway...Earn a passing score on a Department approved pathway exam in a language other than English.

STEM (Science, Technology, Engineering, and Mathematics) Pathway...Earn a passing score on one additional Regents exam or Department approved alternative in mathematics or science.

## **Regents Diploma**

### **Required Courses**

|                            |                    |
|----------------------------|--------------------|
| <b>English:</b>            | <b>4 credits</b>   |
| <b>Social Studies:</b>     | <b>4 credits</b>   |
| <b>Math:</b>               | <b>3 credits</b>   |
| <b>Science:</b>            | <b>3 credits</b>   |
| <b>LOTE:</b>               | <b>1 credit</b>    |
| <b>Art/Music:</b>          | <b>1 credit</b>    |
| <b>Health:</b>             | <b>0.5 credit</b>  |
| <b>Physical Education:</b> | <b>2 credits</b>   |
| <b>Electives:</b>          | <b>3.5 credits</b> |

**Total: 22 credits**

## **Advanced Regents Diploma**

### **Required Courses**

|                            |                    |
|----------------------------|--------------------|
| <b>English:</b>            | <b>4 credits</b>   |
| <b>Social Studies:</b>     | <b>4 credits</b>   |
| <b>Math:</b>               | <b>3 credits</b>   |
| <b>Science:</b>            | <b>3 credits</b>   |
| <b>LOTE:</b>               | <b>3 credit</b>    |
| <b>Art/Music:</b>          | <b>1 credit</b>    |
| <b>Health:</b>             | <b>0.5 credit</b>  |
| <b>Physical Education:</b> | <b>2 credits</b>   |
| <b>Electives:</b>          | <b>1.5 credits</b> |

**Total: 22 credits**

### **Required Regents Exams**

**English Language Arts**

**Algebra I**

**Social Studies (1 exam)**

**Science (1 exam)**

**One Pathway Assessment**

**\*Must have a passing score of 65**

### **Required Regents Exams**

**English Language Arts**

**Algebra I**

**Geometry and Algebra II**

**Global History and Geography**

**U.S. History and Government**

**Science (2 exams)**

**\*Must have a passing score of 65 and above. A passing grade on a local LOTE exam after the third year of study is required. Students may substitute 5 units of business, technology, art or music for the 3-unit LOTE requirement.**

**See your counselor for details.**



## **Graduation Requirements Cont.**

### **Art/Music**

All students must complete a minimum of 1 unit of credit in Art/Music. The following courses are acceptable:

- Studio Art
- Treble Choir
- Mixed Choir
- Select Choir
- Symphonic Band

Intro to Engineering (DDP/PLTW)

Design Drawing for Production

### **55-64 Passing Score and Compensatory Safety Net**

The following students qualify for the 55-64 passing score and compensatory safety net:

- Students with disabilities identified through a Committee on Special Education. Specific language regarding the availability of the safety net does not have to be indicated on the student's individualized education program (IEP).
- Students with disabilities identified through the Section 504 team if recommended and documented on the student's 504 Accommodation Plan.
- Students with disabilities declassified while in grades 8-12 if recommended and documented by the CSE on the student's declassification plan.

## **Appeals Process**

The Board of Regents has an appeals process for students who score 60-64 on a required Regents exam. A student, the student's parent/guardian, or a teacher on the student's behalf, may initiate an appeal if the following criteria are met:

- Has taken the Regents exam in question two times.
- Has earned a score on the Regents exam under appeal within five points of the 65-passing score on that exam.
- Presents evidence that the student has taken advantage of academic help provided by the school in the subject tested by the Regents exam under appeal.
- Based on the student's official transcript (prior year) or report card (current year), have a course average of 65 or better in the subject under appeal.
- Be recommended for an exemption to the graduation requirement by the teacher or instructional specialist in the department of the Regents exam under appeal.



# ART

## **0800 Studio in Art**

**40 Weeks 1 Credit Grades 8-12**

Studio in Art is a year-long foundations course that introduces students to the visual arts. This course puts emphasis on visual perceptions and experiences in an array of art media. Units are designed to enable the students to develop skills as they pertain to the fine and applied art process and related art sequences of the program. Studio In Art broadly introduces students to the elements and principles of art, and their uses in the environment and historical significance.

\*Studio In Art is a prerequisite for an art sequence.

\*Studio In Art may be used to satisfy the High School Fine Arts

## **0801 Drawing & Painting**

**40 Week 1 Credit Grades 9-12**

*Prerequisite: 0800*

Drawing and Painting is a second-year art course that is a continuation of the basics from Studio in Art. Students will expand their knowledge and techniques as they learn refined styles of drawing in assorted mediums. Graphics and other art forms will be explored. Techniques learned will be applied to principles of balance, harmony, structure, and composition.

## **0802 Design 1**

**20 Weeks .5 Credit Grades 10 12**

*Prerequisite: 0801*

An introduction to basic visual communications in the 2D design process. Course will cover graphic design from typography and design principles to methods of visual comprehension and organization. Using aesthetics, the design process and visual organization, students will design solutions to visual communication problems. Creating by hand the first half, and computer the second half, projects will explore aspects of COMPUTER based graphic imagery, typography, hierarchy, color theory, and print-based layout. Students will increase their computer skills through applications requiring the digital experience needed in today's job market and consumer trends and size requirements for today's computer-based jobs. (Fall September-January)

## **0803 Design 2**

**20 Weeks 5 Credit Grades 10-12**

*Prerequisite: 0801 and 0802*

Semester II will heavily use computers/Adobe Apps and printing techniques. Design II will cover graphic design from typography, page layout, digital color gamuts, preflight printing principles to advanced methods of visual comprehension and organization via digital computer-based applications. Using aesthetics and the design process, students will design solutions to solve visual communication problems. Creating real world jobs with computers, projects will explore aspects of design rules, typography, hierarchy, color theory, and print-based layouts. Students will increase their digital computer skills through applications required in today's job market



# ART

which use the consumer trends and size requirements for today's media driven careers and jobs. (Spring-February – June)

## **0807A Ceramics/Sculpture\*\***

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: Studio Art & Drawing and Painting (or teacher recommendation)*

This year long course is an introduction to working with clay. Students will learn several building processes (pinch, slab, coil, throwing) and glazing techniques and applications. Students will be gaining the knowledge and skills necessary to work with clay and apply it to create work that includes their own artistic voice. \*Juniors & Seniors are eligible for up to 6 JCC credits (one time).

## **0808 Ceramics 2\*\***

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: Studio Art, Drawing & Painting, Ceramics 1*

This course is geared to the student who is motivated to undertake very ambitious work in clay and further their understanding of ceramic art as a means of artistic expression and possible pursuit of study in college or future profession. During this course, students are to use the skills they've previously developed (and refine techniques) to express ideas in clay. Student work must reflect well thought-out and ambitious planning. \*Juniors & Seniors are eligible for up to 6 JCC credits (one time).

## **0810 Advanced Art 1**

**20 Weeks .5 Credit Grades 10-12**

*Prerequisite: 0801*

Advanced Art 1 is a course where students will develop a deeper understanding and use of art media and techniques. Students will evaluate their strengths and weaknesses and in return strengthen their skills to develop projects to place in their portfolio. Student's portfolios will be handed in, evaluated by the instructor, and later used as a visual resume for careers and/or colleges.

## **0811 Advanced Art 2**

**20 Weeks .5 Credit Grades 10-12**

*Prerequisite: 0810*

Advanced Art 2 continues to develop student's strengths in all art media while also addressing weak areas in the developing portfolio. This course helps students to continue to develop additional skills in the art criticism as well as help students identify contemporary trends in art history. Projects outlined are intended to allow the students to explore and investigate further concepts of the art process.

## **0812A Digital Photography\*\***

**20 Weeks .5 Credit Grades 10-12**

Digital photography is a comprehensive overview of DSLRs and the technical process to take/save great photographs. From the concept to the actual photoshoot, to the final intended image output. You will learn about: digital cameras, Adobe Photoshop basics (size/crop/dpi/levels/unsharp mask), plus the Mac computer's OS language, shortcuts, and environment. Familiarize yourself with storage devices, archiving,



# ART

labeling/organizing your work. Learn all the digital vocabs, raster, vector, pixels, megapixels, printing basics, color monitors, printing devices and specific color gamut's. Understand and select the appropriate size/resolution for your intended outcome-web, print or large format. Students will receive 3 college credits from CCC (ART 253) upon successfully completing the course and meeting the requirements at no cost. Students are subject to high school and CCC academic standards to receive credit from both.

## **0817A Advanced Painting\*\***

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: 0800 and 0801 – Final averages in these classes must be 90 or higher*

Advanced Painting is for the art student who has completed the above criteria and is preparing and adding to an art portfolio. The class is a studio setting and explores mainly acrylic and watercolor, however, there will be drawing, and art history research expected. Students will be developing their own painting style and explore different painting techniques and methods. The fundamentals and concerns of painting composition, color theory, and subject matter will be covered. Students are subject to high school and CCC academic standards to receive credit from both.

## **8018 Experimental 2D Design**

**20 Weeks .5 Credit Grades 10-12**

*Prerequisites Studio Art & Drawing and Painting (20 weeks)*

Students will explore Printmaking, Collage and Mixed Media in this course. This course will provide opportunities to create, present, respond, and connect works of art in a . Students will develop works around themes in a contemporary context, moving away from fine arts materials and moving towards a more experimental mindset.

## **8019 Experimental 3D Design**

**20 Weeks .5 Credit Grades 10-12**

*Prerequisites Studio Art & Drawing and Painting (20 weeks)*

Students will spend twenty weeks creating works of art with non-traditional sculpture materials. Works will be created around themes or building processes to reflect contemporary practices. Students will explore assemblage, dioramas and other non clay materials. This course will provide opportunities to create, present, respond, and connect works of art in a variety of media.





# English

The English program at Mexico is a developmental one, preparing students for the Comprehensive Regents in English. In addition, some students can take advantage of the Advance Placement (AP) courses as well as a college credit course offered through the English department.

## **0011 English 9 (NCAA Approved)**

**40 Weeks 1 Credit Grade 9**

English 9 is the first year of a four-year sequence in English studies. The course includes a study of high interest literature with solid adolescent themes. Several genres will be studied including short stories, poetry, novels, and non-fiction/realistic fiction. Creative expression is reinforced through narrative, persuasive, and expository writing, and projects with at least one presentation. This literature is used as a means through which students can gain insight into themselves and perspective on their place in the world at large.

## **0012 English 9 Honors (NCAA Approved)**

**40 Weeks 1 Credit Grade 9**

*Prerequisite: Teacher Recommendation*

This course is designed for the student with an acute interest in writing, literature, and the English language. English 9 Honors will follow the curriculum for English 9 at a faster pace with more in-depth study. The course will provide greater challenges including, but not restricted to, literature, writing and composition, and collateral projects.

## **0021 English 10 (NCAA Approved)**

**40 Weeks 1 Credit Grade 10**

*Prerequisite: English 9*

English 10 is the second year in the English program and offers further instruction into the areas and skills introduced in 9<sup>th</sup> Grade. Students will examine the various forms of literature, prepare narrative and expository forms of written work, and improve reading and vocabulary skills. These include selections from Shakespeare, novels, plays, poetry, and non-fiction. The student will also expand his/her writing skills in technical and research areas along with developing a public speaking project.

## **0022 English 10 Honors (NCAA Approved)**

**40 Weeks 1 Credit Grade 10**

*Prerequisite: English 9 Honors or Teacher Recommendation*

English 10 Honors is the second course designed for academic and talented students entering the advanced program to prepare for the Comprehensive Regents examination in English, the Advanced Placement examination in English, and Advanced Regents Diploma. Students will participate in an in-depth examination of the various forms of written expression, and further develop reading, vocabulary, and research skills. Formal oral presentations and research papers will be completed.



# English

## **0031 English 11 (NCAA Approved)**

**40 Weeks 1 Credit Grade 11**

*Prerequisite: English 10*

English 11 is the third year in the English sequence to prepare for the Comprehensive Regents Examination in English. The course includes a study of American Literature, extensive narrative and expository written work, and development of reading and vocabulary skills. It is the purpose of the course to enable students to appropriate their literary heritage in fiction, nonfiction, and poetry and to help them develop further control over their oral and written expression.

## **0032 English 11 Honors (NCAA Approved)**

**40 Weeks 1 Credit Grade 11**

*Prerequisite: English 10 Honors or Teacher Recommendation*

English 11 Honors is the third level of the advanced program in which academic and talented students pursue in-depth studies in composition, literature, independent research, SAT preparation and vocabulary development. At the conclusion of this English course, the students are expected to complete the Comprehensive Regents examination in English to complete their Regents sequence in preparation for Advanced Placement English in their 12<sup>th</sup> year. Formal research papers, debate techniques and Advanced American Literature is incorporated into the course. It is expected that a student in AP US History will also take English 11 Honors or English 11 Advanced Placement.

## **0033 AP Lang.& Comp. (NCAA Approved)**

**40 Weeks 1 Credit Grade 11**

*Prerequisite: English 9, 10, 11 Honors (as applicable), or Teacher Recommendation*

The AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purpose, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing.

As in a college course, the purpose of the AP English Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. An AP English Language and Composition course should help students move beyond such programmatic written responses. Students should be encouraged to place their emphasis on content, purpose, and audience and to allow this focus to guide the organization of their writing. Students will prepare for the AP literature exam in May. Transferable college credit is determined by the admissions staff of the college that each student will be attending. *This course is offered by English Department discretion based upon student need and interest. Will not necessarily be offered every year.*



# English

## **0042 AP Lit. & Comp. (NCAA Approved)**

**40 Weeks 1 Credit Grade 12**

*Prerequisite: English 9,10,11 Honors (as applicable), and/or AP Lang, or Teacher Recommendation*

The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone.

As in a college course, the purpose of the AP English Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. An AP English Language and Composition course should help students move beyond such programmatic written responses. Students should be encouraged to place their emphasis on content, purpose, and audience and to allow this focus to guide the organization of their writing. Students will prepare for the AP literature exam in May. Transferable college credit is determined by the admissions staff of the college that each student will be attending. *This course is offered by English Department discretion based upon student need and interest. Will not necessarily be offered every year.*

## **0049 English 12 (NCAA Approved)**

**40 Weeks 1 Credit Grade 12**

*Prerequisite: English 11*

This course challenges students to improve their written and oral skills, while strengthening their ability to understand and analyze in a variety of genres. Students read a broad array of short stories, poetry, drama, novels, autobiographies, and more. Students build on their writing skills and increasing their vocabulary.

## **0049A English 12\*\***

**40 Weeks 1 Credit Grade 12**

*Prerequisite: Must meet qualification standards as indicated by Local College.*

This course challenges students to refine their research & verbal presentation skills while studying a variety of contemporary novels and speeches. Upon successful completion of this course students may receive six college credits from Local College.

## **0014 ENL (English as a New Language)**

**40 Weeks 1 Credit Grades 9-12**

The ENL program at Mexico High school strives to ensure that all students' individual educational paths and socio-emotional needs are met in multiple languages leading them to college and career readiness. Mexico High School believes that all teachers are teachers of ELLs/MLLs and adheres to the principles and framework as stated in the



## English

NYS *Blueprint for English Language Learner/ Multilingual Learner Success*, together with the guidance & requirements from the NYS Commissioner's Regulations Part 154 (CR Part 154), which includes such resources as the ELL/MLL Identification and Placement Home Language Questionnaire (HLQ) and assessments such as the NYSITELL and the NYSESLAT. Further, we utilize State resources from the Office of Bilingual Education & World Languages (OBEWL), our regional support (RBERNs) and the resources for SIFEs when needed.

Our ENL program consists of both stand-alone and integrated models, dependent on the requirements (Units of Study Table) of each of the five levels as aligned with core-content courses. They are supported by a certified ENL teacher and an ENL aide. All of the core instructional materials used are age and grade appropriate; they provide access to sequenced, spiraled, content-rich statewide curriculum programming and instructional practices that support the attainment of the CCLS and align to the Board of Regents' strategic goals. Our ENL program ensures that core instruction is comprehensible as well as differentiated according to the student's proficiency levels (Entering, Emerging, Transitional, Expanding, or Commanding). Depending on the ENL proficiency level, careful consideration is given to what curricula is chosen, primarily based on the Mexico District's ELA curriculum mapping with a major focus on the identified gaps in learning needed to pass the Regents and/or those pathways leading to graduation. In addition to the adaptation of Engage NY curriculum materials, integration of academic language and literacy instruction into each of the lessons through the research-based methodology Sheltered Instruction Observation Protocol (SIOP), using authentic reading materials, sample exams, literature and texts by grade level is emphasized. Our ENL program incorporates performance tasks & assessments, scaffolded materials, samples of grade-level student work, and other core-content classroom artifacts to ensure that both language and content acquisition is achieved. The learning materials are culturally and linguistically responsive to the students' unique educational needs while valuing ENL's home languages to support the acquisition of English within the school environment. Native language instruction to support English language acquisition is used whenever possible and necessary.



## Family & Consumer Science

The Family and Consumer Science program provides students with a variety of educational courses focusing on practical experiences and hands-on learning. Students are exposed to a variety of occupations and develop skills that are adaptable to personal and career roles, as well as helping students to prepare for entry into advanced education and the world of work.

### **0703 Intro to Foods & Nutrition**

**20 Weeks .5 Credit Grade 10-12**

*Prerequisite: Sophomore Status*

If you like to cook, or would like to learn how, this course is for you! Content includes nutrition awareness, meal management, food purchasing and preparation, meal service, and related career exploration. Sample units: muffins, yeast breads, fruits and vegetables, breakfast, lunch, and a holiday dinner.

### **0704 Gourmet Foods**

**20 Weeks .5 Credit Grade 10-12**

*Prerequisite: Introduction to Foods and Nutrition and Sophomore Status*

This course teaches advanced food preparation techniques, the importance of menu planning, food appearance and presentation, and the use of specialized equipment. Careers will be explored in more depth. Sample units: salads, yeast breads, entrees, beverages, kitchen gifts and international cooking.

### **0705 Comm. Foods/Foods 3**

**20 Weeks .5 Credit Grade 12**

*Prerequisite: 12<sup>th</sup> Grade, must have taken Intro to Foods, Gourmet Foods and .5 credit of any other FACS course.*

Do you want to know what is after Gourmet Foods? Well look no further. Commercial Foods/Foods 3 is where it's at. During this course we will be looking at all aspects of a restaurant. This course presents more advanced techniques of food preparation. Instructional methods include lectures, demonstrations, and student participation. Topics covered include the preparation of beef, poultry, shellfish, fish, vegetarian, and ethnic foods. We will also explore healthy alternatives to common dishes. The highest safety and sanitary practices will be enforced. Students will be given and required to have a professional chef's uniform to participate in class.

### **0706 Interior Decorating Design**

**20 Weeks .5 Credit Grades 9-12**

This course offers students the opportunity to learn about various housing needs, choices, styles and trends. Principles of design and historical influences, as well as housing management and career opportunities are explored.

### **0709 Independent Living**

**20 Weeks .5 Credit Grades 11-12**

*Prerequisite: 11<sup>th</sup> or 12<sup>th</sup> grade*



## Family & Consumer Science

This course is designed to help the older student meet the needs of upcoming independence. Areas of study include human development, money management, housing, clothing, cooking, and career readiness.

### **0920 Nutrition & Fitness / PE**

**40 Weeks 1 Credit Grades 9-12**

Heart disease is the #1 leading cause of death in the United States. Obesity and lack of physical fitness are the leading causes of heart disease. This course will allow students to become more knowledgeable concerning lifestyle choices that impact this epidemic. Students will find this course to be relevant and interesting as they become advocates for their own wellness as well as that of friends and family. They will learn about the benefits of eating a balanced, nutritious diet while they develop their own fitness program. Students will also become more informed, educated consumers as a result of the practical experiences they will obtain in this class. As students learn the fundamentals of diet and exercise, it will empower them in their decision-making process. This course will give them the necessary tools that will guide them into and throughout adulthood in the battle against obesity and heart disease. This will count as .5 credit for PE and .5 credit for an elective.





# Math

## **0210CC Algebra 1 (NCAA Approved)**

**40 Weeks 1 Credit Grades 8-9**

*Prerequisite: Passed 8<sup>th</sup> Grade Math.*

This course is the first course in a three-year sequence aligned with the Common Core State Standards. Algebra provides tools and ways of thinking that are necessary for solving problems in a wide variety of disciplines, such as science, business, social sciences, fine arts, and technology. This course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in a variety of settings. Topics include linear, quadratic, exponential functions, solving equations and inequalities, and statistics, as outlined in the NYS Common Core Standards. The course concludes with the Algebra 1 Regents examination in June. A graphing calculator is required for this class, Texas Instrument TI-84+ is preferred.

## **0211CC Geometry (NCAA Approved)**

**40 Weeks 1 Credit Grade 9-10**

*Prerequisite: Students must pass Algebra 1 (1 year course) with at least a 75 overall average and must pass the Algebra 1 Regents. If a student scored a 65-70 on the Algebra 1 Regents, it is highly recommended that they have an AIS Math section to enhance their understanding of Geometry due to the rigor of the course.*

Geometry is the second of the three Regents level Mathematics courses required for an Advanced Regents designation. Geometry is usually a grade 10 course which places an emphasis upon investigating geometric situations and integrating synthetic, Euclidean, transformational, and coordinate approaches to the study of geometry. Students will justify geometric relationships and theorems of geometric figures. Major topics of study include congruence and similarity of triangles, transformations, trigonometry, three-dimensional analysis, density, and coordinate geometry. The numerous properties of triangles, quadrilaterals, and circles receive particular attention. Students are also required to use the traditional tools of compass and straightedge to assist in these investigations. Geometry is meant to lead students to an understanding that reasoning and proof are fundamental aspects of mathematics and something that sets it apart from the other sciences. This course requires students to memorize numerous theorems, definitions, properties, and formulas to be successful as this information is not provided on the Regents reference sheet. Additionally, this course culminates in a NYS Regents Examination. The Geometry Regents has the most challenging conversion in order to receive a passing grade on the Regents.



# Math

## **0213 Fundamentals of Geometry**

**40 Weeks 1 Credit Grade 10-11**

*Prerequisite: Common Core Algebra 1 (0210CC or CTD0204)*

Fundamentals of Geometry is a course designed for students who choose not to study at the depth and swift pace required for the rigor of Common Core Geometry. This course provides a second math credit for students pursuing a Regents Diploma. Students will cover topics that include algebra review, irrational numbers, properties of triangles and polygons, systems of equations, quadratics, trigonometry, Pythagorean Theorem, coordinate Geometry, quadrilaterals, and transformational geometry. The study of formal proofs is not included. This course culminates in a final, which is 20% of the overall grade for the course.

## **0231 Stats. & Real-World App (NCAA Approved) 40 Weeks 1 Credit Grades 11-12**

*Prerequisite: Completion of two years of Math.*

This statistics course counts as a third math credit for students earning a regent's diploma. Students will explore data in many forms. This course will involve learning to analyze data, work as a team, and share information with the class. Topics include displaying data, measuring data, measuring variation, probability, and experimental design. Students will be required to complete a final project to share with the class.

## **0218 Financial Literacy**

**40 Weeks 1 Credit Grades 11-12**

*Prerequisite: Completion of two years of Math*

Students are introduced to topics that include insurance, cost comparisons, home ownership, calculating net pay, budgeting expenses, and managing checking and savings accounts. The goal of this course is to provide students a strong foundation in logical thinking and problem solving to make responsible financial decisions in their daily lives. This course culminates in a final which is 20% of the overall grade for the course. Financial Literacy counts as a third math credit for students earning a Regents Diploma. This class replaces Consumer Math from 2021 2022.

## **0225CC Algebra II (NCAA Approved)**

**40 Weeks 1 Credit Grades 10-11**

*Prerequisite: Students must pass Common Core Geometry with at least a 75 overall average and must pass the Geometry Common Core Regents. If a student scored a 65-70 on the Geometry Regents, it is highly recommended that they have an AIS Math section to enhance their understanding of Algebra II due to the rigor of the course.*

Algebra II is the third of the three Regents level Mathematics courses required for an Advanced Regents designation. This course is an extension of Algebra 1 and Geometry. This is a fast paced, rigorous course, which requires the student to apply the knowledge obtained from Algebra 1 and Geometry. Topics studied include algebra, rational expressions, complex numbers, functions, trigonometry, logarithms, exponents, probability, statistics, series, and sequences. Students will take the Algebra II Regents exam upon completion of this course. Course credit and Regent's credit are required for an Advanced Regents diploma. Graphing calculator is required for this course. Texas Instruments TI-84+ series is preferred.





# Math

## **0240A Pre-Calculus\*\* (NCAA Approved)**

**40 Weeks 1 Credit Grades 11-12**

*Prerequisite: 0225CC*

This course is designed to prepare students for their first course in calculus and other college courses in mathematics. The purpose of this course is to improve problem-solving skills, explore alternative solutions to problems, and help students to become independent critical thinkers. Topics of study include mathematical modeling, linear motion, exponential functions, matrices, logarithms, trigonometry, and polar coordinates. This course is offered through Cayuga Community College which allows them to take a college level course at no cost. Students will receive 3 college credits upon passing completion of the course through CCC (MAT 106).

## **0250 AP Calculus AB (NCAA Approved)**

**40 Weeks 1 Credit Grades 12**

*Prerequisite: 0240A*

Advanced Placement Calculus is a course which covers, in depth, the integration and differentiation of algebraic, logarithmic, exponential, and trigonometric functions. College credit or advanced standing may be granted based on a student's grade on the AP exam offered in May by the College Entrance Exam Board. Transferable college credit is determined by the admissions staff of the college that the student will be attending. AP Examination fee is approximately \$95.00.

## **0348 Intro to Comp. Sci. (NCAA Approved)**

**40 Weeks 1 Credit Grades 12**

The world is changing rapidly and the need for students with knowledge related to programming and coding is increasing. The Intro to Computer Science course is designed for complete beginnings with no previous background in computer science. The course is highly visual, dynamic, and interactive making it engaging for new coders. Introduction to Computer Science teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. This course satisfies the third-year requirement for science or math.



# Music

Students who are enrolling in an instrumental music course offering must have participated in the Middle School Band program, or have transferred from the Middle School program, OR have permission from the band director to enroll.

## **0851 Mixed Choir**

**40 Weeks 1 Credit Grades 9-12**

*Prerequisite: All 9-12 Tenor and Bass voices and 11-12 Soprano and Alto voices or permission from instructor.*

Mixed Choir is an ensemble/class of mixed voices where students are performing at a curriculum level IV and above. The course of study includes literature of advanced difficulty levels that require more vocal independence of each student. This ensemble is an advanced course of choral performance and practice that explores music that is both historic and contemporary in style. Students are required to attend 4 vocal/sectional lessons and 4 performances a year.

## **0852F Treble Choir**

**40 Weeks 1 Credit Grades 9-10**

*Prerequisite: For Soprano, Alto student grades 9-10 (or Permission from Instructor)*

Women's Choir is a vocal performance class made up of female mixed voices and is open to all female students in 9<sup>th</sup> and 10<sup>th</sup> grade. This ensemble is designed to work on the blending aspect of female vocal performance and practice that explores music that is both historic and contemporary in style. Students are required to attend 4 sectional lessons and 4 performances a year.

## **0853 Intro to Music/FAB I**

**40 Weeks 1 Credit Grades 9-12**

*Prerequisite: Open to all students enrolled in a musical performing group.*

FAB I is designed to prepare students for an enriched curriculum of comprehensive music theory and application in music in preparation to take the AP Music Theory Exam. Students will explore musical terminology, notational skills, basic compositional skills, score analysis, aural skills, applied musicianship and piano (no experience needed).

## **0854 AP Music Theory**

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: FAB I or by permission of instructor.*

AP Music Theory is a college preparatory class culminating in the Advance Placement Examination in Music Theory as well as a comprehensive final project. Students review basic concepts in music theory before expanding upon topics such as harmonic composition and part writing, melodic composition, structure, form, key relationships and modulation, part writing and figured bass, score analysis, ear training, sight singing, and applied musicianship.



# Music

## **0856 Vocal Ensemble**

**40 Weeks .5 Credit Grade 10-12**

Vocal Ensemble is an independent study that is offered to students who cannot traditionally schedule a choral class due to scheduling conflicts. Students are responsible for assigned literature and are required to attend 4 sectional lessons and 4 performances a year.

## **0866 Select Choir Ensemble**

**40 Weeks .5 Credit Grades 9-12**

*Prerequisite: Open to all student by permission of the high school choir director; audition required.*

Select Choir ensemble will meet after school and will focus on the study and performance of jazz and other contemporary literature. Performance and rehearsal attendance are required for course credit. Students are required to attend 4 performances a year.

## **0867 Voice Lessons**

**40 Weeks .5 Credit Grades 9-12**

*Open to all students enrolled in a choral performing group*

Voice lesson is an independent study that will consist of vocal flexibility, knowledge of the voice and learning new repertoire. This will enable students to participate in NYSSMA Solo festival and prepare them for any performance. Lessons will be weekly.

## **0863 Instrumental Jazz Ensemble**

**40 Weeks .5 Credit Grades 9-12**

*Prerequisite: Open to all students by permissions of the high school band director.*

Instrumental Jazz Ensemble focuses on the study and performance of jazz and other contemporary literature. Concurrent enrollment in Symphonic Band is required for all woodwind, brass, percussion, and double bass students. Guitarists and pianists' participation is based on director approval (necessary skills to meet group ability). The ensemble comprehensively engages in activities that align with New York and National music standards pertaining to jazz band literature, music theory, music history, sight reading skills, ear training, and effective individual and ensemble practice and rehearsal skills, as it pertains to jazz. Students grow as educated musicians both individually and collectively through performing NYSSMA level III and IV literature encompassing a wide variety of composers and styles. Students are required to attend all performances, rehearsals and weekly lessons.



# Music

## **0864 Symphonic Band**

**40 Weeks 1 Credit Grades 9-12**

*Prerequisite: Successful completion of middle school band or by permission of the high school band director.*

Symphonic Band is open to all woodwind, brass, percussion, and double bass students who meet the course prerequisites. The ensemble comprehensively engages in activities that align with New York State and National music standards pertaining to wind band literature, music theory, music history, sight reading skills, ear training, and effective individual and ensemble practice and rehearsal skills. Students grow as educated musicians both individually and collectively through performing NYSSMA level III, IV, and V literature encompassing a wide variety of composers and styles. Students are required to attend all rehearsals, performances, and weekly lessons.

The Marching Band is the key performing group in many community events and celebrations, allowing our students to demonstrate upper-level musical skills and community involvement. Concurrent enrollment in Symphonic Band is required for all woodwind, brass, percussion, and double bass students. Additional

afternoon/evening rehearsals will be scheduled prior to competitions and performances on an as needed basis. ***Marching Band is not required for participation in Symphonic Band. However, for those who elect to participate in Marching Band and those students seeking “Honors” Symphonic Band credit, all Marching Band performances, rehearsals, and weekly lessons will be required components of the student’s grade in addition to those requirements outlined.***



# Physical Education

## **0902 Physical Education**

**40 Weeks .25 Credit Grade 9-12**

Evaluation criteria for a passing grade necessitates that the student will: 1) report to Physical Education class in appropriate attire for each unit; 2) complete all local or state required physical fitness, skills, and content tests with satisfactory scores; 3) maintain positive class citizenship with their peers and instructors during each semester; and 4) participate fully during each class to the best of their ability. A student must pass 4 years of Physical Education to be eligible for graduation.

## **0350A Health\*\***

**20 Weeks .5 Credit Grade 10-12**

This course is designed to provide students with comprehensive knowledge and skills necessary to achieve a health enhancing lifestyle. The course consists of planned learning experiences that will allow the students to authentically apply the learned skills which are aligned with the New York State and National Health Education Learning Standards. The goal of Health Education is to give the students the necessary confidence and skills to practice health enhancing behaviors as well as to become active and contributing members in society. *This course is a graduation requirement. Students will receive 3 college credits (HEA 104) upon passing completion of the course through CCC.*

## **0920 Nutrition & Fitness/PE**

**40 Weeks 1 Credit Grade 10-12**

*Prerequisite: Completed Health course in HS.*

Nutrition & Fitness is a junior/senior level course. This interdisciplinary Physical Education (PE) and Family & Consumer Science (FACS) course is designed to help students understand the importance of exercise and healthy eating habits presently and for a lifetime. Students will participate in a wide variety of exercise activities to improve their overall wellness and athletic performance. This course will enhance students' understanding of their fitness needs and guide them in making wise decisions to improve their health and wellness. Students will analyze and compare healthy food choices, as well as analyze their health risk, fitness levels, nutritional habits, lifestyles, and attitude toward wellness. A personal wellness plan will be developed and implemented by the students during this year long class. The individualized wellness plan, accompanied with time spent working hands-on preparing nutritional food will help the students understand how exercise and health behavior management will assist them to attain personal goals.

## **0352 Sports Medicine**

**20 Weeks .5 Credit Grades 10-12**

*Prerequisite: Complete Health*

This course will provide "real life" career education experiences focuses on sports/health related professions. The outcome of this course is to give students who are interested in health-related careers the fundamental skills and knowledge relevant to those areas. Areas of study include basic anatomy, CPR/AED and first aid skills, injury prevention, recognition, treatment and preventative taping skills and career education.



# Physical Education

## **0906 Lifeguarding/PE**

**20 Weeks .25 Credit Grades 10-12**

*Prerequisite for this Course: 1) Must be 15 years old on or before the final scheduled session of this course \*\*predominately available for juniors and seniors\*\* 2) Swim 300 yards continuously demonstrating breath control and rhythmic breathing. Candidates may swim using the front crawl, breaststroke, or a combination of both but swimming on the back or side is not allowed. Swim goggles may be used. 550 yards for waterfront certification. 3) Tread water for 2 minutes using only the legs. Candidates should place their hands under the armpits. 4) Complete a timed event within 1 minute, 40 seconds. \*starting in the water, swim 20 yards. The face may be in or out of the water. Swim goggles are not allowed. \* Surface dive, feet-first or head-first, to a depth of 7 to 10 feet to retrieve 10-pounds, both hands holding the object and keeping the face at or near the surface so they are able to get a breath. Candidates should not swim the distance underwater. \* Return to the surface and swim 20 yards on the back to return to the starting point with object. \*Exit the water without using a ladder or steps.*

Purpose of the American Red Cross Lifeguarding Course is to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide care for breathing and cardiac emergencies, injuries, and sudden illnesses until emergency medical services (EMS) personnel take over.

## **0907 Paddle Sports & Boater Safety**

**20 Weeks .25 Credit Grades 10-12**

*Prerequisites: Swim the crawl stroke or breaststroke without a buoyancy aid at least 100 yards. Comfortable underwater.*

Paddle Sports: Basic and advanced kayaking dry and wet exit techniques. On-water self and partner rescues from a canoe and kayak. Stand up paddle board introduction, solo and tandem canoe techniques, NYS Boaters Safety course. Complete a group project (Cardboard Regatta). Participate in field experiences-kayaking day trip.

## **0908 Outdoor Education**

**40 Weeks 1 Credit Grades 10-12**

Through various modes of teaching, students will gain knowledge of outdoor education through Project Adventure, Backpacking, Camping 101, Orienteering/Navigation, Survival Skills, and Hiking. Students will also be given the opportunity to practice Archery, Snowshoeing, Canoeing and Kayaking as part of the course. This course will include a local overnight camping experience, a white-water rafting trip and an experience at the Syracuse University's Outdoor Challenge Course. Finally, the culminating activity will include a weekend camping trip to the Adirondack's, that will test certain skills and knowledge acquired throughout the year.



# Physical Education

## **0911A Weight Training/PE\*\***

**20 Weeks .25 Credit Grades 10-12**

Use of free weight room. Brief presentation of the history of strength building includes Olympic lifting, power lifting, bodybuilding, strength research, and strength fitness. Students will receive 1 college credit (CCC PE 130) upon passing completion of this course.

## **0912A Weight Train. Practicum/PE\*\***

**20 Weeks .25 Credit Grades 10-12**

*Prerequisite: Weight Training/PE\*\**

Review of Weight Training. Continued use and instruction of equipment in weight room. Students will receive 1 college credit (CCC PE 131) upon passing completion of this course.

## **0913A Fitness Center 1/PE\*\***

**20 Weeks .25 Credit Grades 10-12**

Training program designed to meet cardiovascular requirements and improve strength and flexibility. Following orientation, lecture, assessment and testing, students will use the skills learned throughout the semester. Students will receive 1 college credit (CCC PE 161) upon passing completion of this course.

## **0914A Fitness Center II/PE\*\***

**20 Weeks .25 Credit Grades 10-12**

*Prerequisite: Fitness Center 1\*\**

Continues fitness regimen, providing weight control module. Students will receive 1 college credit (CCC PE 162) upon passing completion of this course.





# Science

## Mexico High School Science Laboratory Qualification Policy

**The following excerpts are taken from:**

**<http://www.p12.nysed.gov/part100/pages/policyqascience.html>**

“For admission to a Regents examination in science, a student must complete the State- mandated laboratory requirement. The laboratory component must be provided in addition to the required classroom instruction associated with earning a unit of credit and must include 1200 minutes of hands-on laboratory with satisfactory laboratory reports [100.5(b)(7)(iv)(d)].”

“Schools are permitted to establish a target date for the completion and submission of the laboratory requirement at any time, but no later than one week prior to the administration of any component of a Regents examination in science.”

“The [NYS Education] Department strongly recommends that the laboratory requirement be completed again by all students who fail any commencement-level science course.”

The deadline for this course is provided by teacher in syllabus (end of May).

Any student who is not lab qualified by the aforementioned date may be required to take a local final examination to be scheduled at the discretion of the teachers of that subject area. A local final examination may also be given in addition to the Regents examination.

The Science Department offers a variety of offerings including Regents courses, non-Regents courses, College credit courses and AP courses.

### **0321 Living Environment (NCAA Approved)      40 Weeks   1 Credit   Grades 9-10**

Living Environment deals with the study of plants and animals. The first few weeks of the course are devoted to an overall look at the field of biology with a major emphasis on biochemistry including molecular structure. This is followed by the study of anatomy and physiology of living things with the major emphasis placed upon human biology. Patterns of reproduction, development, organic evolution, and heredity are also studied. To conclude the study of biology, ecology of living things is studied so that the student is aware of the interactions taking place between organisms and their environment.

Students must successfully complete a laboratory requirement of 1200 lab minutes. At the completion of this course students will take the New York State Regents examination in Living Environment.





# Science

## **0311 Earth Science (NCAA Approved)**

**40 Weeks**

**1 Credit**

**Grade 10**

*Prerequisite: Living Environment*

Among the units of work studied are the atmosphere, rock and minerals, weather, climate, and features of the earth's surface and astronomy. There is a laboratory requirement of 1200 minutes which all students must successfully complete if they are to gain credit for this course. At the completion of this course, students are required to take the New York State Regents examination for Earth Science.

## **0322 AP Biology (NCAA Approved)**

**40 Weeks**

**1 Credit**

**Grades 11-12**

**Recommended overall final average of 85% in Regents Chemistry is suggested.**

The AP Biology course is designed to be the equivalent of a college introductory biology course, usually taken by biology majors during their freshman college year. This course differs significantly from the Regents Living Environment course, with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students. The course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Units of study will include biological chemistry, cells, energy transformation, molecular genetics, heredity, evolution, plants, animals, and ecology. The kinds of laboratory work done by the students in this course are equivalent to those done by college students. This course consists of five periods of lecture and lab over a five-day cycle.

Students must take the Advanced Placement Examination in Biology in May.

Transferrable college credit is determined by the admission staff of the college that the student will be attending. Examination fee is approximately \$95.00

## **0329 Environ. Science (NCAA Approved))**

**40 Weeks**

**1 Credit**

**Grades 10-12**

*Prerequisite: 1 year of science*

The course is concerned with the relation of living things to their environment and their interdependence upon each other. Biodiversity, Sustainability, Alternative Energy systems, Eco and Small Space Architecture, and cool Environmental Technology are but some of the topics we will cover this year. Activities, including projects and student developed experiments, will be an integral part of the course. No labs are required.

## **0330A Intro to Environ. Science\*\***

**40 Weeks**

**1 Credit**

**Grades 10-12**

*Prerequisite: 1 year of science*

The course explores the human relationship with the natural environment by examining the critical issues that affect the viability and sustainability of natural resources of our planet. Natural resources, their importance, distribution, and impacts from human-use and over-use are examined at local, state, national and global levels. This course uses case studies of current-day environmental issues



## Science

and their relationship to concepts of ecological, air, soil, water, energy, biodiversity, and population dynamics are examined from viewpoints of scientific theories of environmental impacts as well as human interactions and constituent viewpoints. Activities, including projects and student developed experiments, will be an integral part of this course. Upon successful completion of this course, students will receive 3 college credits (SUNY Morrisville ENSC100). The cost of the course is approximately \$150.00.

### **0328F Foundations in Chemistry**

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: Two years of science satisfies third year of science.*

This is a complete Chemistry course designed for students not requiring the more technical Regent's course. Students will obtain sufficient chemical knowledge and skills to explore and assess chemistry-related personal and social issues and concerns. Students will also gain an appreciation for the important role that chemistry plays in everyday life through problem-solving activities and laboratory experiments. This course will include such topics as matter and energy, atomic structure, bonding, the periodic table, solution chemistry, acids and bases, and organic chemistry.

### **0331 Chemistry (NCAA Approved)**

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: It is highly recommended that students attempting to take Regents*

*Chemistry should have successfully completed Regent Exams with at least a 75 in:*

*Earth Science, Living Environment, Algebra, Geometry and be currently enrolled in*

*Algebra II.* Did you ever wonder how the different colors of fireworks are made? What about floating ice cubes, leaves turning color or how a battery works. Models of chemistry and physical science can explain why these events occur. The study of chemistry involves examining the physical and chemical properties of discovered substances in the earth to see how mankind can use the substances. Knowledge of chemical principles is important for just about everyone. Mechanics, business, firefighters, nurses and engineering are just a few of the any professions involving chemical principles. One of the main goals of this course is to increase awareness of chemistry around you. There is a lab requirement of 1200 successfully completed lab minutes in addition to the Chemistry New York State Regents exam at the end of the course.

### **0330 AP Chemistry (NCAA Approved)**

**40 Weeks 1 Credit Grade 12**

*Recommended Prerequisite: Overall final average of 85% in Regents Chemistry suggested.*

AP Chemistry is a full year course which is offered to a selected group of juniors and seniors. The course is designed to be the equivalent of the general chemistry course usually taken during the first college year. It contributes to the development of students' abilities to think clearly and to express their ideas orally and in writing with clarity and logic. This course differs qualitatively from a regents' chemistry course with respect to the kind of textbook used, the topics covered, the emphasis on chemical



## Science

calculations, the mathematical formulation of principles, and the kind of laboratory work done by students. Quantitative differences appear in the number of topics treated,

the time spent on the course by students, and the nature and variety of experiments done in the laboratory.

All students must take the Advanced Placement Examination in Chemistry in May. Transferrable college credit is determined by the admission staff of the college that the student will be attending. Examination fee is approximately \$95.00

### **0341 Physics (NCAA Approved)**

**40 Weeks 1 Credit Grade 9-12**

*Prerequisite: Algebra 1 and Living Environment*

Physics is the foundation for all sciences and many of the technological advances throughout human history. Physics is a must for students who want a more complete view of the world around us as well as those who want a more complete ability to work through any logical problem. The course includes concepts related to the Motion of objects, Forces that cause these motions, Energy, Electricity and Magnetism, Waves, as well as Modern Physics. A minimum of 1200 minutes of successfully completed laboratory experiences must be completed to qualify the student for the New York State Regents Examination in Physics at the end of the course.

All students taking this course may be required to take a local final exam in June. This will give students the opportunity to obtain local Physics credit if they are not successful on the Regents exam.

### **0340 AP Physics (NCAA Approved)**

**40 Weeks 1 Credit Grade 11-12**

*Prerequisite: Algebra II and Geometry*

*Recommended Co-requisite: AP Calculus*

Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. The following are Big Ideas:

- Objects and systems have properties such as mass and charge. Systems may have internal structure.
- Fields existing in space can be used to explain interactions.
- The interactions of an object with other objects can be described by forces.
- Interactions between systems can result in changes in those systems.
- Changes that occur because of interactions are constrained by conservation laws.



## Science

All students must take the AP Physics 1 exam in May. Transferrable college credit is determined by the admission staff of the college that the student will be attending.

### **0346 Astronomy (NCAA Approved)**

**40 Weeks 1 Credit Grade 11-12**

*Satisfies third year of science.* Included topics are, but not limited to, the formation of the solar system, planets and their moons, meteors and the asteroid belt, comets and the Oort cloud. Central to Astronomy is a detailed look at the individual planets, their structures and composition as well as their moons.

Additionally, actual observations will be made, including constellations, the moon and planets. Several planned observing nights will be held at the high school and at the Observatory at Oswego State University. Students will be required to perform Internet research at designated sites to find 'recent' discoveries in areas such as comet sightings, planets, stellar formation, regions, and nebulae. Students will learn and use Kepler's Laws of Motion as well as some rudimentary Newtonian physics.

Cosmological evolution will be examined, as well as stellar formation and the life cycles of stars and galaxies. In addition, students will learn a detailed history of space exploration from Sputnik to the present-day International Space Station. The theories of Relativity, Black Holes, and Chaos will be examined and compared. DSO (Deep Sky Observations) will be made both in real time and from Internet sources. Students will also be instructed in the Hubble Space Telescope, to gain knowledge of how such a publicly owned telescope is used. A project will be required, based on topics agreed upon with the instructor. The course will conclude with a 'futures' look at the Universe and space exploration, examining proposed missions to solar system bodies and extra-solar systems targets. Students will be required to complete quizzes, a midterm, and a final examination, as well as presenting their research project.

### **0348 Intro.to Comp. Science (NCAA Approved) 40 Weeks 1 Credit Grade 11-12**

The world is changing rapidly and the need for students with knowledge related to programming and coding is increasing. The Intro to Computer Science course is designed for complete beginnings with no previous background in computer science. The course is highly visual, dynamic, and interactive making it engaging for new coders. Introduction to Computer Science teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. This course satisfies the third-year requirement for science or math.



## Social Studies/Leadership

### **0101 Global History 9 (NCAA Approved)      40 Week      1 Credit      Grade 9**

This course introduces the students to the dimensions of Global History – history, geography, economics, and political science and government. It deals with the first four Eras of Global History, including pre-historic peoples, the Ancient Worlds of Rome, the Middle East and China, World Religions, and the histories of China, Japan, South Asia, the Middle East, Latin America, Africa and Europe from 1000 C.E. until the mid-1700's. There are fifteen Themes and Concepts that act as organizers for the course. This first course in Global History will conclude with a final exam modeled on the NYS Regents.

### **0102 Global History 9 Honors (NCAA Approved) 40 Weeks      1 Credit      Grade 9**

*Prerequisite: Recommendation from 8<sup>th</sup> Grade Social Studies Teacher*

Students in this course will receive an enriched program as they are introduced to the dimensions of history, geography, economics, political science, and government. Students who take this course will be expected to complete more in-depth analytical writing assignments and read independently. This course prepares students for 10<sup>th</sup> grade AP World History. This first course in Global History will conclude with a final exam modeled on the NYS Regents.

### **0111 Global History 10 (NCAA Approved)      40 Weeks      1 Credit      Grade 10**

*Prerequisite: Global History 9*

This course picks up where Global History 1 leaves off in 1750. Students will review the dimensions of Global History mentioned above, as well as the fifteen Themes and Concepts. Students will continue with the histories of China, Japan, South Asia, the Middle East, Latin America, Africa, and Europe, beginning in the mid-1700s. The course will conclude an analysis of economic interdependence, globalization, modernization, and issues concerning human rights and the environment. Students will be required to take and pass the NYS Regents in Global History at the end of this course. *This course will conclude with a Regents exam covering only 1750-present.*

### **0113 AP World History 10 (NCAA Approved)      40 Weeks      1 Credit      Grade 10**

*Prerequisite: Global History 9 Average 88+ or Global 9 Honors 85+ each quarter*

*Co-Prerequisite: 9<sup>th</sup> Grade Teacher Recommendation*

The Advanced Placement Course in Global History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with problems and materials in World History. Students will learn to assess historical materials-their relevance to given interpretive problems, their reliability, and their importance- and to weigh the evidence and interpretations presented in historical scholarship. The Advanced Placement World History course will work on developing the skills necessary to arrive at conclusions on the bases of an informed judgement. Students will be expected to take the Advanced Placement Examination in World History.



## Social Studies/Leadership

Students will take the AP World History exam in May. Transferable college credit is determined by the admission staff of the college that the student will be attending. Examination fee is approximately \$95.00.

### **0121 US History and Gov't (NCAA Approved)      40 Weeks      1 Credit      Grade 11**

*Prerequisite: Global History 10*

US History and Government is a course which develops understandings necessary for students as they seek to comprehend and participate in current national life. It presents an in-depth study of the American people, government and politics, economics, foreign affairs, and American civilization in historical perspective. Topics covered include history and function of the U.S. Constitution; the age of reform in antebellum America; the Civil War, Reconstruction, and the age of big business; as well as strong emphasis on 20<sup>th</sup> century foreign and domestic policy. The course develops writing skills necessary for the Regents examination in American History and Government at the end of this course.

### **0122 AP US History (NCAA Approved)      40 Weeks      1 Credit      Grade 11**

*Prerequisite: Global History 10 Average 88+ or Global Honors 85+ each quarter*

The Advanced Placement Course in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. Students will learn to assess historical materials – their relevance to given interpretive problems, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. The Advanced Placement United States History course will work on developing the skills necessary to arrive at conclusions based on an informed judgment. Students will present reasons and evidence clearly and persuasively in essay format. Students will be expected to take the Advanced Placement Examination in United States History.

Students will take the AP US History exam in May. Transferable college credit is determined by the admission staff of the college that the student will be attending. Examination fee is approximately \$95.00.

### **0131 Economics (NCAA Approved)      20 Weeks      .5 Credit      Grade 12**

*Prerequisite: US History & Government*

This course emphasizes economic decision making regarding personal, national, and global economic issues. Students will be exposed to both micro economic and macro-





## Social Studies/Leadership

economic concepts and theories. The course will encourage students to understand their roles in both the United States economy and an interdependent global economy. The course is designed to provide students with an overview of basic economic problems and issues, which affect them as citizens, workers, and consumers. Emphasis is on developing both an understanding of these issues and the skills necessary to make better economic systems, consumer skills, development and operation of the United States economy, and global economics.

### **0132 Participation in Gov't (NCAA Approved)    20 Weeks    .5 Credit    Grade 12**

*Prerequisite: US History & Government*

This course aims to provide students with opportunities to become engaged in the political process by acquiring the knowledge and skills necessary for active citizenship. We seek to apply their prior social studies learning to the examination of contemporary political issues. The emphasis is on current events, societal problems, as identified by students, and strategies for change. Students work on political advocacy skills, media literacy, interactions with political leaders and persuasive speaking and writing skills to realize their potential as young citizens. The course allows students to apply political and governmental topics to their lives in school, the local community and at the national level. Class activities include dynamic discussion, debates, group-based projects all exercised with the intention of empowering students to formulate political opinions and to see themselves as necessary to the democratic process.

### **0951 JROTC / PE**

**40 Weeks    1 Credit    Grades 9-12**

*Point of Contact: Lt. Col. John Freda (315) 963-8400 and/or [jfreda@mexicocsd.org](mailto:jfreda@mexicocsd.org).*

Students attend an assigned class period, during the regular school day. Students may choose to voluntarily participate in the many courses co-curricular, extracurricular, or athletic activities. There is no military obligation. The course used a military framework to teach the essential skills for professional success. This will count as .5 credit for PE and .5 credit for an elective.

### **0952 Leadership/PE (Education Character Development / Marine Corps Junior Reserve Officers' Training Corps (MCJROTC))    40 Weeks    1 Credit    Grades 9-12**

Course Description:

The Leadership Education & Development Program is a four-year (elective) program of instruction offered to MACS students in the 9<sup>th</sup> through 12<sup>th</sup> grades. Students may enroll in from one to four years of the program.



## Social Studies/Leadership

The specific program objectives are to:

1. Strengthen personal character;
2. Help to form habits of self-discipline teamwork and leadership;
3. Develop informed & responsible citizens;
4. Develop a respect for, and understand the need for, duly constituted authority in a democratic society;
5. Promote an understanding of the basic elements & requirements for national security;
6. Develop an understanding of the privileges as well as the responsibilities of citizenship, and enhance patriotic pride in our country.

This course is organized, and executes activities, in a manner that closely resembles that of the workplace. The course introduces, and constantly reinforces, those life-skills that are useful in the workplace. Entry-level leadership students learn basic workplace skills and are introduced to leadership principles, traits, and the core values of “honor, courage, and *commitment*.”

Advanced leadership students are assigned to positions of responsibility where they serve as liaisons between the instructors and students, direct and lead other students, perform office administration and human resources functions, account for property and order supplies, conduct multi-media advertisement of program activities and plan/execute program operations. Through these processes, the course forges self-confident, highly disciplined business and community leaders of the future who will take responsibility for their actions, aggressively seek responsibility for others, act decisively, and display only desirable traits of the highest personal character.

Students enrolled in the course tend to develop a strong sense of belonging to an extended “family” of students with like interests; this has proven to be particularly helpful for those students transferring in from other school districts and those initially lacking in self-confidence or esteem. Freshmen through seniors are grouped in the same class; providing for positive role models and a level of social interaction infrequently found in any other class. Students are encouraged to assist each other by providing peer counseling and emotional support, tutoring each other in deficient academic areas, serving as positive role models, and providing positive peer pressure to demonstrate appropriate social behavior.

Students may participate, on a voluntary basis, in many extra-curricular activities such as weekend field trips to out-of-state high schools for team competitive purposes, adventure training at military installations, fund-raising and form social activities, and numerous community service projects which the course supports. This will count as .5 credit for PE and .5 credit for an elective.





## Social Studies/Leadership

\*\*This course does not in any way recruit the student for military service, teach military tactics, obligate the graduate to involuntarily join military service upon graduation, or obligate the student to involuntarily participate in any extracurricular course activities. \*\*

### **Additional Course Credits:**

**Seniors enrolled in the course receive the following credit: Leadership .5 credit; Government (course satisfied) and PE .5 credit.**

Course community service satisfies MACS annual requirement for community service.

Mexico School Board has approved students in JROTC/Leadership as meeting the NYS standards for Physical Education.

### **Course Benefits:**

1. Receive work - force leadership training and experience while still in high school. Highlight your scholarship, college and employment applications with the words *"Leadership Education & Character Development."*
2. ROTC scholarships are worth \$16,000.00 per year in tuition, books, and laboratory fees – plus an allowance of \$250.00 per month that school is in session. Scholarship recipients usually receive outright grants for room and board from the host college or university. At the national level, all course graduates who applied have received a minimum of one ROTC scholarship.
3. Several \$250.00 - \$500.00 local scholarships are available each year to course graduates.
4. \$5000.00 scholarships are available for demonstrated marksmanship proficiency.
5. As a Naval Honor School, our graduates may be nominated for appointment to a military academy (e.g., West Point) under the JROTC category.
6. Earn MACS Big "M" varsity sports letters for Drill, Sporter Air Rifle, or Youth Physical Fitness teams, and Color Guard.
7. Earn numerous prestigious awards and decorations sponsored by highly recognizable national organizations.

### **Course Prerequisites:**

#### **Students must:**

1. Be enrolled in an academic course of instruction leading to graduation.
2. Be at least 14 years of age sometime during the freshman year.
3. Be certified, through a routine school physical, to participate in PE.



# Technology

Technology Education is a program of instruction in the resources and systems of technology, and technology's impact on the individual and society. Students enrolled in Technology Education courses study the major technological systems of the world and our society. Various components or processes which are fundamental to technological systems are studied in detail. Technology Education courses have been designed to meet the needs of all academic levels and are taught through laboratory based hands-on learning activities. Students locating an occupation area of interest may pursue it further through the Career & Technical Education (CTE) at Center for Instruction, Technology and Innovation (CiTi) and/or SUNY two- or four-year technical colleges. All Technology Education courses are open to all students.

## **0731 Fine Woodworking**

**20 Week .5 Credit Grades 9-12**

Fine Woodworking is designed for the student who wants to know more about wood and wood products, equipment, processes, safe use and care of machines. It is intended to encourage students to develop competent technical skills in the broad areas of woodworking. Each student will have instruction in design, equipment, joinery, lamination, construction, and finishing. Students may select their own individual project that will give experience with various wood joints and more complex machine operations. The importance of safety will be stressed throughout the course.

## **0722 Manufacturing Systems**

**20 Week .5 Credit Grades 9-12**

*Prerequisite: Fine Woodworking required.*

This course provides instruction in the manufacturing aspects of industry, the basic organization of industry with units covering materials processing, manufacturing processes, mass production, and business organization for manufacturing a product. Students are instructed in areas of manufacturing systems which explores the use of jigs, fixtures, and assembly that are incorporated into the production process. Each class will become familiar with manufacturing and organize the class to mass-produce.

## **0726 Electricity**

**20 Weeks .5 Credit Grades 9-12**

Provides a study of electricity in the home. Students will have hands on exposure to single throw, 3-way, and 4-way switch systems. Each system will be constructed, tested, trouble shot for accuracy, and inspected. Because electricity has had such an impact on our lives, it is important to know its uses, dangers, and its potential for the future.

## **0733 Basic Welding**

**20 Weeks .5 Credit Grades 9-12**

This is a course designed to introduce students to the methods, techniques, and equipment needed for each of the common welding processes. Techniques to be



## Technology

covered within oxy-acetylene welding include tinning, brazing, oxy-cutting, sweat soldering, and filler rod welding. The areas of arc welding including GMAW, SMAW, TIG, and Plasma will also be explored. In addition, proper use of equipment, basic metalworking, welding safety, proper assembly and testing of materials will be covered.

**0736APLTW IED/DDP PLTW\*\* 40 Weeks 1 Credit Grades 9-12**

*This course may be used to satisfy the High School Fine Arts requirement.*

In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solution to peers and members of the professional community. This course is designed for students who show an interest in engineering. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. **Students have the option of earning college credit from RIT after they get the results of the end of the year exam in June and meet the college requirements. The approximate cost to receive college credit is \$200.**

**0742APLTW Computer Integrated Manufacturing CIM/PLTW\*\***

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: DDP/PLTW (Intro to Engineering Design)*

This course is an introduction to Robotics and CNC Machining. Builds upon the computer solid modeling design skills developed in PLTW – Intro to Engineering Design (DDP). Students will be presented with design problems that require the use of Autodesk Inventor to develop solutions to problems. They will use rapid prototyping equipment to produce three-dimensional models of the solutions, as well as learn how to program a CNC machine and robots to create their design. **Students have the option of earning college credit from RIT after they get the results of the end of the year exam in June. The approximate cost to receive college credit is \$200.**

**0745APLTW Digital Electronics (DE/PLTW\*\*)**

**40 Weeks 1 Credit Gr 10-12**

*Prerequisite: DDP/PLTW (Intro to Engineering Design/DDP)*

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices. **Students have the option of earning college credit from RIT after they get the results of the end of the year exam in June. The approximate cost to receive college credit is \$200. Digital Electronics can count as a third year of Math. Offered every other year (available in 2022-2023).**



# Technology

## **0460APLTW Principles of Engineering\*\* 40 Weeks 1 Credit Grades 11-12**

Project Lead the Way (POE/PLTW)

*Prerequisite: Integrated Algebra and Geometry, 2 Years of Science, IED/DDP (PLTW)*

This is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. The main purpose of this course is to experience through theory and hands-on problem-solving activities what engineering is and “Is a career in engineering or engineering technology for me?” **Students have the option of earning college credit from RIT after they get the results of the end of the year exam in June. The approximate cost to receive college credit is \$200. Offered every other year (Not offered for 2022-2023).**

## **0750 Automation & Robotics 20 Weeks .5 Credit Grades 9-12**

*Prerequisite: None*

This is a beginning course in robotics. We will be utilizing various Robot platforms and software. The objective of this course is to introduce the student to basic programming as well as problem solving strategies. This course will involve students in the development, building and programming of robots. Students will work hands-on in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, timing, program loops, decision-making, timing sequences, and propulsion systems. Student designed robots will be programmed to compete in various obstacle courses and competitions seen in local and state robotics competitions.

Students will:

- Work hands-on in teams to design, build, program and document their progress.
- Learn basic robot programming language and software.
- Design and build robots to perform using robots.
- Work in groups to solve problems using robots.
- Compete with classmates on robotic solutions.

## **0751 Robotics 2 20 Weeks .5 Credit Grades 9-12**

*Prerequisite: Automation & Robotics*

Robotics 2 continues to process begun in Robotics 1 and allows students to pursue more advanced applications of the framework that was introduced during the previous semester. Students are encouraged to actively pursue a chosen specialty and apply



# Technology

their knowledge to the construction and coding of various prototypes to meet the design specifications that they have established in conjunction with their groups and mentor.

## **0752 Drone Technology**

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: Must be 16 to take the test and recommended overall average of last science class to be 85%*

This course is a hands-on introduction to drone technology in which students will learn the fundamentals of UAS (Unmanned Aircraft Systems) from the ground up. Students will learn about the system components, usage and deployment as well as learn to fly commercially deployed drone technology. Course material is geared towards students preparing to obtain a Remote Pilot Certificate under the FAA's Small UAS Rule (Part 107). Exam Fee: See Instructor.

**\*\*Drone course offering updates Spring 2023\*\***

## **0753 Drone Technology 2**

**40 Weeks 1 Credit Grades 10-12**

*Prerequisite: Must hold a valid 14 CFR Part 107 Certificate.*

This course is a hands-on continuation of drone technology in which students will learn the fundamentals of photo and video editing, 3D mapping, and autonomous flight operations as used in the drone industry. Students will learn about the components of photo and video editing, as well as autonomous flight as used in 3D mapping of structures and land parcels using commercial type drones. Course material is geared towards students who have already completed their 14 CFR Part 107 and are interested in a career in the drone industry.



## World Language

### **0501 Spanish 1 (NCAA Approved) 40 Weeks 1 Credit Grades 8-9**

This course is the Checkpoint A course for NYS World Language Proficiency and is a high school graduation requirement (it can be satisfied if the student has taken and passed the 7<sup>th</sup> and 8<sup>th</sup> grade World Language courses and the 8<sup>th</sup> grade World Language final exam). It provides students with a foundation in Spanish at the Novice High level. Throughout this course, students will explore Spanish speaking culture and come away with the ability to identify topics and some isolated facts about the Spanish speaking worlds through informational and literacy texts as well as conversations in the language. They will also learn how to understand familiar questions and statements, identify the main idea of passages, and follow the main message and flow of events in various time frames in the language they are studying. Students will learn how to expand their skills in the language they are studying to request and provide information, meet basic needs and express, ask about, and react to preferences, feelings, or opinions on familiar and everyday topics on a sentence level in Spanish. Lastly, students will learn how to identify and compare products and practices in their own world and in the Spanish speaking world using simple sentence in Spanish to help them understand perspectives. Students will take the State Equivalent Proficiency Exam at the end of this course and must pass the course or the exam to earn their graduation credit.

### **0502 Spanish 2 (NCAA Approved) 40 Weeks 1 Credit Grade 9**

*Prerequisite: Successful Completion of Spanish 1*

This course is the first half of Checkpoint B for NYS World Language Proficiency. Students will continue exploring the Spanish speaking words and culture at the Intermediate Low level. Throughout the course students will develop the ability to identify topics, main ideas, and related information from simple sentences in short informational and literary texts and conversations that are spoken or written. They will learn how to request and provide information; express, ask about, and react with some details to preferences, feelings, or opinions on familiar topics, create simple sentences and ask appropriate follow-up questions in conversations. Students will also learn to present more in-depth information about their life and activities and state and make attempts to support preferences and opinions on familiar and everyday topics. Students at this level will learn how to work with sentences to describe and compare cultural products and practices in their own and other cultures to help them understand perspectives.





## World Language

### **0503 Spanish 3 (NCAA Approved)**

**40 Weeks**

**1 Credit**

**Grade 10**

*Prerequisite: Successful Completion of Spanish 2*

This course is the second half of Checkpoint B for NYS World Language Proficiency and culminates in a Regents Equivalency Exam. Students enrolled in this course qualify for an Advanced Regents Diploma. Students in this course will continue exploring the Spanish speaking worlds and cultures at the Intermediate Mid-level. Students at this level will learn how to understand the main idea and key information in short straightforward informational and literary texts and conversations that are spoken and written. They will learn how to exchange information, preferences, feelings, or opinions on a variety of familiar and some researched topics, and they will learn how to create sentences and series of sentences. Students at this level will learn to ask follow-up questions in conversations, narrate personal experiences, present information, and state and support viewpoint(s) on a variety of familiar, concrete, and researched topics, using sentences and series of connected sentences, through spoken or written language. Lastly, using sentences and strings of sentences, students will learn how to describe and make comparisons of cultural products and practices in their own and other cultures to help them understand perspectives.

### **0504A Spanish 4\*\* (NCAA Approved)**

**40 Weeks**

**1 Credit**

**Grade 11**

*Prerequisite: Successful Completion of Spanish 3*

This course is the first half of Checkpoint C for NYS World Language Proficiency and provides an opportunity for students to earn three college credits from SUNY Oswego. Students in this course begin their preparation towards earning their NYS Seal of Biliteracy and continue building their proficiency skills within Intermediate Mid proficiency range. Students continue to learn how to understand the main idea and key information in short straightforward informational and literary texts and conversations that are spoken or written. They continue to learn how to exchange information, preferences, feelings, or opinions on a variety of familiar and some researched topics and continue to learn how to create sentences and series of sentences. Students at this level continuing developing the ability to ask follow-up questions in conversations, narrate personal experiences, present information, and state and support viewpoint(s) on a variety of familiar, concrete, and researched topics, using sentences and series of connected sentences. Lastly, students at this level continue learning how to describe and compare cultural products and practices in their own and other cultures to help them understand perspectives using strings of sentences.



## World Language

### **0506A Spanish 5\*\* (NCAA Approved)      40 Weeks      1 Credit      Grade 12**

*Prerequisite: Successful Completion of Spanish 4*

This course is the second half of Checkpoint C for NYS World Language Proficiency and is the capstone course for the World Languages Program. It provides an opportunity for students to earn three college credits from SUNY Oswego at the 202 level and culminates in the earning of the NYS Seal of Biliteracy. Students in this course are learning how to operate at the Intermediate High level. They learn how to follow the main idea, main message, and flow of events in various time frames in straightforward, paragraph-length texts, conversations and discussions that are spoken or written. They also continue to learn how to exchange information, preferences, feelings, or opinions on a variety of familiar, concrete, and researched topics, sometimes involving a complication using connected sentences that may combine to form paragraphs and asking a variety of questions in conversations and discussion, often across various time frames. Lastly, students learn how to compare and explain cultural products and practices in their own and other cultures to help them understand perspectives. Students learn how to use connected sentences that may combine to form paragraphs.

### **0511 German 1 (NCAA Approved)      40 Weeks      1 Credit      Grades 8-9**

This course is the Checkpoint A course for NYS World Language Proficiency and is a high school graduation requirement (it can be satisfied if the student has taken and passed the 7<sup>th</sup> and 8<sup>th</sup> grade World Language courses and the 8<sup>th</sup> grade World Language final exam). It provides students with a foundation in German at the Novice High level. Throughout this course, students will explore German speaking culture and come away with the ability to identify topics and some isolated facts about the German speaking worlds through informational and literacy texts as well as conversations in the language. They will also learn how to understand familiar questions and statements, identify the main idea of passages, and follow the main message and flow of events in various time frames in the language they are studying. Students will learn how to expand their skills in the language they are studying to request and provide information, meet basic needs and express, ask about, and react to preferences, feelings, or opinions on familiar and everyday topics on a sentence level in German. Lastly, students will learn how to identify and compare products and practices in their own world and in the German speaking world using simple sentence in German to help them understand perspectives. Students will take the State Equivalent Proficiency Exam at the end of this course and must pass the course or the exam to earn their graduation credit.





## World Language

### **0512 German 2 (NCAA Approved)      40 Weeks      1 Credit      Grade 9**

*Prerequisite: Successful Completion of German 1*

This course is the first half of Checkpoint B for NYS World Language Proficiency. Students will continue exploring the German speaking words and culture at the Intermediate Low level. Throughout the course students will develop the ability to identify topics, main ideas, and related information from simple sentences in short informational and literary texts and conversations that are spoken or written. They will learn how to request and provide information; express, ask about, and react with some details to preferences, feelings, or opinions on familiar topics, create simple sentences and ask appropriate follow-up questions in conversations. Students will also learn to present more in-depth information about their life and activities and state and make attempts to support preferences and opinions on familiar and everyday topics. Students at this level will learn how to work with sentences to describe and compare cultural products and practices in their own and other cultures to help them understand perspectives.

### **0513 German 3 (NCAA Approved)      40 Weeks      1 Credit      Grade 10**

*Prerequisite: Successful Completion of German 2*

This course is the second half of Checkpoint B for NYS World Language Proficiency and culminates in a Regents Equivalency Exam. Students enrolled in this course qualify for an Advanced Regents Diploma. Students in this course will continue exploring the German speaking worlds and cultures at the Intermediate Mid-level. Students at this level will learn how to understand the main idea and key information in short straightforward informational and literary texts and conversations that are spoken and written. They will learn how to exchange information, preferences, feelings, or opinions on a variety of familiar and some researched topics, and they will learn how to create sentences and series of sentences. Students at this level will learn to ask follow-up questions in conversations, narrate personal experiences, present information, and state and support viewpoint(s) on a variety of familiar, concrete, and researched topics, using sentences and series of connected sentences, through spoken or written language. Lastly, using sentences and strings of sentences, students will learn how to describe and make comparisons of cultural products and practices in their own and other cultures to help them understand perspectives.

### **0514A German 4\*\* (NCAA Approved)      40 Weeks      1 Credit      Grade 11**

*Prerequisite: Successful Completion of German 3*

This course is the first half of Checkpoint C for NYS World Language Proficiency and provides an opportunity for students to earn three college credits from SUNY Oswego. Students in this course begin their preparation towards earning their



## World Language

NYS Seal of Biliteracy and continue building their proficiency skills within Intermediate Mid proficiency range. Students continue to learn how to understand the main idea and key information in short straightforward informational and literary texts and conversations that are spoken or written. They continue to learn how to exchange information, preferences, feelings, or opinions on a variety of familiar and some researched topics and continue to learn how to create sentences and series of sentences. Students at this level continuing developing the ability to ask follow-up questions in conversations, narrate personal experiences, present information, and state and support viewpoint(s) on a variety of familiar, concrete, and researched topics, using sentences and series of connected sentences. Lastly, students at this level continue learning how to describe and compare cultural products and practices in their own and other cultures to help them understand perspectives using strings of sentences.

### **0516A German 5\*\* (NCAA Approved)      40 Weeks      1 Credit      Grade 12**

*Prerequisite: Successful Completion of German 4*

This course is the second half of Checkpoint C for NYS World Language Proficiency and is the capstone course for the World Languages Program. It provides an opportunity for students to earn three college credits from SUNY Oswego at the 202 level and culminates in the earning of the NYS Seal of Biliteracy. Students in this course are learning how to operate at the Intermediate High level. They learn how to follow the main idea, main message, and flow of events in various time frames in straightforward, paragraph-length texts, conversations and discussions that are spoken or written. They also continue the learn how to exchange information, preferences, feelings, or opinions on a variety of familiar, concrete, and researched topics, sometimes involving a complication using connected sentences that may combine to form paragraphs and asking a variety of questions in conversations and discussion, often across carious time frames. Lastly, students learn how to compare and explain cultural products and practices in their own and other cultures to help them understand perspectives. Students learn how to use connected sentences that may combine to form paragraphs.

### **0521 French 1 (NCAA Approved)      40 Weeks      1 Credit      Grades 8-9**

This course is the Checkpoint A course for NYS World Language Proficiency and is a high school graduation requirement (it can be satisfied if the student has taken and passed the 7<sup>th</sup> and 8<sup>th</sup> grade World Language courses and the 8<sup>th</sup> grade World Language final exam). It provides students with a foundation in French at



## World Language

the Novice High level. Throughout this course, students will explore French speaking culture and come away with the ability to identify topics and some isolated facts about the French speaking worlds through informational and literacy texts as well as conversations in the language. They will also learn how to understand familiar questions and statements, identify the main idea of passages, and follow the main message and flow of events in various time frames in the language they are studying. Students will learn how to expand their skills in the language they are studying to request and provide information, meet basic needs and express, ask about, and react to preferences, feelings, or opinions on familiar and everyday topics on a sentence level in French. Lastly, students will learn how to identify and compare products and practices in their own world and in the French speaking world using simple sentence in French to help them understand perspectives. Students will take the State Equivalent Proficiency Exam at the end of this course and must pass the course or the exam to earn their graduation credit.

**0522 French 2 (NCAA Approved)      40 Weeks      1 Credit      Grade 9**

*Prerequisite: Successful Completion of French 1*

This course is the first half of Checkpoint B for NYS World Language Proficiency. Students will continue exploring the French speaking words and culture at the Intermediate Low level. Throughout the course students will develop the ability to identify topics, main ideas, and related information from simple sentences in short informational and literary texts and conversations that are spoken or written. They will learn how to request and provide information; express, ask about, and react with some details to preferences, feelings, or opinions on familiar topics, create simple sentences and ask appropriate follow-up questions in conversations. Students will also learn to present more in-depth information about their life and activities and state and make attempts to support preferences and opinions on familiar and everyday topics. Students at this level will learn how to work with sentences to describe and compare cultural products and practices in their own and other cultures to help them understand perspectives.

**0523 French 3 (NCAA Approved)      40 Weeks      1 Credit      Grade 10**

*Prerequisite: Successful Completion of French 2*

This course is the second half of Checkpoint B for NYS World Language Proficiency and culminates in a Regents Equivalency Exam. Students enrolled in this course qualify for an Advanced Regents Diploma. Students in this course



## World Language

will continue exploring the French speaking worlds and cultures at the Intermediate Mid-level. Students at this level will learn how to understand the main idea and key information in short straightforward informational and literary texts and conversations that are spoken and written. They will learn how to exchange information, preferences, feelings, or opinions on a variety of familiar and some researched topics, and they will learn how to create sentences and series of sentences. Students at this level will learn to ask follow-up questions in conversations, narrate personal experiences, present information, and state and support viewpoint(s) on a variety of familiar, concrete, and researched topics, using sentences and series of connected sentences, through spoken or written language. Lastly, using sentences and strings of sentences, students will learn how to describe and make comparisons of cultural products and practices in their own and other cultures to help them understand perspectives.

### **0526A French 4\*\* (NCAA Approved)      40 Weeks      1 Credit      Grade 11**

*Prerequisite: Successful Completion of French 3*

This course is the first half of Checkpoint C for NYS World Language Proficiency and provides an opportunity for students to earn three college credits from SUNY Oswego. Students in this course begin their preparation towards earning their NYS Seal of Biliteracy and continue building their proficiency skills within Intermediate Mid proficiency range. Students continue to learn how to understand the main idea and key information in short straightforward informational and literary texts and conversations that are spoken or written. They continue to learn how to exchange information, preferences, feelings, or opinions on a variety of familiar and some researched topics and continue to learn how to create sentences and series of sentences. Students at this level continuing developing the ability to ask follow-up questions in conversations, narrate personal experiences, present information, and state and support viewpoint(s) on a variety of familiar, concrete, and researched topics, using sentences and series of connected sentences. Lastly, students at this level continue learning how to describe and compare cultural products and practices in their own and other cultures to help them understand perspectives using strings of sentences.

### **0527A French 5\*\* (NCAA Approved)      40 Weeks      1 Credit      Grade 12**

*Prerequisite: Successful Completion of French 4*

This course is the second half of Checkpoint C for NYS World Language Proficiency and is the capstone course for the World Languages Program. It provides an opportunity for students to earn three college credits from SUNY Oswego at the 202 level and culminates in the earning of the NYS Seal of Biliteracy. Students in this course are learning how to operate at the Intermediate High level. They learn how to follow the main idea, main message, and flow of events in various time frames in straightforward, paragraph-length



## World Language

texts, conversations and discussions that are spoken or written. They also continue to learn how to exchange information, preferences, feelings, or opinions on a variety of familiar, concrete, and researched topics, sometimes involving a complication using connected sentences that may combine to form paragraphs and asking a variety of questions in conversations and discussion, often across various time frames. Lastly, students learn how to compare and explain cultural products and practices in their own and other cultures to help them understand perspectives. Students learn how to use connected sentences that may combine to form paragraphs.



# Career & Technical Education at Center for Instruction & Innovation (CiTi)

## **CiT*i* CAREER & TECHNICAL EDUCATION PROGRAMS**

The Oswego County Board of Cooperative Educational Services has a Career and Technical Education (CTE) program located in Mexico, NY. Students who take CTE programs will attend Mexico HS for half of the school day and the career and technical program for the other half. School bus transportation is provided. Many students continue their education in two- and four-year colleges after completing these programs.

In career and technical education, students: 1) learn on state-of-the-art equipment in a simulated work environment; 2) may receive up to four credits per year in the program they choose.

The location of the campus is: Mexico Campus, 179 County Route 64, Mexico, NY 13114. Phone: 315-963-4251.

### **2023-2024 Courses** ***Career and Technical Programs***

|  |  |
|--|--|
| *Advanced Metal Manufacturing (2 year) | *Digital Media Technology (2 year)             |
| *Auto Body Repair (2 year)             | *Early Childhood Education (2 year)            |
| *Auto Tech I & II (2 year)             | *Heavy Equipment Repair and Operation (2 year) |
| *Computer Coding (2 year)              | *Industrial Electrical Technologies (2 year)   |
| *Construction Technology (2 year)      | *Nursing Assistant (2 year)                    |
| *Cosmetology (2 year)                  | *Public Safety and Justice (2 year)            |
| *Culinary Arts (2 year)                | *Welding Technology (2 year)                   |



# Career & Technical Education at Center for Instruction & Innovation (CiTi)

## **NEW VISIONS**

New Visions programs are interdisciplinary and are oriented toward highly motivated seniors. Each program has a distinct outline that includes immersion experiences in the specific field, is one year in length and is structured in a college preparatory model.

Students who successfully complete a program typically go on to pursue two-year or four-year degrees.

\*Credits include English 12; Government/Economics; and 2 CTE credits.

SUNY Oswego: English 102 / English 150 / Psychology 100 / General Studies 101

***Currently the following programs are offered:***

\*Allied Health

\*Specialized Careers

See website for additional information: <https://www.citiboces.org/Page/341>