# Cardinal Mooney High School Course Descriptions Booklet for 2023-2024

#### INTRODUCTION

This booklet has been prepared to assist both students and parents in course selections for the 2023-2024 school year. Recognizing that the time of course selection is extremely important, we encourage each student and his/her parents to carefully review the information presented here so that proper course selections can be made. The program of studies chosen should be one which challenges the student to develop his/her total person, one which is based on the student's interests, abilities, and future goals.

In planning, the pages which present general guidelines should be studied carefully. Each student should then list the courses already completed and the credit earned, and project the courses he/she hopes to take during the remaining years at Cardinal Mooney. This overview should help ensure that graduation requirements are met, and that the student's program has purpose and proper sequence. The Guidance Department is available to assist in this planning in any way they are able and will meet with each student to go over his/her final course selections.

The selections in this course book represent all the courses that may be offered at Cardinal Mooney. Not all of them may appear on the final master schedule, however.

#### PHILOSOPHY OF EDUCATION

Cardinal Mooney is a Catholic high school whose community of students and their families, teachers, administrators, support staff, and alumni take pride in the school's family atmosphere and its purpose to live and proclaim the Gospel of Jesus Christ. The high school responds to the needs of its members by providing an enriching environment to help students grow intellectually, spiritually, and personally.

Cardinal Mooney educates students through steadfast traditions of scholarship, sanctity, and discipline -- traditions that have been highly valued since the school's inception. Through worship, learning, athletic, and extracurricular activities the goal is personal excellence and integrity.

Students come to Cardinal Mooney from Mahoning and surrounding counties. Because they represent diverse ethnic, racial, and economic backgrounds, students are encouraged to foster and promote greater understanding of others. Ultimately, the high school helps serve the needs of the community by empowering students to develop into productive, responsible adult citizens who are committed to service in the name of Jesus Christ

#### **MISSION STATEMENT**

Cardinal Mooney High School, a Roman Catholic school of the Diocese of Youngstown, Ohio, is committed to providing a quality education in the supportive atmosphere of the Mooney Family. Our embrace of Gospel values and our traditions of sanctity, scholarship, and discipline enable our students to achieve personal excellence. We strive to develop leaders dedicated to social justice and service in the world community.

# Profile of the Cardinal Mooney High School Graduate at Graduation

A person who lives a life informed and transformed by Gospel values, Mooney Family experiences, our three core values, and a dedication to excellence. This graduate:

- Embraces Gospel values
  - Leads a life inspired by the humble model of Jesus Christ and inspired by the Holy Spirit to serve and build God's kingdom
  - Recognizes and responds to the movement of the Holy Spirit in his/her life to discern a particular vocation in the world
  - Appreciates and respects the beauty, value, and goodness of all creation
  - Engages in respectful relationships and collaborates with others for the common good
  - Engages in critical reflection and application of Church teaching to the unique moral and ethical challenges of our global community
- Embraces membership in the Mooney Family
  - Values the diversity of people and encourages acceptance by treating each person with dignity and respect
  - Possesses self-confidence and a healthy sense of humor
  - Lives for the service of others, making informed judgments and decisions, acting in accordance with the principles of Catholic social teaching and our democratic society, and going forth to love and serve the Lord and one another
  - Shares time, talent, and treasure to support Mooney and the community
- Embraces Mooney's core values of sanctity, scholarship, and discipline
  - o Sanctity
    - Develops a life of faith and relationship with God through ongoing study, prayer and participation in the sacramental and community life of the Church
    - Makes decisions with a formed Christian conscience based on Gospel values and the moral teachings of the Church
    - Enjoys a meaningful prayer life and understanding of the Catholic faith
    - Exhibits attitudes of justice, compassion, forgiveness, empathy, concern, and respect for others
    - Recognizes, develops, and respects the God-given talents of oneself and others
    - Respects life in all its forms and at all its stages
  - o Scholarship
    - Assumes personal responsibility for life-long learning and intellectual curiosity
    - Applies critical thinking and problem-solving skills to real life experiences
    - Demonstrates proficiency and clarity in oral and written communication in a variety of content areas and disciplines
    - Demonstrates skills of scientific inquiry and math competency as well as information, media, and technology literacy
    - Appreciates the aesthetic value in art, music, and literature
    - Demonstrates knowledge of a broad range of disciplines including the humanities, world languages, and the social sciences
    - Demonstrates a balanced lifestyle that maintains physical, spiritual, and social emotional health
  - o Discipline

- Utilizes self-discipline and assumes personal responsibility for him/herself and others
- Exhibits a work ethic, self-discipline, and persistence to pursue goals even when encountering challenges
- Strives to achieve personal excellence
- Acts as a respectful, contributing, flexible, effective member of a collaborative team
- Serves as a role model to others by living a life built upon our deeply held, common values
- Embraces excellence
  - Strives to lead and serve with integrity and a dedication to social justice
  - Exhibits a sense of responsibility, stewardship, and commitment to economic justice, multicultural diversity, as well as protection and care for the environment

# **GENERAL GUIDELINES**

### **GRADUATION REQUIREMENTS**

Cardinal Mooney is a high school in the Diocese of Youngstown and chartered by the State of Ohio. The following are the requirements for graduation as prescribed by the Ohio State Department of Education and Cardinal Mooney High School.

 Each student must successfully complete a program of <u>25 total units of credit</u>. (1 unit=1 credit). The minimum program for graduation requires:

Theology	4 units (□*1.)
English	4 units
Mathematics	4 units (□*2.)
Science	3 units (including Biological Science, Physical Science and one
	advanced science) (□*3.)
Social Studies Fine Arts Health Physical Education Financial Literacy Electives	3 units (including U.S. History, Government and World History) 1 unit <sup>1</sup> / <sub>2</sub> unit <sup>1</sup> / <sub>2</sub> unit (2 courses @1/4 credit each or waiver) <sup>1</sup> / <sub>2</sub> unit 5 units

□\*1. This requirement may be adjusted for students who enter Cardinal Mooney after the ninth grade.

□\*2. Four credits in Mathematics passed in grades 9-12 (including one unit in Algebra II) are required.

□\*3. Science courses that qualify as a Physical Science course are any Chemistry or Physics course as well as Physical Science.

Advanced sciences include: Chemistry, all AP science courses, Anatomy and Physiology, Forensic Science, Environmental Science, Earth Science, H Physics, and Physics.

- 4. Students who plan to enroll in AP courses must meet the prerequisites.
- 5. It is recommended that college-bound students earn at least 2 credits in the same world language.
- 6. All students must pass all tests required by the State of Ohio, Department of Education.

Students who fail to meet the academic requirements for graduation may not be permitted to participate in graduation activities.

7. Additional graduation requirements and pathways from the State of Ohio are available at <u>education.ohio.gov/Topics/Ohio-s-Graduation-Requirements</u>.

#### ACADEMIC PROGRAM

Cardinal Mooney is committed to offering a rigorous academic program for all students. Mooney's program prepares students for college and success in future careers. The core and elective courses help each student develop the knowledge, skills, and values needed to face the challenges of the future. Students are required to meet the prerequisites for each course selected. Each student should choose core and elective courses that will best develop the talents, abilities, and prerequisites that align with his/her future goals.

#### SUBJECT LOAD

All students are required to schedule at least 7 classes each semester. A student may schedule one study hall each semester, to complete their 8 block schedule.

#### FINE ARTS REQUIREMENT

The minimum program for graduation includes successful completion of one unit in fine arts. Courses that fulfill this requirement include all Art classes, all Music courses, Drama, Creative Communications and Debate.

#### **COLLEGE PREPARATORY PROGRAM**

A rigorous college preparatory program includes the courses outlined below. Taking the minimum number of credits in each area prepares a student for college studies, but a college or university may require additional courses for general admission and/or admission to a specific program. Carrying the optimum units of credit in each area will better prepare a student to take college entrance examinations and meet the requirements of the more selective colleges.

#### Recommended College Preparatory Program

4 units of English
4 units of Theology
4 units of Mathematics (including Algebra II)
3-4 units of Science (including Biology, Chemistry, and Physics)
3 units of World Languages (or 2 of each of 2 languages)
3 or more units of Social Studies
½ unit of Health and ½ unit of Physical Education or waiver
Additional electives to explore areas of interest or courses related to possible major or career
1 or more units of Fine Arts\*
STEM courses
\*The type of course accepted varies with each college/university. Students should check the specific admission requirements of the school(s) of their choice as well as requirements to specific programs or majors.

#### HONORS COURSES

Honors courses offered within the Art, English, Mathematics, Science, and Social Studies Departments are intended to challenge the academically talented and dedicated student. These courses involve an accelerated, in-depth approach to the subject matter and students are expected to complete more comprehensive assignments than those in the regular programs. To enroll in an honors course, students must meet the stated criteria and fulfill the prerequisites. Because of the additional course requirements, grades from honors courses are weighted in computing a student's grade point average. (Refer to the Parent/*Student Handbook* for further information on weighted grades.)

#### ADVANCED PLACEMENT COURSES

An Advanced Placement course is a college-level course offered to high school students. The content of the course and the rigor with which it is approached is the same as experienced on the college campus. Students enrolled in an AP course are required to take the Advanced Placement examination conducted by the College Board each May. AP courses are offered within the Art, English, Mathematics, Science, Social Studies, Technology and World Language Departments.

Students may earn college credit based on their score on an AP exam and the policies of the college or university where they enroll. Grades from Advanced Placement courses are weighted in the computation of a student's grade point average.

#### COLLEGE CREDIT PLUS (CCP)

Students may also work with the counselor to schedule College Credit Plus courses. See the details in the *Parent/Student Handbook* for an explanation of this program and how to enroll. If Mooney offers an Honors or AP Course comparable to the College Credit Plus course a student completes, the CCP grade will be weighted.

## <u>GRADING</u>

The following grading system is used to indicate academic progress in all courses except those that are classified "Honors" or "Advanced Placement".

<u>GRADE</u>	<b>GRADING SCALE</b>	QUALITY POINT VALUE
А	100 - 93	4.0
В	92 - 85	3.0
С	84 - 75	2.0
D	74 - 67	1.0
F	66 and below	0.0
Inc	(Incomplete)	0.0
Р	(Passing)	0.0
S	(Satisfactory)	0.0
U	(Unsatisfactory)	0.0
W	(Withdrawn	0.0
Aud	(Audit)	0.0

In those courses classified as "Honors" or "Advanced Placement" (and comparable CCP courses that coincide with CMHS Honors or AP courses) the following point values will be assigned:

<u>GRADE</u>	<u>GRADING SCALE</u>	<u>QUALITY POINT VALUE</u>
A	100 - 93	5.0
В	92 - 85	4.0
С	84 - 75	3.0
D	74 - 67	2.0
F	66 and below	0.0
Inc	(Incomplete)	0.0
Р	(Passing)	0.0
S	(Satisfactory)	0.0
U	(Unsatisfactory)	0.0
W	(Withdrawn)	0.0
Aud	(Audit)	0.0

#### **GRADUATION HONORS**

The graduating senior with the highest quality point total after seven semesters will earn the class valedictorian award. The class salutatorian award will be given to the senior with the second highest quality point total after seven semesters. Honor cords will be awarded to those students who place in the top 15% of the class academically, based on the total quality points earned after seven semesters.

To qualify for these graduation honors, a student must be enrolled for a minimum of three (3) continuous semesters at Cardinal Mooney High School prior to graduation.

#### POLICIES REGARDING SCHEDULE CHANGES

The staff and administration of Cardinal Mooney High School are committed to scheduling students for the classes they request in the spring. Consultation with the Guidance Department and parental approval are required before course selections can be finalized. Following spring course registration,

the school hires staff, orders supplies, and builds the Master Schedule based on student requests. Therefore, in general, requests to make a change to a student's schedule will be limited to the following reasons:

1. Computer/Guidance Department errors.

Students indicate their top choices, especially for electives, during the registration process. If a selected class does not appear on the final Master Schedule or does not fit within a student's final schedule, that is not an error.

2. Teacher recommended schedule changes based on academic performance.

Whenever possible, according to our schedule, these will be made on an individual basis and must have administrative approval.

- 3. Any request for adding or dropping a course must be made in writing on the schedule change form a student obtains from the Guidance Department after a discussion with a counselor. The form must be signed by the student, the student's parent or guardian, the counselor, and the teachers involved. Such changes may only be made within the first two weeks of the semester. There may be a \$25 change fee.
- 4. Any exceptions to these policies must be authorized by an administrator.

# On the following pages are examples of the Course Selection Request Forms students will complete with the help of the members of the Guidance Department.

At the end of this booklet are flow charts that depict how the courses in each department interconnect. Students can use the charts to figure out the program of studies they can pursue in each department to fulfill graduation requirements and to help them choose electives to match their interests and goals.

Name			
(	(Last)	(First)	(Middle Initial)

DIRECTIONS: In the core subjects chart below, choose your core courses based on your counselor's recommendations. On the back, request your electives based on how many credits you need. Do this by subtracting your total credits on the front from 8. For example, if you have 5.5 credits on the front, you will need 2.5 credits checked on the back. You will also need to CIRCLE 3 alternate elective classes as backup options, in case you cannot be placed into your primary elective selections.

Remember: 1 credit equals a full year course, and 0.5 credit equals a semester course.

#### CORE SUBJECTS

Credit	Subject	Semester	Semester
Required 1 credit	English	<ul> <li>English 9 (0.5) EN3005</li> <li>Honors English 9 (0.5) EN3105</li> </ul>	<ul> <li>English 9 (0.5) EN3005</li> <li>Honors English 9 (0.5) EN3105</li> </ul>
Required 1 credit	Social Studies	<ul> <li>Modern World History (0.5)</li> <li>SS8001</li> <li>Honors Modern World History (0.5) SS8803</li> </ul>	<ul> <li>Modern World History (0.5) SS8001</li> <li>Honors Modern World History (0.5) SS8803</li> </ul>
Required 1 credit	Math	<ul> <li>Algebra (0.5) MA6103</li> <li>Honors Algebra (0.5) MA6104</li> <li>Geometry (0.5) MA6202</li> <li>Honors Geometry (0.5) MA6203</li> <li>Math Lab (0.5) MA6002</li> </ul>	<ul> <li>Algebra (0.5) MA6103</li> <li>Honors Algebra (0.5) MA6104</li> <li>Geometry (0.5) MA6202</li> <li>Honors Geometry (0.5) MA6203</li> <li>Math Lab (0.5) MA6002</li> </ul>
Required 1 credit	Science	<ul> <li>Physical Science (0.5) SC7004</li> <li>Biology (0.5) SC7102</li> <li>Honors Biology (0.5) SC7103</li> </ul>	<ul> <li>Physical Science (0.5) SC7004</li> <li>Biology (0.5) SC7102</li> <li>Honors Biology (0.5) SC7103</li> </ul>
Required 1 credit	Theology	Principles of the Catholic Faith (0.5) RE9004	Old Testament (0.5) RE9003

Recommended 1 credit	Language	<ul> <li>Italian I (0.5) LA3401</li> <li>Spanish I (0.5) LA3901</li> <li>Academic Study Skills (0.5) EN3408</li> </ul>	<ul> <li>Italian I (0.5) LA3401</li> <li>Spanish I (0.5)LA3901</li> <li>Academic Study Skills (0.5) EN3408</li> </ul>
Required 0.5 credit	Physical Education	<ul> <li>Physical Education I* (0.25)</li> <li>HP4001</li> <li>Waiver</li> </ul>	
Required 0.5 credit	Health	Health (0.5)HP4101	

Core Credits:

#### **ELECTIVES & ALTERNATIVES**

Credits	Subject Area	Semester	Semester
1 credit	Fine Arts	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>
0.5 credit	Fine Arts	<ul> <li>Color &amp; Design (0.5)1010</li> <li>Guitar (0.5) AR1500</li> <li>Piano I (0.5) AR1452</li> <li>Drama (0.5) EN3404</li> </ul>	
0.5 credit	Business and Technology	<ul> <li>Marketing Principles (0.5 credit) BU2015</li> <li>Digital Media Production (0.5 credit) BU2114</li> <li>Web Development (0.5 credit) ST9002</li> </ul>	
0.5 credit	Social Studies	World Geography (0.5) SS8317	

0 credit	Study Hall	☐ Study Hall** ADM1002	
0.5 credit	Study Hall	Guided Study Hall*** (0.5) ADM1001	☐ Guided Study Hall** (0.5)
1 credit	Studio Art Program (Also: Fine Arts Credit)	☐ Studio Art I (0.5) AR1013	☐ Studio Art I (0.5) AR1013

\*Physical Education I will be taken over a semester, but will earn 0.25 credit.

\*\*Study Halls will not count towards your GPA calculation or graduation requirement.

\*\*\*Administrative decision.

Elective Credits:	
Total Credits:	

All freshmen will be required to participate in a study skills course during Flex Time the first semester. A half credit will be given for this course.

Student Signature:
Parent Name:
Parent Signature:
Parent Phone Number:
Counselor's Signature:

Cardinal Mooney High School 23-24 Scheduling Form for Grade 10

Name		
(Last)	(First)	(Middle Initial)

DIRECTIONS: Choose <u>8 total credits</u> for your schedule. Then choose 3 alternate elective classes as backup options in case you cannot be placed into your primary elective selections. Write all core course selections in the table below, and electives and alternates on the back. A full course listing is attached. Remember: 1 credit equals a full year course, and 0.5 credit equals a semester course.

Remember: 1 credit equals a full year course, and 0.5 credit equals a semester course.

#### CORE SUBJECTS

Credit	Subject	Semester	Semester
Required 1 credit	English	English 10 EN3105	English 10 EN3105
		English 10 Honors EN3101	English 10 Honors EN3101
Required	Social	Financial Literacy SS8000	
0.5 \ credit	Studies		
Required	Math	Geometry MA6202	Geometry MA6202
1 credit		Honors Geometry MA6203	Honors Geometry MA6203
		Algebra II TrigonometryMA6106	Algebra II TrigonometryMA6106
		Honors Algebra II Trigonometry MA6107	Honors Algebra II Trigonometry MA6107
		MA6107	MA6107
Required	Science	Physical Science SC7102	Physical Science SC7102
1 credit		☐ Biology SC7102	☐ Biology SC7102
		Chemistry SC7202	Chemistry SC7202
		Honors Chemistry SC7203	Honors Chemistry SC7203
Required	Theology	New Testament & Acts of the	Sacraments RE9102
1 credit		Apostles RE9103	
Recommended	Language	🔲 Italian I LA3401	Italian I LA3401
1 credit		🔲 Italian II LA3402	Italian II LA3402

		<ul><li>Spanish I LA3901</li><li>Spanish II LA3402</li></ul>	<ul><li>Spanish I LA3901</li><li>Spanish II LA3402</li></ul>
Required 0.5 credit	Physical Education	<ul> <li>Physical Education HP4001</li> <li>Waiver</li> </ul>	
Core Credit	s:		

#### **ELECTIVES & ALTERNATIVES**

Credits	Subject Area	Semester	Semester
1 credit	Fine Arts	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Studio Art II (0.5) Ar1014</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Studio Art II (0.5) Ar1014</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>
0.5 credit	Fine Arts	<ul> <li>Color &amp; Design (0.5)1010</li> <li>Ceramics I (0.5 credit) AR1011</li> <li>Digital Photo* (0.5 credit) AR1107</li> <li>Drawing (0.5 credit) AR1040</li> <li>Painting* (0.5 credit) AR1041</li> <li>Photography I (0.5 credit) AR1101</li> <li>Photography II* (0.5 credit) AR1105</li> <li>Guitar (0.5) AR1500</li> <li>Piano I (0.5) AR1452</li> <li>Piano II* (0.5 credit) AR1454</li> <li>Drama (0.5) EN3404</li> <li>Debate (0.5 credit) EN3414</li> </ul>	
0.5 credit	Business and Technology	Marketing Principles (0.5 credit) BU2015	

		<ul> <li>Digital Media Production (0.5 credit) BU2114</li> <li>Web Development (0.5 credit) ST9002</li> <li>Animation &amp; Game Design (0.5 credit) ST9003</li> </ul>	
0.5 credit	Social Studies	<ul> <li>World Geography (0.5) SS8317</li> <li>Law in Action (0.5 credit) SS8311</li> </ul>	
0.5 credit	English	Creative Writing* (0.5 credit) EN3403	
1 credit	English	☐ Newspaper (0.5 credit) EN3420	☐ Newspaper (0.5 credit) EN3420
0.5 credit	Industrial Arts	<ul> <li>Mechanical Drawing I IN5101</li> <li>Woodworking Art &amp; Design I IN5003</li> </ul>	
0 credit	Study Hall	Study Hall** ADM1002	
0.5 credit	Study Hall	☐ Guided Study Hall*** (0.5) ADM1001	☐ Guided Study Hall** (0.5)
1 credit	Studio Art Program (Also: Fine Arts Credit)	☐ Studio Art I (0.5) AR1013	☐ Studio Art I (0.5) AR1013

\*Physical Education I will be taken over a semester, but will earn 0.25 credit.

\*\*Study Halls will not count towards your GPA calculation or graduation requirement.

\*\*\*Administrative decision.

Elective Credits:	
Total Credits:	

All freshmen will be required to participate in a study skills course during Flex Time the first semester. A half credit will be given for this course.

udent Signature:
arent Name:
arent Signature:
arent Phone Number:
ounselor's Signature:

Name	

(Last)

(First)

(Middle Initial)

**DIRECTIONS:** In the core subjects chart below, choose your core courses based on your counselor's recommendations. On the back, request your electives based on how many credits you need. Do this by subtracting your total credits on the front from 8. For example, if you have 6.5 credits on the front, you will need 1.5 credits checked on the back. You will also need to **CIRCLE** 3 alternate elective classes as backup options, in case you cannot be placed into your primary elective selections.

Remember: 1 credit equals a full year course, and 0.5 credit equals a semester course.

<u>Credit</u>	<u>Subject</u>	<u>Semester</u>	<u>Semester</u>
Required 1 credit	English	<ul> <li>English 11 (0.5) EN3204</li> <li>Honors English 11* (0.5) EN3201</li> </ul>	<ul> <li>English 11 (0.5) EN3204</li> <li>Honors English 11* (0.5) EN3201</li> </ul>
Required 1 credit	Social Studies	<ul> <li>US History (0.5) SS8101</li> <li>Advanced Placement US History* (0.5) SS8102</li> </ul>	<ul> <li>US History (0.5) SS8101</li> <li>Advanced Placement US History* (0.5) SS8102</li> </ul>
Required 1 credit	Math	<ul> <li>Algebra II (0.5) MA6205</li> <li>Algebra II Trigonometry* (0.5) MA6106</li> <li>Honors Algebra II Trigonometry* (0.5) MA6107</li> <li>Pre-Calculus* (0.5) MA6304</li> <li>Honors Pre-Calculus* (0.5) MA6305</li> </ul>	<ul> <li>Algebra II (0.5) MA6205</li> <li>Algebra II Trigonometry* (0.5) MA6106</li> <li>Honors Algebra II Trigonometry* (0.5) MA6107</li> <li>Pre-Calculus* (0.5) MA6304</li> <li>Honors Pre-Calculus* (0.5) MA6305</li> </ul>
Required 1 credit	Science	<ul> <li>Chemistry* (0.5) SC7202</li> <li>Honors Chemistry* (0.5) SC7203</li> <li>Advanced Placement Biology* (0.5) SC7108</li> <li>Physics* (0.5) SC7301</li> <li>Honors Physics* (0.5) SC7303</li> <li>Anatomy &amp; Physiology* (0.5) SC7104</li> </ul>	<ul> <li>Chemistry* (0.5) SC7202</li> <li>Honors Chemistry* (0.5) SC7203</li> <li>Advanced Placement Biology* (0.5) SC7108</li> <li>Physics* (0.5) SC7301</li> <li>Honors Physics* (0.5) SC7303</li> <li>Anatomy &amp; Physiology* (0.5) SC7104</li> </ul>
Required 1 credit	Theology	Catholic Church History (0.5) <b>RE9203</b>	Morality, Justice & Peace (0.5) RE9202
Recommended 1 credit	Language	<ul> <li>Italian I (0.5) LA3401</li> <li>Italian II* (0.5) LA3402</li> <li>Italian III* (0.5) LA3403</li> <li>Spanish I (0.5) LA3901</li> </ul>	<ul> <li>Italian I (0.5) LA3401</li> <li>Italian II* (0.5) LA3402</li> <li>Italian III* (0.5) LA3403</li> <li>Spanish I (0.5) LA3901</li> </ul>

# **CORE SUBJECTS**

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Spanish II\* (0.5) LA3402
 Spanish III\* (0.5) LA3403

#### **ELECTIVES & ALTERNATIVES**

<u>Credits</u>	Subject Area	Semester	Semester
0.5 credit	Fine Arts All courses in this category count towards your required fine art credit.	<ul> <li>Color and Design (o.5) 1010</li> <li>Ceramics I* (0.5) AR1011</li> <li>Ceramics II* (0.5) AR1020</li> <li>Drawing (0.5) AR1040</li> <li>Painting* (0.5) AR1041</li> <li>Portfolio* (0.5) AR1032</li> <li>Photography 1 (0.5) AR1101</li> <li>Photography II* (0.5) AR1105</li> <li>Digital Photography II* (0.5) AR1107</li> <li>Digital Photography II* (0.5) AR1108</li> <li>Guitar (0.5) AR1452</li> <li>Piano II* (0.5) AR1454</li> <li>Drama (0.5) EN3404</li> </ul>	
1 credit	Fine Arts All courses in this category count towards your required fine art credit.	<ul> <li>Advanced Placement 2D Art* (0.5) AR1031</li> <li>Advanced Placement 3D Art* (0.5) AR1034</li> <li>Advanced Placement Drawing* (0.5) AR1035</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>	<ul> <li>Advanced Placement 2D Art* (0.5) AR1031</li> <li>Advanced Placement 3D Art* (0.5) AR1034</li> <li>Advanced Placement Drawing* (0.5) AR1035</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>
0.5 credit	Business & Technology	<ul> <li>Professional and Business Etiquette (0.5 credit) BS2006</li> <li>Creative Entrepreneurship (0.5) BU2111</li> <li>Animation &amp; Game Design (0.5) ST9003</li> <li>Web Development (0.5) ST9002</li> <li>Environmental Sustainability* (0.5) SC7305</li> <li>Forensic Science* (0.5) SC7012</li> <li>Mechanical Drawing I (0.5) IN5101</li> <li>Mechanical Drawing I* (0.5) IN5102</li> <li>Woodworking Art &amp; Design I (0.5) IN5003</li> </ul>	
1 Credit	Business & Technology	<ul> <li>Broadcast Journalism (0.5 credit) BU2115</li> <li>Advanced Placement Computer Science Principles* (0.5) BU2118</li> </ul>	<ul> <li>Broadcast Journalism (0.5 credit) BU2115</li> <li>Advanced Placement Computer Science Principles* (0.5) BU2118</li> </ul>
1 credit	Science	Earth Science* (0.5) <b>SC7002B</b>	Earth Science* (0.5) SC7002B
0.5 credit	English	<ul> <li>Creative Writing* (0.5) EN3403</li> <li>Debate* (0.5) EN3414</li> </ul>	

1 credit	English	Newspaper (0.5) <b>EN3420</b>	Newspaper (0.5) EN3420
1 credit	Social Studies	AP Psychology (0.5) SS8312	AP Psychology (0.5) SS8312
0.5 credit	Social Studies	<ul> <li>Law in Action (0.5) SS8311</li> <li>World Geography (0.5) SS8317</li> <li>Sociology (0.5) SS8306</li> </ul>	
0 credit	Study Hall	Study Hall** ADM1002	
0.5 credit	Study Hall	Guided Study Hall*** (0.5) ADM1001	Guided Study Hall*** (0.5) ADM1001
0.5 credit* (must do both courses for Graduation Recognition	Biomedical Program	Principles of the Biomedical Sciences (0.5) Semester 1 SC7023	Microbiology (0.5) Semester 2 SC7024
0.5 credit* (must do both courses for Graduation Recognition	Engineering Program	Engineering Essentials:Exploring Careers (0.5) Semester 1 ST9023	Introduction to Engineering Design (0.5) Semester 2 ST9024
1 credit	Studio Art Program (Also: Fine Arts Credit)	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Studio Art II* (0.5) AR1014</li> <li>Studio Art III* (0.5) AR1015</li> </ul>	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Studio Art II* (0.5) AR1014</li> <li>Studio Art III* (0.5) AR1015</li> </ul>

\*Requires a prerequisite.

\*\*Study Halls will not count towards your GPA calculation or graduation requirement.

\*\*\*Administrative decision.

TOTAL CORE CREDITS:	
TOTAL ELECTIVE CREDITS:	
TOTAL CORE & ELECTIVE CREDITS:	

I will be taking CCP courses during the 2022-2023 school year. Yes No

If yes, the course(s) I am considering taking are: \_\_\_\_\_

Parent Name:	
Parent Signature:	
Parent Phone Number:	
Counselor's Signature:	

Date: \_\_\_\_\_

Name

(Last)

(First)

(Middle Initial)

**DIRECTIONS:** In the core subjects chart below, choose your core courses based on your counselor's recommendations. On the back, request your electives based on how many credits you need. To determine this, subtract your total credits on the front from 8. For example, if you have 5.5 credits on the front, you will need 2.5 credits checked on the back. You will also need to **CIRCLE** 3 alternate elective classes as backup options, in case you cannot be placed into your primary elective selections. **Remember: 1 credit equals a full year course, and 0.5 credit equals a semester course.** 

<u>Credit</u>	<u>Subject</u>	<u>Semester</u> <u>Semester</u>	
Required 1 credit	English	<ul> <li>English 12 (0.5) EN3304</li> <li>Advanced Placement Literature &amp; Composition* (0.5) EN3303</li> </ul>	<ul> <li>English 12 (0.5) EN3304</li> <li>Advanced Placement Literature &amp; Composition* (0.5) EN3303</li> </ul>
Required 1 credit	Social Studies	<ul> <li>American Government (0.5) SS8314</li> <li>Advanced Placement Government* (0.5) SS8105</li> </ul>	Advanced Placement Government* (0.5) SS8105
Required 1 credit	Math	<ul> <li>Algebra II (0.5) MA6205</li> <li>Algebra II Trigonometry* (0.5) MA6106</li> <li>Honors Algebra II Trigonometry* (0.5) MA6107</li> <li>Pre-Calculus* (0.5) MA6304</li> <li>Honors Pre-Calculus* (0.5) MA6305</li> <li>Calculus* (0.5) MA503</li> <li>AP Calculus* (0.5) MA6501</li> <li>College Algebra* (0.5) MA6402</li> </ul>	<ul> <li>Algebra II (0.5) MA6205</li> <li>Algebra II Trigonometry* (0.5) MA6106</li> <li>Honors Algebra II Trigonometry* (0.5) MA6107</li> <li>Pre-Calculus* (0.5) MA6304</li> <li>Honors Pre-Calculus* (0.5) MA6305</li> <li>Calculus* (0.5) MA503</li> <li>AP Calculus* (0.5) MA6501</li> <li>College Algebra* (0.5) MA6402</li> </ul>
Required 1 credit	Science	<ul> <li>Chemistry* (0.5) SC7202</li> <li>Advanced Placement Chemistry* (0.5) SC7204</li> <li>Anatomy &amp; Physiology* (0.5) SC7104</li> <li>Physics* (0.5) SC7301</li> <li>Honors Physics* (0.5) SC7303</li> </ul>	<ul> <li>Chemistry* (0.5) SC7202</li> <li>Advanced Placement Chemistry* (0.5) SC7204</li> <li>Anatomy &amp; Physiology* (0.5) SC7104</li> <li>Physics* (0.5) SC7301</li> <li>Honors Physics* (0.5)SC7303</li> </ul>
Required 1 credit	Theology	Christian Lifestyles/Sexuality (0.5) <b>RE9301</b>	World Religions (0.5) <b>RE9404</b>
Recommended 1 credit	Language	<ul> <li>Italian I (0.5) LA3401</li> <li>Italian II* (0.5) LA3402</li> <li>Italian III* (0.5) LA3403</li> <li>Spanish I (0.5) LA3901</li> <li>Spanish II* (0.5) LA3402</li> <li>Spanish III* (0.5) LA3403</li> <li>Advanced Placement Spanish IV* (0.5) LA3904</li> </ul>	<ul> <li>Italian I (0.5) LA3401</li> <li>Italian II* (0.5) LA3402</li> <li>Italian III* (0.5) LA3403</li> <li>Spanish I (0.5) LA3901</li> <li>Spanish II* (0.5) LA3402</li> <li>Spanish III* (0.5) LA3403</li> <li>Advanced Placement Spanish IV* (0.5) LA3904</li> </ul>

#### **CORE SUBJECTS**

# **ELECTIVES & ALTERNATIVES**

<u>Credits</u>	Subject Area	Semester Semester	
0.5 credit	Fine Arts All courses in this category count towards your required fine art credit.	<ul> <li>Ceramics I* (0.5) AR1011</li> <li>Ceramics II* (0.5) AR1020</li> <li>Drawing (0.5) AR1040</li> <li>Painting* (0.5) AR1041</li> <li>Portfolio* (0.5) AR1032</li> <li>Photography 1 (0.5) AR1101</li> <li>Photography II* (0.5) AR1105</li> <li>Digital Photography I* (0.5) AR1107</li> <li>Digital Photography II* (0.5) AR1108</li> <li>Guitar (0.5) AR1450</li> <li>Piano I (0.5) AR1454</li> <li>Drama (0.5) EN3404</li> </ul>	
1 credit	Fine Arts All courses in this category count towards your required fine art credit.	<ul> <li>Advanced Placement 2D Art* (0.5) AR1031</li> <li>Advanced Placement 3D Art* (0.5) AR1034</li> <li>Advanced Placement Drawing* (0.5) AR1035</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>	<ul> <li>Advanced Placement 2D Art* (0.5) AR1031</li> <li>Advanced Placement 3D Art* (0.5) AR1034</li> <li>Advanced Placement Drawing* (0.5) AR1035</li> <li>Band (0.5) AR1450</li> <li>Choir (0.5) AR1451</li> </ul>
0.5 credit	Business & Technology	<ul> <li>Professional and Business Etiquette (0.5 credit) BS2006</li> <li>Creative Entrepreneurship (0.5) BU2111</li> <li>Animation &amp; Game Design (0.5) ST9003</li> <li>Web Development (0.5) ST9002</li> <li>Environmental Sustainability* (0.5) SC7305</li> <li>Forensic Science* (0.5) SC7012</li> <li>Mechanical Drawing I (0.5) IN5101</li> <li>Mechanical Drawing II* (0.5) IN5102</li> <li>Woodworking Art &amp; Design I (0.5) IN5003</li> </ul>	
1 credit	Business & Technology	<ul> <li>Broadcast Journalism (0.5 credit) BU2115</li> <li>Advanced Placement Computer Science Principles* (0.5) BU2118</li> </ul>	<ul> <li>Broadcast Journalism (0.5 credit) BU2115</li> <li>Advanced Placement Computer Science Principles* (0.5) BU2118</li> </ul>
1 credit	Science	Earth Science* (0.5) SC7002B	Earth Science* (0.5) SC7002B
0.5 credit	English	Creative Writing* (0.5) <b>EN3403</b> Debate* (0.5) <b>EN3414</b>	
1 credit	English	Newspaper (0.5) <b>EN3420</b>	Newspaper (0.5) <b>EN3420</b>
1 credit	Social Studies	Advanced Placement Psychology* (0.5) SS8312	Advanced Placement Psychology* (0.5) <b>SS8312</b>
0.5 credit	Social Studies	<ul> <li>Law in Action (0.5) SS8311</li> <li>World Geography (0.5) SS8317</li> </ul>	

		Sociology SS8306		
0 credit	Study Hall	Study Hall** ADM1002		
0.5 credit	Study Hall	Guided Study Hall*** (0.5) ADM1001	Guided Study Hall*** (0.5) ADM1001	
0.5 credit* (must do both courses for Graduation Recognition	Biomedical Program	Principles of the Biomedical Sciences (0.5) Semester 1 SC7023	Microbiology (0.5) Semester 2 SC7024	
0.5 credit* (must do both courses for Graduation Recognition	Engineering Program	Engineering Essentials:Exploring Careers (0.5) Semester 1 ST9023	Introduction to Engineering Design (0.5) Semester 2 ST9024	
1 credit	Studio Art Program (Also: Fine Arts Credit)	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Studio Art II* (0.5) AR1014</li> <li>Studio Art III* (0.5) AR1015</li> <li>Studio Art IV/ AP Visual Art * (0.5) AR1016</li> </ul>	<ul> <li>Studio Art I (0.5) AR1013</li> <li>Studio Art II* (0.5) AR1014</li> <li>Studio Art III* (0.5) AR1015</li> <li>Studio Art IV/ AP Visual Art * (0.5) AR1016</li> </ul>	

\*Requires a prerequisite.

\*\*Study Halls will not count towards your GPA calculation or graduation requirement.

\*\*\*Administrative decision.

TOTAL CORE CREDITS:	
TOTAL ELECTIVE CREDITS:	
TOTAL CORE & ELECTIVE CREDITS:	

I will be taking CCP courses during the 2022-2023 school year.	Yes	No
--	-----	----

If yes, the course(s) I am considering taking are: \_\_\_\_\_

Student Signature:		
Parent Name:		

Parent Signature: \_\_\_\_\_

Parent Phone Number:		
-		

Counselor's Signature:

Date: \_\_\_\_\_

# **Academic Programs**

In addition to our college preparatory curriculum, Cardinal Mooney offers three unique and specialized academic programs that empower students to pursue career-focused programming.

# **Biomedical**

Biomedical Science applies real-world issues by exploring topics like disease, DNA analysis, medical terminology, microbiology, epidemiology, public health, and more. Along the way, students gain experience with techniques that are used by professionals in hospitals and labs every day. They will also explore the prevention, diagnosis and treatment of disease working collaboratively to investigate and design innovative solutions for the health challenges of the 21st century. The following courses will be offered each semester for interested juniors and seniors.

- Principles of the Biomedical Sciences (Semester 1, 2023-2024 school year)
- Microbiology (Semester 2, 2023-2024 school year)
- Epidemiology (Semester 1, 2024-2025 school year)
- Capstone: Biomedical Innovation (Semester 2, 2024-2025 school year)

# Engineering

Throughout this program, students will step into the varied roles engineers play in our society, discover new career paths and possibilities, and develop engineering knowledge and skills. In addition, as students work in teams to design and test solutions, they're empowered to develop in-demand, 21st century skills like collaboration, critical thinking, and communication. Students will need to have at least Algebra 2 to be qualified to participate in the program. The following courses will be offered each semester for interested juniors and seniors.

- Engineering Essentials: Exploring Careers (Semester 1, 2023-2024 school year)
- Introduction to Engineering Design (Semester 2, 2023-2024 school year)
- Engineering 2: Electrical Electronics (Semester 1, 2024-2025 school year)
- Capstone : Mechanical Engineering (Semester 2, 2024-2025 school year)

# Studio Art

With an emphasis on studio arts, students explore a wide range of 2D and 3D media, skills and techniques, as related to contemporary and historical art perspectives. Projects may include but not be limited to: drawing, painting, collage, mixed media, photography and sculpture. The following courses will be offered for the Studio Art Program and are to be taken in order beginning freshman year.

- Studio Art 1 (Year 1)
- Studio Art 2 (Year 2)
- Studio Art 3 (Year 3)
- Studio Art 4 (AP Visual Art) (Year 4)

# **ART DEPARTMENT**

(\*The Studio Art Program is a special graduation recognition program for students who complete all four (4) years )

# COLOR AND DESIGN (1010)

The color and design course is a beginning art course that will introduce students to the basics of two dimensional design and color theory. Incorporating the elements and principles of art and design as it relates to past and present. Everything from the houses we live in, the cars we drive to the pencils we hold.

Students will need to purchase some supplies for this course.

No prerequisite

# **<u>STUDIO ART 1\*</u>** (AR1013)

Art 1 is intended to be the beginning level art class that will introduce students to a variety of art experiences. Students will have the opportunity to creatively solve visual problems through a variety of 2 and 3 dimensional media using basic art techniques. Students will be participate in written and oral critiques, visit art museums, write art

reports and have tests. Art 1 is the foundational class to build a better understanding and skill set for future art classes.

Some supplies are needed for this class.

No Prerequisite

### **STUDIO ART 2\*** (AR1014)

Art 2 students will further develop and explore media from the art 1 class and will also add a few new processes to advance their basic skill set. The design elements and principles will continue to be stressed when developing student works. Students will continue to refine traditional and expressive techniques using 2 and 3 dimensional art forms while engaging in higher order visual problem solving. Students will engage in discussions about aesthetics, criticism and art history. Students will be required to visit local art museums and reflect on their experiences through writing, visual recreations, and discussion about their experiences. A visual journal is required and there will be a final portfolio critique.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 1 AND a teacher recommendation.

Grades 10, 11, 12

Grades 9,10,11,12

1 credit

grades 9, 10, 11

1 credit

.5 Credit

Art 3 is a comprehensive, lightly guided art course, that asks students to get further involved with the concepts, processes, media choices and ideas behind their works. Students at this level, will be called upon to be more independently driven. Projects ask for more in depth creative solutions to more involved and in depth solutions to visual problems. A further refinement to skill level with more opportunities to explore media potential. Students will engage in written and verbal reviews, journaling (written and visual), A final portfolio with critique is part of this class.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 2 AND a teacher recommendation.

# Grades 11, 12

1

# STUDIO ART 4 AP VISUAL ARTS\* (AR1016)

credit

Art 4 is a comprehensive, partially guided art course that asks students to explore in a more in depth manner the concepts, processes, media choices and ideas behind their works. Talented students at this honors level, will be called upon to be more independently driven, developing a strong work ethic in a studio setting in a cooperative environment. The focus of this course is to create a portfolio of work in varied media, both two dimensionally and/or three dimensionally. This cohesive collection will represent the individual student's artistic and technical skill and personal creative expression. A further refinement to skill level with more opportunities to explore media potential.Students will engage in written and verbal reviews, journaling (written and visual), A final portfolio and exhibit with critique is part of this class.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 2 AND a teacher recommendation. Grades 12

### **<u>PORTFOLIO</u>** (AR1032)

Independent study class that is meant for a more focused, serious self motivated student that would like to pursue a specific direction with their creative efforts. Specific requirements will be established between teacher and student. Research, journal (written and visual) critiques and portfolio review are all a part of this course. This course may be repeated.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 2 AND a teacher recommendation.

Grades 10, 11, 12

.5 credit

1 credit

25

### **<u>CERAMICS 1</u>** (AR1011)

This course is a basic course in methods of hand built functional and sculptural ceramics, including pinch, slab, and coil techniques. Students will also need basic art skills to help to visualize and convey ideas through sketches and have a basic understanding of color theory. Students will have the opportunity to familiarize themselves with a variety of ceramic tools and glaze effects. The students will be able to identify, discuss and appreciate pottery from several different periods and cultures. Strong work ethic and some supplies are needed.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 1 AND a teacher recommendation.

#### **<u>CERAMICS 2</u>** (AR1020)

This course is a further development and application of the basic skills developed in ceramics 1. Students will also need basic art skills to help to visualize and convey ideas through sketches and have a basic understanding of color theory. Students will be called upon to extend the ceramics 1 experience to creating more sculptural pieces as well as the practical ceramic pieces. The students will continue to identify, discuss and appreciate pottery from several different periods and cultures and incorporate that into their own work. Strong work ethic and some supplies are needed.

Students will need to purchase supplies for this course. Prerequisite is a B average in Ceramics 1 AND a teacher recommendation.

Grades 11, 12

.5 credit

#### **DRAWING** (AR1040)

Drawing is a mid-level course designed to explore drawing techniques and visual concepts. It will also help to develop expression and discipline in drawing with emphasis on materials. Students will create a variety of drawings ranging from object rendering, still life, landscapes and portraits. Students will also have the opportunity to apply these to ideas in surreal/fantasy, realism, expressionism and abstraction. Students will be required to keep a sketchbook to further develop skills in close observation, discipline, and visual sensitivity. A continued development in understanding and using the design elements and principles of art will also be a major part of the course.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 1 AND a teacher recommendation.

Grades 10, 11, 12

.5 credit

.5 credit

Grades 10, 11, 12

Painting is an advanced level course designed to explore painting techniques and visual concepts. Students will be introduced the various painting media including watercolor, acrylic and oil. Students will focus on sound fundamentals, content, and personal expression. A variety of subject matter and art concepts will be covered to further explore the different painting media. Students will be required to keep a sketchbook to further develop skills in close observation, discipline, and visual sensitivity. A continued development in understanding and using the design elements and principles of art will also be a major part of the course.

Students will need to purchase supplies for this course. Prerequisite is a B average in Art 2 or Drawing AND a teacher recommendation.

Grades 10, 11, 12

#### <u>AP VISUAL DESIGN - 2-D, 3-D, DRAWING/HONORS PORTFOLIO</u> (AP2D: AR1031, AP3D: AR1034, AP DRAWING: AR1035)

1 credit

The AP Art and Design program consists of three different courses and AP Portfolio Exams—AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing—corresponding to college and university foundations courses. Students may choose to submit any or all of the AP Portfolio Exams. Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. Students may choose to submit any or all of the AP Portfolio Exams.

College Course Equivalent

The AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing courses are designed to be the equivalent of a one-semester, introductory college course in 2-D art and design, 3-D art and design, and drawing, respectively.

Students will need to purchase supplies for this course.

Prerequisite is a B average in Art 2, Painting, Portfolio, Honors Portfolio AND a teacher recommendation.

Grades 11, 12

This course explores darkroom and 35mm camera fundamentals, focusing on the technical and the visual design relating to the black and white photograph as an expressive art form. Selected technical and aesthetic photographic problems will enrich the students' abilities and knowledge of photography as they develop their own film and prints, and strengthen their critical thinking skills.. Students will be introduced to the history of photography and famous photographers, and research works by such. Students will create artist statements and be able to analyze images critically and aesthetically. Students will have a portfolio of work at the end of the calls. Students may use their own 35mm camera or one will be provided. Film, chemistry, and paper are provided.

PREREQUISITE: No prerequisite. Class size is limited.

# PHOTOGRAPHY II (AR1105)

Further explore the magic of the darkroom, focusing on the practical and expressive forms of black and white photography as a fine art. The class will go on location to take photos for the various projects. The student will draw upon previous technical and visual knowledge and will be introduced to a variety of toning processes, alternative negative processes, and photo papers. The student will be introduced to a "white room" technique to make high contrast digital negatives. The students will express themselves through artist statements and class critiques. Students will present their work in book form again for each project.

Students will need a 35mm film camera (or one will be provided). Film, chemistry, and paper are provided. Some supplies are needed. A great work ethic and the ability to multitask is essential.

PREREQUISITE: B in Photography I and teacher recommendation. Class size is limited Grades 10,11,12

#### PHOTOGRAPHY III ADVANCED PHOTO (AR1116)

Photo III is designed for students who are seriously interested in the practical and expressive experience of photography as art. Students will explore and experience a variety of concepts, techniques, and approaches designed to help demonstrate their creativity, problem solving skills and ideas. By exploring analog and digital photographic media with the camera, computer, and darkroom, students will create a body of work to develop their own styles and modes of expression. Research, journals, critique and artist statements are an integral part of the class. Students will display their work and present their final portfolio. Great work ethic and high-quality work is required. Some supplies are needed. Including a flash drive.

PREREQUISITE: B in Digital Photography II and/or Photography II and teacher recommendation GRADES 11, 12

.5 Credit

GRADES 10,11,12

.5 Credit

#### DIGITAL PHOTOGRAPHY I (AR1107)

This course is a beginning study of digital photography. The student will draw upon previous knowledge of the dark room and explore the "white room" as well as camera fundamentals, and color. The focus will be on the visual and technical knowledge relating to photography as a fine art form. Selected technical problems and the introduction to Adobe Photoshop as well as other editing software will expand the students' abilities and knowledge of photography. The history of the digital camera and contemporary artists will be researched in this class. Students will use their smartphones and 35mm DSLR camera in this class. A portfolio will be virtual and in hard copy prints. A great work ethic is needed. Students will need some supplies including a flash drive (8GB).

PREREQUISITE: B in Photography I. Class size is limited.

GRADES 10, 11, 12

#### DIGITAL PHOTOGRAPHY II (AR1108)

.5 Credit

This course is the further study of digital photography and editing. The student will draw upon previous knowledge of both the "darkroom" and the "white room" as well as camera fundamentals, focusing again on the visual and technical knowledge relating to photography as an art form. Selected new and challenging projects will expand the students' creative abilities and knowledge of photography. Students will select a personal theme for a final project. Students will study and research works by contemporary photographers. Adobe Photoshop and other editing software will be used. Virtual and hard copy portfolios will be made. A great work ethic is required. Students will need some supplies including a flash drive (8GB).

PREREQUISITE: B in Digital Photography I and teacher recommendation. Grades 11,12

# **BUSINESS and TECHNOLOGY DEPARTMENT**

#### MARKETING PRINCIPLES (BU2015)

This marketing course will cover basic skills for success in the marketing world. Students will develop the understanding and skills in functional areas such as customer service, marketing math, human relations, communications, economics, distribution, ethical issues, advertising management, promotion and selling. Understanding these principles will enhance their knowledge of owning their own business, pursuing business marketing or working in a business.

PREREQUISITE: None

#### PROFESSIONAL AND BUSINESS ETIQUETTE (BS2006)

This course focuses on foundational communication techniques and strategies for student success in personal and professional environments. The topics to be explored include: Rules of Etiquette; First Impressions; Business Relationships; Digital Etiquette; Dining and Special Events Etiquette; and Cross-Cultural Etiquette Skills.

PREREQUISITE: None

#### **CREATIVE ENTREPRENEURSHIP** (BU2111)

Explores how emerging social media, information technologies, 3-D printing, and rapid prototyping are transforming career and entrepreneurial opportunities. Students will have the opportunity to create a 21<sup>st</sup> century business and marketing plan and create a prototype of a product they will create.

PREREQUISITE: None

#### DIGITAL MEDIA PRODUCTION (BU2114)

Students in Media Production are part of the Cardinal Mooney media team. In this class, students will be exposed to the many aspects of digital media, video, and movie production. Along with learning to plan, shoot, edit and publish digital video projects, students will learn the technical and storytelling aspects of creating engaging digital video and media projects.

PREREQUISITE: None

#### WEB DEVELOPMENT (ST9002)

Students will learn how to create and share content on web pages. They will learn how to structure and style pages using HTML and CSS. They will also learn how to use valuable programming skills such as debugging, using resources, and collaborating with their classmates.

PREREQUISITE: None

.5 credit

GRADES 9, 10, 11, 12

.5 credit

GRADES 11, 12

Grades 9,10

Grades: 9,10,11,12

.5 Credit

GRADES 10, 11, 12

.5 Credit

.5 Credit

# ANIMATION AND GAME DESIGN (ST9003)

Students will work in Java Script to create and program animations, interactive art, and games. Students will start off with simple shapes and build up to more sophisticated sprite-based games, using the same programming concepts and the design process computer scientists use. Students will create, develop a personalized interactive program for their final project.

# PREREQUISITE: None

# AP COMPUTER SCIENCE PRINCIPLES (BU2118)

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming. abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

PREREQUISITE: Grade of A or B in Algebra I

### BROADCAST JOURNALISM (BU2115)

Students in Broadcast Journalism can be members of a school news network, and are be a responsible for planning, filming, editing, and broadcasting Cardinal Mooney High School's daily video news and announcements, as well as providing students, staff, parents, and members of the Mooney Family with various forms of engaging and informative media and web-based productions. Not only will students assume the role of a professional video news production team, but they will become the faces and voices of Cardinal Mooney.

PREREQUISITE: Digital Media Production

Grades: 10,11,12

**GRADES 11, 12** 

1 Credit

Grades 11,12

1 Credit

.5 Credit

# **ENGLISH DEPARTMENT**

The English Department at Cardinal Mooney High School prides itself on the success of its students in testing, competition, college acceptance, and publishing. Our experienced and unique staff is supportive in the efforts to refine our students' abilities to communicate ethically, exactly, and creatively. In literature we treasure the classics and highly regard contemporary works. Our curriculum continues to produce profound thinkers and writers who can visualize, analyze, and synthesize all visual and literary media.

# **ENGLISH 9** (EN3005)

English 9 will review basic grammar, usage and mechanics; develops vocabulary and critical thinking; and practices narrative, descriptive, expository, informative, and technical writing (basic research writing and strategy). Students read, study, and respond to various genres of literature like short stories, essays, novels, poetry, drama, and the epic. Students will create a résumé and develop a writing portfolio throughout the semester. This class requires summer reading and minimal research accountable at the start of the course.

PREREQUISITE: None

# HONORS ENGLISH 9 (EN3001)

Intended for students with *advanced* language arts skills, this course begins the Honors/Advanced Placement program. Using a textbook that links grammar and writing skills, students read, study, and respond to various genres of literature like short stories, essays, non-fiction and epic selections, three plays, and five novels. Literature is linked to activities in critical thinking, language skills, vocabulary development, and formal research. Students will create résumés and develop a writing portfolio throughout the semester. This class requires significant summer reading and minimal research accountable at the start of the course.

Prerequisite: Based on placement test results.

# **ENGLISH 10** (EN3105)

Exploring the masterpieces of world literature, students are introduced to myths, legends, short stories, poetry, drama, non-fiction, and supplementary novels representative of world cultures. English 10, in addition, continues the study of grammar, vocabulary, and the MLA format applied to the writing and research process. Students will revise their résumés and add samples to their writing portfolios. This class requires summer reading and minimal research accountable at the start of the course.

PREREQUISITE: English 9

1 Credit

1 Credit

# HONORS ENGLISH 10 (EN3101)

This class develops writing skills including outlining and preparation of documented expository and research papers. The course further extends vocabulary skills and briefly reviews grammar, mechanics, and usage to correct writing errors and refine composition skills. With selections from early myths and folktales through the works of the twentieth century, students explore the literature of major world cultures. Students will revise their résumés and add samples to their writing portfolios. This class requires significant summer reading and minimal research accountable at the start of the course.

PREREQUISITE: B in Honors English 9 or A in English 9

#### **ENGLISH 11** (EN3204)

English 11 studies American writings (essays, poetry, plays, speeches, histories, diaries, short stories, and four American novels) from Colonial times to the 21<sup>st</sup> Century. Students learn and use context vocabulary from their American Literature text in addition to a separate text for vocabulary advancement. This course allows students to improve their language skills by applying grammar lessons and pre-writing techniques to persuasive, expository, narrative, and descriptive writing. The formal MLA research process (now fully developed) is reflected in a research paper of substantial length and quality. Students will update information to a prepared résumé and add writing samples/projects to their writing portfolios. This class requires summer reading and minimal research accountable at the start of the course.

#### PREREQUISITE: B in Honors English 10

#### HONORS ENGLISH 11 (EN3201)

Honors English 11 blends a study of complex grammar forms and usage applications in writing with American literature from Colonial times to the present. Each era is studied for its historical significance as students enjoy essays, diaries, poetry, plays, short stories, speeches, and five novels. Comprehensive library instruction precedes the practice of analyzing and writing compositions in the forms of exposition, analysis, and the MLA research paper. Projects and oral presentations are incorporated to expand their communication skills. Students will update information to prepared résumés and add writing samples/projects to their writing portfolios. This class requires significant summer reading and substantial research accountable at the start of the course.

PREREQUISITE: B in Honors English 10

#### *ENGLISH* 12 (EN3304)

This course focuses on the masterpieces of British literature from the *Beowulf* poet to modern writers. Students write extended compositions and formal MLA style research paper(s). Continued development of vocabulary usage, critical thinking skills, and the ever-changing nature of the English language are also course objectives. Students will compile a final writing portfolio and résumé. This class requires summer reading and minimal research accountable at the start of the course.

PREREQUISITE: English 11

33

#### 1 Credit

1 Credit

1 Credit

## ADVANCED PLACEMENT LITERATURE AND COMPOSITION (EN3303)

Students who have superior skills in reading, vocabulary, literary analysis, and writing are eligible for this class. The course will survey major American authors, various works of literature, and major British and world authors. Students review literary terms/devices and concepts through intensive reading and writing. Continued development of vocabulary usage, critical thinking skills, and the ever-changing nature of the English language are also course objectives. Major research projects cover MLA, APA and CMS styles, and/or the Annotated Bibliography. Group projects that incorporate rhetorical devices and presentations complement this challenging course. The personal résumé is finalized and the Senior Writing Portfolio completed. Writing and/or participation in academic literary competitions is strongly encouraged. Extensive summer reading and preparation are mandatory and accountable at the start of the course.

PREREQUISITE: B in Honors English 9, 10, 11

# **CREATIVE WRITING** (EN3403)

"I hate to write!" If you've ever felt this way, our innovative writing course hopefully will alter your opinion. Creative writing consists of writing in all of its forms, such as short story and poetry, satiric and farcical writing, as well as journalistic/investigative writing, commercial and script writing, and various other projects. This class CANNOT be counted as a Fine Arts elective.

PREREQUISITE: At least a C average in English

**DRAMA** (EN3404)

Drama has great fun in store for you with instruction in vocalization, interpretation, acting, directing, and staging. And while building those creative skills, you will also study drama techniques and styles from the ancient Greeks to the modern playwrights. This course counts as a Fine Arts elective.

PREREQUISITE: None

**DEBATE** (EN3413)

Calling all arguers, dissenters, know-it-alls, non-conformists, and rebels! This class provides a significant training ground for students who enjoy the clash of ideas! From persuasive speaking to informal debate; from student congress to public forum debate, students will learn and engage in the skills of research, persuasion, case strategy, rebuttal, and presentation. If time permits, Moot Court/Mock Trial will be enacted by student "perpetrators," "victims," attorneys, jury members, judges, and reporters.

PREREQUISITE: Communications class

GRADES 10, 11, 12

.5 Credit

GRADES 10, 11, 12

.5 Credit

GRADES 9, 10, 11, 12

.5 Credit

Grade 12

# **NEWSPAPER** (EN3420)

This course is intended for students wanting to continue their education within the field of journalism. In this hands-on class, students will apply research, writing, editing, and layout abilities to showcase their skills as journalists. As a newspaper staff, students will create and design a professional student publication. Students who are interested will need to submit a writing sample to be considered for the newspaper.

PREREQUISITE: B or higher in English

#### ACADEMIC STUDY SKILLS (EN3408)

Academic Study Skills is a freshman centered course designed to redefine the skill set needed in high school to set them on the path to success. We will focus on organizational skill, improving on study skills, improving reading comprehension through short stories and novels, and the inclusion of core subjects (i.e. History, English and Science). Grade 9

PREREQUISITE: Based on grades and standardized testing results

GRADES 10,11, 12

# HEALTH AND PHYSICAL EDUCATION DEPARTMENT

#### PHYSICAL EDUCATION I (HP4001)

**Physical Education I** involves the development of basic motor skills in team and individual sports, and the development of overall strength and cardiovascular endurance, flexibility, coordination and poise. Emphasis is placed on the value of teamwork, sportsmanship, fair play and a common respect for fellow students. (.25 credit). Recommended for grade 9 students unless they are playing sports and seek the waiver.

#### *HEALTH* (HP4101)

Health is a course designed to help students develop an awareness of health and social problems that they will be confronted with in today's society. Examples of subject matter are: physical fitness, behavior, emotions, personality, drugs and alcohol, the opioid crisis, tobacco, first aid, diet and nutrition, human sexuality, mental health, and environmental health.

#### PREREQUISITE: None

**<u>PHYSICAL EDUCATION WAIVER OPTION</u>** (See Counselor for form that must be completed to document each of the two sport seasons the student completes. The signed form must be submitted to the counselor to record the data.)

The Physical Education Waiver is an alternative way for students to fulfill their P.E. graduation requirement in Ohio. No grade or credit is earned. The purpose of the waiver is to open a student's schedule so the student can take a ½ credit course in another area of study. If this option is used to fulfill the P.E. requirement for graduation, the student must complete two full seasons of a sport or band and the student must complete an additional ½ credit elective course. The student's counselor will facilitate the process when the student requests a waiver form.

.25 Credit each

GRADE 9

.5 Credit

# **INDUSTRIAL ARTS DEPARTMENT**

#### WOODWORKING I (IN5003)

The students will build at least three (3) wood projects. In the building process students will also be exposed to building supplies, materials, processes, and tools that are basic to area culture. Students are required to purchase materials for this class.

#### PREREQUISITE: None

#### WOODWORKING II (IN5005)

For students who have completed Woodworking I and want to continue to build their skills, this course offers them the opportunity to do so. Students design and complete additional wood projects. Students are required to purchase materials for this class.

PREREQUISITE: Woodworking I and recommendation of the teacher

### **MECHANICAL DRAWING I** (IN5101)

The principles of sketching, printing, three view orthographic projection drawing, pictorial drawings, dimensioning, problem solving, and blueprint reading are studied. Students are required to purchase materials for this class.

PREREQUISITE: None

#### **MECHANICAL DRAWING II** (IN5102)

The principles of design and problem-solving methods are applied to product development, simple architecture projects and drawings with an emphasis on AutoCAD drafting and 3D printing Techniques and principles.

PREREQUISITE: Mechanical Drawing I

.5 Credit

GRADES 10, 11, 12

### GRADES 10, 11, 12

### .5 Credit

**GRADES 11, 12** 

.5 Credit

.5 Credit

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# **MATHEMATICS DEPARTMENT**

(4 Credits of Math, including Algebra II, are required for graduation)

Cardinal Mooney's math curriculum is aligned with the Common Core Standards for Algebra I, Geometry and Algebra II and Trigonometry. All students must take 4 years of math, including Algebra II. In many classes E-books will be available, along with the hard cover text.

Calculator use is necessary. A scientific calculator must be purchased for each student's use. The TI84+ would be a wise investment for those students with plans to pursue a math, science, or business career. This calculator is useful for ACT and SAT Tests and is vital in AP Calculus. They may be used for Algebra I.

#### **MATH LAB** (MA6002)

1 Credit The elective course emphasizes the concepts and skills necessary to be successful in Algebra I and proficient on standardized testing. The course helps students identify their individual strengths and challenges while developing good mathematical study skills and learning strategies. Students will explore operations on real numbers, algebraic expressions and equations, ratios, proportions, percent, linear functions and graphing in conjunction with concepts and skills studied in Algebra 1. This math elective does not fulfill a math graduation credit requirement.

PREREQUISITE: Administrative recommendation based on math scores Grade 9

ALGEBRA I (MA6103)

In this course emphasis is placed on algebraic properties, linear and polynomial equations with transformations, factoring, rational algebraic expressions, roots of algebraic expressions, radical expressions, guadratic equations, and problem solving. The TI30X11S calculator must be purchased for this class.

PREREQUISITE: Based on placement test results

#### HONORS ALGEBRA I (MA6104)

Honors Algebra I is a course designed for students whose grades and standardized test scores indicate readiness for more intense studies in Algebra. Topics include operations and properties of real numbers, solving equations and inequalities, polynomials and factoring, graphing and analysis, rational expressions, radical expressions, relations and functions, guadratic equations, and problem solving. The pace and level of difficulty will be increased over the Algebra I course. Students should consider purchasing a TI-84 Plus calculator to use in all high school math classes. (Also ACT and SAT Tests)

PREREQUISITE: Based on placement test results

PREREQUISITE: Lower than C in Algebra 1 **GRADE 10**  1 Credit

1 Credit

**GRADE 9** 

#### **<u>GEOMETRY</u>** (MA6202)

This is a course to develop a better understanding of the nature of a math system, to develop power of spatial visualization, to appreciate the basic structure of geometry, and to perceive the role of inductive and deductive reasoning in both math and non-math situations. It also covers such topics as congruent and similar triangles, circles, constructions and transformations, and areas and volumes of geometric figures.

PREREQUISITE: C in Algebra 1

#### HONORS GEOMETRY (MA6203)

This course is designed for those students with above average ability in mathematics. Its emphasis is on the understanding of proof and the ability to write proofs. The topics of this course will be treated in greater depth and students can complete more topics than in the Geometry course. The student will study parallel lines, congruent triangles, polygons, similarity, right triangles, area and volume, coordinate geometry, and transformations.

#### PREREQUISITE: A in Algebra I or B in Honors Algebra 1

#### ALGEBRA II (MA6205)

This course is designed especially for juniors and seniors not desiring an in-depth trigonometry course or not planning to take Advanced Math. It enlarges on skills and concepts learned in Algebra I and investigates such topics as real and complex number systems, relations and functions, quadratic functions, coordinate geometry, real number exponents, logarithmic functions, and probability and statistics.

#### PREREQUISITE: Algebra I

#### ALGEBRA II and TRIGONOMETRY (MA6106)

This course builds on the Algebra I course, developing competence in basic skills and understandings for dealing with number and form and investigating in depth such topics as the real number system, the complex number system, first and second degree equations and inequalities, functions, logarithms, polynomials, transformations, graphing and trigonometry.

PREREQUISITE: C in Algebra I

### HONORS ALGEBRA II and TRIGONOMETRY (MA6107)

This course is designed for students whose mathematics ability is above average. Material will be covered at a greater depth, and a wider range of topics will be considered, than in the Algebra II and Trigonometry course. Topics include: solving equations, inequalities, and linear and quadratic systems; transformations, the complex number system, polynomial, exponential, logarithmic and trigonometric functions and problem solving. Students will use the school's TI-83 graphing calculators throughout the course. (Students may substitute TI-84 Plus in place of TI-83)

PREREQUISITE: A in Algebra I or B in Honors Algebra I GRADES 10, 11

GRADES 11, 12

1 Credit

1 Credit

1 Credit

GRADES 10,11, 12

1 Credit

**GRADES 9.10** 

**GRADES 9, 10** 

#### PRE-CALCULUS (MA6304)

This pre-calculus course covers such topics as coordinate geometry of points and lines, inequalities and their graphs, functions, circle and triangle trigonometry, exponents and logarithms, vectors, complex numbers, sequences and series, advanced factoring, conic sections, and graphing of polynomials, and an introduction to probability and statistics and limits. PREREQUISITE: C in Algebra II/Trigonometry **GRADES 11, 12** 

#### HONORS PRE-CALCULUS (MA6305)

The topics in this course will be treated in greater depth than in the Pre-Calculus course. Students will study coordinate geometry, polynomials, inequalities, functions, exponents and logarithms, trigonometry, matrices, vectors, conic sections, sequences and series, and probability and statistics. Students will use the school's TI-83 graphing calculators throughout the course. (Students may substitute the TI-84 Plus in place of the TI-83.)

#### PREREQUISITE: B in Honors Algebra II and Trigonometry or **GRADES 11, 12** A in Algebra II and Trigonometry

#### CALCULUS (MA503)

This course will define and calculate limits. It will explore calculus through the interpretation of graphs, tables, and analytic methods. Derivatives will be determined and interpreted as rates of change and linear approximations. The definite integral will be introduced as a description of the net effect of rate of change over time, area under the curve, and volume of a solid. The TI-83 calculator will be used throughout the course.

#### PREREQUISITE: C in Pre-calculus

### ADVANCED PLACEMENT CALCULUS AB (MA6501)

This course covers the material specified for the Advanced Placement AB Examination so that college credit can be earned. Topics include: functions, including trigonometric functions, exponential functions, and logarithmic functions; differentiation, including applications of the derivative; integration, including applications of the integral and some special techniques of integration. TI-84+ graphing calculators will be used throughout the course. (There is a fee for the exam which must be paid for by the student.)

This course can also be taken as a College Credit Plus (CCP) course for students who qualify and complete the CCP application requirements.

PREREQUISITE: B in Honors Pre-calculus

#### COLLEGE ALGEBRA (MA6402)

This course is a pre-college course for students who have completed Algebra II or Algebra II and Trigonometry but may not desire to take Pre-calculus. This course provides a highly numerical approach to algebra and geometry through use of the calculator. The course will also involve the study of the trigonometric functions.

PREREQUISITE: Algebra II or Algebra II/Trigonometry **GRADE 12** 

1 Credit

1 Credit

**GRADE 12** 

GRADE

1 Credit

1 Credit

# **MUSIC DEPARTMENT**

#### **<u>BAND</u>**(AR1450)

The Marching Band performs at each football game. Marching fundamentals and technique are explored to rehearse and perform halftime shows during football season. The Pep Band is responsible for providing entertainment between JV and Varsity home basketball games. The Concert Band prepares seasonal concerts and other non-sporting-related musical performances. All three bands are comprised of the same group of students registered for this class. Instruments are available through the school, so please consult the band director if you do not own a musical instrument as we have a good selection of our own. ALL scheduled performances are MANDATORY and are included in the course syllabus.

#### PREREQUISITE: None. However, to repeat this course, a C or higher GRADES 9, 10, 11, 12 must have been earned. *DRUMLINE CONSIDERATION: Successful tryout*

#### CONCERT CHOIR (AR1451)

The Concert Choir is the premier vocal ensemble of the school. Basic vocal technique and pedagogy are explored, and the music selection is varied to cover topics of faith, the human condition, and differing musical genres, along with classical voice training. Opportunities for collaboration with other school music ensembles are available for concerts and events. Opportunities to perform outside of Mooney, and individual and/or small group singing, are also part of this course. **ALL scheduled performances are mandatory and included in the course syllabus**.

PREREQUISITE: None. However, to repeat this	course, a C or higher GRADES 9, 10, 11, 12
must have been earned.	

#### **<u>PIANO I</u>** (AR1452)

This course is designed for the beginner-level musician: *this is a start-from-scratch course needing no prior musical experience*. By the end of the class, the students will be able to read and perform simple songs using music notation, demonstrate an understanding of the fundamentals of piano performance, and be able to navigate novice-level works of music using basic Music Theory. Assignments include class performances and theory/composition projects. This course may <u>not</u> be repeated.

PREREQUISITE: None

#### *PIANO II* (AR1454)

This course is designed for the intermediate-level piano student with some experience reading music and some technical proficiency navigating the keyboard. The class concentrates on applying Music Theory to performance using various selections of music, and also through song writing and composition. The course midterm and final are in-class performances. This course is designed to increase the current skill set of the student musician in a variety of ways. *This course may <u>not</u> be repeated*.

.5 Credit

1 Credit

1 Credit

.5 Credit

GRADES 9, 10, 11, 12

#### PREREQUISITE: B in Piano Musicianship 1 or teacher recommendation

#### GRADES 9, 10, 11, 12

#### **<u>GUITAR</u>** (AR1500)

.5 Credit

Guitar class introduces the basics of guitar performance to the student with no previous experience. **This class is designed for the start-from-scratch beginner.** Reading of traditional music notation and Tablature will be explored and technique explored covers the fretboard, scales, chords, and chord progressions in multiple genres. A fundamental understanding of basic music theory will be developed as well.

Students may provide their own guitars or the school will provide them.

PREREQUISITE: None

GRADES 9,10,11,12

## **SCIENCE DEPARTMENT**

(\*The Biomedical Program is a special Graduation recognition program for Junior and Seniors who complete the required courses )

Three units of science are required by the state for high school graduation. These units must include one unit of life science, one unit of physical science and one unit of advanced science.

For college-bound students, the traditional sequence of science courses has been and continues to be Biology, Chemistry, and Physics with other courses added to satisfy the students' interests and abilities. These three courses are required by many colleges for many programs and majors. Many colleges and universities also require 4 units of science for admission, so it is recommended students take 4 years of science.

#### PHYSICAL SCIENCE (SC7004)

In this course, students explore scientific concepts that provide the foundation for the study of many branches of science. Students will learn about the classification of matter, atoms, periodic trends of the elements, bonding and compounds, the reactions of matter, energy, waves, force, and the motion of the universe.

PREREQUISITE: Based on placement test

### **BIOLOGY** (SC7102)

In this course, the student explores all the major themes of biology. They will learn about biochemistry, cytology, photosynthesis, respiration, evolution, genetics, and an introduction to the domains of life. Appropriate laboratory experiences will allow students to have hands-on experiences to clarify and confirm these concepts.

PREREQUISITE: Based on placement test results

### HONORS BIOLOGY (SC7103)

This course is designed for the student who exhibits a strong interest in science and plans to pursue courses in honors chemistry, physics, advanced biology, or advanced chemistry. Topics include biochemistry, cytology, photosynthesis, respiration, evolution, genetics, anatomy, micro-techniques, botany, zoology, and all their related fields. Independent study and projects allow students to investigate these topics in depth. Students will also expand their learning through in-depth lab experiences.

PREREQUISITE: Based on placement test results

1 Credit

1 Credit

**GRADES 9, 10** 

**GRADES 9, 10** 

1 Credit

#### ADVANCED PLACEMENT BIOLOGY (SC7108)

In this course, students explore advanced topics in biology in preparation for the Advanced Placement Exam. The course is designed to be the equivalent of a college-level introductory biology course. Topics students study include: molecules and cells, cellular processes, heredity, evolution, organisms, populations, and ecology. The lab exercises emphasize modern biological laboratory techniques and give students the opportunity to experience labs that are the equivalent to those done by college students. The fee for taking the AP exam is the responsibility of each student.

PREREQUISITE:	B in Honors Biology and B in Honors	GRADE 11
Chemistry or A in Biology, A in Chemistry		

#### EARTH SCIENCE (SC7002B)

This course introduces the student to concepts such as: rocks and minerals, rock formation, weathering, plate tectonics, geologic time, and the earth's resources. Laboratory exercise will introduce, reinforce, and confirm the concepts.

#### PREREQUISITE: Passing grade in Biology and Chemistry **GRADES 11, 12**

#### **ENVIRONMENTAL SUSTAINABILITY** (SC7305)

Environmental Sustainability explores the relationship of mankind with the environment, delving into the unintended social, environmental, and economic consequences of rapid population growth, economic growth, and consumption of natural resources. Sustainable development principles, global warming and climate change and understanding one's own carbon footprint and lifestyle choices are investigated. Students study political, economic, and social issues as well as ethical considerations and business practices. Case studies, analyses and appropriate projects are integrated.

PREREQUISITE: Passing grade in Biology and Chemistry

#### CHEMISTRY (SC7202)

The student will be able to explore the fundamental concepts of chemistry, stressing periodicity, the acid-base relationships, redox, atomic theory, equilibrium, stoichiometry, and the gas laws. Laboratory procedures confirm each concept.

PREREQUISITE: C in Biology C in Algebra II or concurrent enrollment

GRADES 10, 11, 12

.5 Credit

1 Credit

**GRADES 11, 12** 

1 Credit

#### HONORS CHEMISTRY (SC7203)

This course allows students to combine their math and science skills and intensely study major topics in chemistry. They will investigate stoichiometry, periodicity, oxidation reduction, thermodynamics, equilibrium, gas laws, and acid-base relationships. The course also includes laboratory experiences that reinforce concepts while allowing students to learn proper lab techniques.

#### **GRADE 10** PREREQUISITE: C in Honors Biology or A in Biology and C in Honors Algebra II and Trigonometry or concurrent enrollment

#### PHYSICS (SC7301)

Physics is the branch of science concerned with the nature and properties of matter and energy. Students will learn about mechanics, heat, light and other radiation, sound, electricity, and magnetism. Appropriate lab exercises will support the main concepts.

PREREQUISITE:	C in Algebra II
	C in Chemistry

#### HONORS PHYSICS (SC7303)

This course allows the student to combine their math skills with an exploration of the major themes of Physics. Students will learn about Newtonian Mechanics, Fluid Mechanics, thermal physics, electricity, magnetism, waves, and optics. Through their laboratory exercises, they will have opportunities to experience these topics first hand and reinforce the concepts.

#### PREREQUISITE: A in Algebra/Trigonometry and Chemistry or A or B in Honors Algebra/Trigonometry and H Chemistry GRADES 11,12

### ADVANCED PLACEMENT CHEMISTRY (SC7204)

In this course students will study advanced topics in chemistry in preparation for the Advanced Placement Exam. The course is designed to be the equivalent of a college introductory course in chemistry. Students will explore atomic structure, bonding, molecular structure, organic chemistry, oxidation-reduction reactions, nuclear chemistry, acid-base chemistry, thermodynamics, kinetics, and qualitative analysis. Appropriate lab exercises will complement the material. The fee for taking the exam is the responsibility of each student.

PREREQUISITE: A in Algebra II and Trigonometry A in Chemistry A or B in Honors Algebra/Trigonometry and H Chemistry GRADE 12

1 Credit

1 Credit

**GRADES 11,12** 

1 Credit

#### ANATOMY AND PHYSIOLOGY (SC7104)

This course will focus on human anatomy and physiology. Appropriate laboratory exercises will support the main concepts. Topics will include: cell and tissue physiology, skin and body membranes, and an in-depth study of human organ systems. Appropriate laboratory exercises will support the main concepts.

#### PREREQUISITE: C in Honors Biology or B in Biology **GRADES 11, 12** and a C in Chemistry. May be taken concurrently with Honors Chemistry in grade 10

#### FORENSIC SCIENCE (SC7012)

This course introduces the student to the science behind forensics. Topics covered will include collection of evidence, examination of trace evidence such as hair, fibers, soil, glass, fingerprints, blood, DNA ballistics and forensic anthropology. Labs will reinforce these concepts.

PREREQUISITE: Passing grade in Biology

#### PRINCIPLES OF BIOMEDICAL SCIENCE\* (SC7023)

The Principles of Biomedical Science course is your students' introduction to the world of biomedical science. This course will introduce students to medical terminology, human body systems and how they are impacted by disease, microbiology, virology, immunizations, and pharmacology. This course provides an overview of all the courses in the Biomedical Sciences program and prepares students for subsequent courses.

Prerequisite: C or higher in Honors Biology B or higher in Biology

#### MICROBIOLOGY\* (SC7024)

In this course, students learn microbiological techniques to prepare agar plates, isolate and identify bacteria, and test antibiotic susceptibility and resistance. Students will also examine the modes of action of common antibiotics against different strains of bacteria. This course will also investigate the transmission and prevention of viruses.

PREREQUISITE: Principles of Biomedical Sciences

#### EPIDEMIOLOGY\* (SC7025)

Epidemiology is the study of the distribution and causes of disease in human populations and the techniques used to improve disease outcomes. This course investigates the distribution, the pattern, and the natural history of disease, and seeks to determine the cause of disease while evaluating strategies for the control, management, and prevention of disease.

Prerequisite: Principles of Biomedical Sciences

.5 Credit

**GRADES 11,12** 

.5 Credit

**GRADES 11,12** 

1 Credit

.5 Credit

**GRADES 11. 12** 

.5 Credit

Students will apply what they have learned in the previous Biomedical Science Courses to design innovative solutions to the health issues of today. Students will investigate issues in clinical medicine, physiology, biomedical engineering, mental health, and public health.

Prerequisites: Principles of Biomedical Sciences, Microbiology, and Epidemiology

GRADES 11,12

# **SOCIAL STUDIES DEPARTMENT**

The Social Studies Department at Cardinal Mooney High School is focused on preparing our students to be engaged and informed citizens in the world in which they live by teaching them the knowledge and skills necessary to be effective in society. Through a rigorous instruction program, they will become creative and independent thinkers about issues in both the contemporary and historical Our young men and women will be able to connect the past to the present and the world. implications for the future. The Social Studies Department offers a variety of courses. This diversity allows students to have an understanding of the historical and current issues locally, as well as nationally and globally.

#### MODERN WORLD HISTORY (SS8001)

This course presents students with a chronological narrative of World History from the Enlightenment to the 21<sup>st</sup>Century. Within its framework, students will trace the development of civilization in different parts of the world. The course is integrated by a number of themes that form the patterns of civilization. These themes provide students with an understanding of political change and economic development, the influence of geography on cultures, the growth of science and technology, the effect of contact between cultures, and creativity in the arts.

PREREQUISITE: None

#### HONORS MODERN WORLD HISTORY (SS8803)

This course is designed for students who have an interest in Social Studies and plan to pursue AP and honors social studies classes throughout their high school career. This course presents students with a chronological narrative of World History, giving special emphasis to the cultures of Egypt, Greece, and Rome. The course is integrated by a number of themes that form the patterns of civilization. These themes provide influence of geography on cultures, the growth of science and technology, the effect of contact between cultures, and creativity in the arts. Honors Modern World History will be taught at a faster pace with more emphasis on writing and a more in depth look at the themes that are covered as part of the curriculum.

PREREQUISITE: None

### **<u>U.S. HISTORY</u>** (SS8101)

This course includes a general review of our nation's heritage from 1900 to the present day. It describes the struggles and accomplishments of all Americans, including the diverse ethnic and minority groups who have made numerous valuable contributions to our nation's identity. The course's chronological approach allows students to realize how the ideas and events of the past influence current ideas, decisions, and events. Most importantly, the students learn how generations of Americans have struggled to realize the promise embodied in the Declaration of Independence and the Constitution of the United States.

PREREQUISITE: None

1 Credit

1 Credit

1 Credit

**GRADE 11** 

**GRADE 9** 

#### ADVANCED PLACEMENT U.S. HISTORY I (SS8102)

This college level course will prepare students for the A.P. U.S. History examination given each spring. By taking this examination students may receive college credit in U.S. History. (Please see the section on Advanced Placement Courses in this booklet.) This course is designed to provide students with both the factual knowledge and the analytical skills necessary to deal critically with the problems and materials in United States history. Students will learn to assess historical materials — their relevance to a given problem, their reliability, and their importance — and to weigh the evidence and interpretations presented. An A.P. U.S. History courses thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. This course will begin by studying U.S. History from its beginning through the Civil War to the present.

PREREQUISITE: B in Honors English 10 or A in English 10

#### AMERICAN GOVERNMENT (SS8314)

This course deals primarily with the institutions of the American government and relates them to the everyday world. Students are led to consider how the government is organized, and develop an understanding of the system and its structure. By exploring the foundations and principles of the United States government, the students will learn how the United States Constitution and the interpretation of the United States Constitution directly affects their lives. They will also identify how a successful democracy in today's world depends on the understanding and participation of its citizens.

PREREQUISITE: None

#### FINANCIAL LITERACY (SS8000)

This course is **required** for graduation and fulfills the financial literacy requirement. It is designed for students to research earning potential for various career choices and will complete an interest inventory as they begin to compile a career profile. Students will be presented with strategies for managing personal resources which will include the budget preparation, checking accounts and other banking services, saving/investing for the future, responsibilities, and cost of credit, renting vs. buying a home, buying a vehicle, simple income tax preparation, evaluating a pay stub and explanation of life, car and home insurances.

PREREQUISITE: None

#### LAW IN ACTION (SS8311)

This course is designed to provide students with the foundation of the American legal system. It describes those laws which have an impact on citizens' lives, while providing a basis for civil and criminal justice procedures. After completing this course, students will be able to: understand how criminal laws are made at the federal, state and local levels of government and how these laws are applied in the courts; distinguish various roles of lawyers, law enforcement officers, correction officers, and court officials; analyze both adult and juvenile criminal justice systems, along with the rights and responsibilities afforded to these individuals; investigate causes and consequences of crime.

PREREQUISITE: None

## GRADE 10

#### .5 Credit

### GRADE 11

GRADE 12

.5 credit

.5 Credit

GRADES 10, 11,12

#### WORLD GEOGRAPHY (SS8317)

This course is an overview of geography throughout the world. It will cover physical and human geography of areas around the world. The course will also focus on the different cultures throughout the world. Students will learn to use maps, graphs, tables, and other geographical reference tools. Students will also learn to think spatially as they consider how things are distributed over the space of the earth.

#### PREREQUISITE: None

#### ADVANCED PLACEMENT PSYCHOLOGY (SS8312)

AP Psychology is a college level course that will prepare students for the AP Exam in the spring. This AP Exam is mainly vocabulary driven with an objective and subjective guestion format.

Psychology is commonly defined as the scientific study of behavior and the mental processes. This course will be designed around the five major content domains of psychology. Those domains are: Cognitive, Biopsychological, Developmental, Sociocultural, and Methods. The student will be expected to spend significant time outside of the classroom to master the course objectives. Students who take this class may not take Principles of Psychology.

PREREQUISITE: B in Honors English or A in English

#### **SOCIOLOGY** (SS8306)

This course provides students with a comprehensive examination of the basic concepts, principles, and methods central to the scientific study of sociology. The course is designed to meet three major goals. The first goal is to teach students to think like sociologists. The second goal is to help students develop a sociological imagination, which will enable them to view their own lives within a larger social and historical context. The third goal is to help students understand and thus appreciate the rich diversity that is possible in social life by exposing them to data from a wide variety of cross-cultural and historical sources.

PREREQUISITE: None

**GRADES 11, 12** 

**GRADES 9, 10** 

**GRADES 11, 12** 

1 Credit

.5 credit

.5 Credit

#### ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS (SS8105) 1 Credit

Advanced Placement United States Government and Politics is an eighteen-week college level course. It is offered to students who wish to be academically challenged in the content area and meet the prerequisites. It is a survey course that provides an introduction into the operation of the American government and politics. As such we will examine:

- The American system of government and its origins
- Political opinions, interests and behaviors
- Political organizations, to include parties, interest groups and mass media
- The institution of government and their role in making and enforcing public policy
- Civil liberties and civil rights
- Primary source materials and contemporary news analyses

In exploring these areas, the goal is for students to develop analytical perspectives for interpreting, understanding, and explaining the political processes and events in this country.

PREREQUISITE: B in Honors English or A in English GRADES 12

## **ENGINEERING PROGRAM\***

(\*The Engineering Program is a special Graduation recognition program for Junior and Seniors who complete the required courses )

#### ENGINEERING ESSENTIALS: EXPLORING CAREERS (ST9023)

Students will be engaged in an inquiry problem based course that explores the many facets of engineering. Through research and conducting experiments (challenges) students will develop higher order thinking and problem solving skills, needed in the many different engineering fields today.

PREREQUISITE: C in Algebra 2 or Higher

#### INTRODUCTION TO ENGINEERING DESIGN (ST9024)

Students will be exposed to the iteration and the engineering design process in order to plan and conduct experiments, manage projects, solve problems and to make informed decisions so as to be able to write informative/ explanatory text to explain complex ideas of information.

PREREQUISITE: C in Algebra 2 or Higher, Engineering Essentials: Exploring Careers **GRADES 11,12** 

#### **ENGINEERING 2: ELECTRICAL ELECTRONICS** (ST9025)

Students will be introduced to Electrical/electronic phenomenon. How electrical components work in conjunction in order to create our society. This class has a strong background in math and is a writing intensive course.

PREREQUISITE: C in Algebra 2 or Higher, Engineering Essentials: Exploring Careers, Introduction to Engineering Design

#### CAPSTONE: MECHANICAL ENGINEERING (ST9026)

Students using iteration and the Engineering design process will develop a capstone design project First: developing a critique of a problem, need, or design innovation. Second: investigating Constraints and criteria and developing prototypes in order to achieve a viable working model.

PREREQUISITE: C in Algebra 2 or Higher, Engineering Essentials: Exploring Careers, Introduction to Engineering Design, Engineering 2: Electrical Electronics

**GRADES 11,12** 

**GRADES 11,12** 

.5 Credit

.5 Credit

**GRADES 11,12** 

.5 Credit

.5 Credit

# THEOLOGY DEPARTMENT

#### PRINCIPLES OF THE CATHOLIC FAITH (RE9004)

This course provides an integrated survey of the doctrinal beliefs, prayer and worship traditions, Scriptures and moral principles of Roman Catholicism. It is presented with sensitivity to the spiritual growth and development of the adolescent. Woven within this course will be sessions on self-image and human sexuality, cultural and media influences, and moral and justice issues.

PREREQUISITE: None

#### OLD TESTAMENT (RE9003)

This course concentrates not only on the roots of Judaism but also Christianity, for it is within the story of the biblical Jews that Christianity has its origins. In studying the Old Testament, students will discover the Bible as the story of God's boundless love for us. This message will be presented in the different forms of literature: primeval history, patriarchal history, prophets, psalms, and selected writings.

#### PREREQUISITE: None

#### NEW TESTAMENT AND THE ACTS OF THE APOSTLES (RE9103)

This course leads students toward a deeper understanding of the New Testament and the Catholic approach to Scripture, the Good News of Jesus Christ, the Acts of the Apostles, and the Catholic Epistles of Saint Paul.

The students will explore three exegetical methods in the Catholic approach to Scriptures and learn about the development of the New Testament. This course will delve into the history, Christology, and ecclesiology of the books of the New Testament, beginning with the synoptic Gospels and the Gospel of John, and then explore the Acts of the Apostles, the Pauline and Deutero-Pauline letters, and the Book of Revelation.

PREREQUISITE: None

#### SACRAMENTS (RE9102)

The students will come to understand the seven sacraments as forms of liturgical signs highlighted in the gathering of the Catholic community's worship. Through instruction, the students will see the sacraments as an important area of the Catholic Church that put us in touch with the risen Lord. The historical perspectives of the seven sacraments and the application of them to every day Christian life will be explored.

PREREQUISITE: None

GRADE 10

.5 Credit

**GRADE 9** 

**GRADE 9** 

.5 Credit

.5 Credit

GRADE 10

#### CATHOLIC CHURCH HISTORY (RE9203)

This course will present the students with the varied expressions of the Roman Catholic Church in its Western historical context so that, aware of the Church's development and social interaction throughout Western Civilization, students will understand the nature of the Church and appreciate their own role in the Church's mission today. Special emphasis will be placed on the nature and the development of the Catholic Church in Europe and the United States.

#### PREREQUISITE: None

#### MORALITY/JUSTICE AND PEACE ISSUES (RE9202)

This course leads the students toward a deeper understanding of God's law revealed to us through reason and revelation. The students explore how Christ's life and teachers are the fulfillment of the Old Law summarized in the Ten Commandments. Thus, the content of the course is explained by the moral law in the Old Testament, by Christ's moral teachings in the Gospels, and by the moral teaching of the Church. These are applied to our contemporary oral guestions. The New Law of Christ calls us to go beyond keeping moral minimums and to love God, neighbor, and self with all our We can only do this empowered by God's grace. In the end, Christian Morality is about beina. responding to God's love by living in full communion with God and others.

This course also leads students toward a deeper understanding of the rich traditions of Catholic social teachings. The course examines the foundations of Catholic social teaching in Scripture and tradition. The students then study specific social issues, such as the protection of human life from its beginning to its end, poverty and hunger, war and peacemaking, economic justice, and environmental justice. The students are called to reflect on Christ's call to live justly and confront sinful social structures.

PREREQUISITE: None

#### CHRISTIAN LIFESTYLEs (RE9301)

This is a "life preparation" course that is animated by the conviction that the capacity for relationships, love, and a solid personal identity are all gifts from God. Growth in self-understanding and relational effectiveness will be treated fully as well as human sexuality in the context of love and commitment. The students will be enabled to comprehensively examine and evaluate the various attitudes concerning sexuality that permeate our culture. Marriage in its sacramental, sexual, and personal dimension will be studied. Family life and its demands, with practical emphasis on social skills will also have its place in this offering. The single life, the committed religious life and Holy Orders will be presented as responsible and loving choices of Christian ministry. Divorced and separated, the widowed and the single parent will be explored and discussed. This course is required for all seniors.

PREREQUISITE: None

.5 Credit

.5 Credit

**GRADE 12** 

GRADE 11

**GRADE 11** 

.5 Credit

#### WORLD RELIGIONS (RE9404)

In this senior elective course humankind's faith response to God as a being greater than ourselves will be explored as well as the expression of this belief in a formal creed. Emphasis will be placed on the Kingdom of God and the role of Christians who believe in Jesus Christ as Lord and Savior in that Kingdom. Comparative studies will be accomplished between the major Christian denominations as well as the major world religions--Buddhism, Confucianism, Hinduism, Islam, Judaism, and Taoism--with the correlation being made between the beliefs and practices of these religions and our own Catholic beliefs and practices. Analysis will be made of contemporary religious cults (e.g., Unification Church, People's Temple, Hare Krishna, etc.) regarding their appeal, their danger, and the difference between them and the major religions studied earlier in the course.

PREREQUISITE: None

# WORLD LANGUAGES DEPARTMENT

#### ITALIAN I (LA3401)

The objective of the first level course in Italian is to develop basic skills in grammar, speech and listening comprehension. Oral dialogues will be used to increase vocabulary and learn the culture, history and geography of Italy.

GRADES 9, 10, 11,12

GRADES 10, 11, 12

#### ITALIAN II (LA3402)

PREREQUISITE: None

After an initial review of the fundamentals learned in Italian I, Italian II is a continuation with more advanced grammar, additional vocabulary, and basic spontaneous conversation. These skills will be used in the readings of excerpts from Italian literature.

PREREQUISITE: C in Italian I

### ITALIAN III (LA3403)

Italian III is designed to help students develop spontaneous speaking skills as well as improve listening and reading skills. Vocabulary and grammar are reviewed in greater detail by speaking and writing compositions in the target language. The primary objective of this course is the attainment of a useful fluency in Italian.

PREREQUISITE: C in Italian II

#### **SPANISH I** (LA3901)

This course offers the student with a general introduction to the Spanish language utilizing a variety of audio activities, videos, learning pronunciation, functional vocabulary related to daily basis lifestyle, cultural knowledge and fundamental grammar applications. Concentration will be on the acquisition of four skills: listening, speaking, reading and basic writing. There are two main objectives to the course:

- 1. Provide students the ability to hold simple conversations.
- 2. Provide students with learning that enables them to comprehend and assimilate Spanish culture, vocabulary, and grammatical structures.

PREREQUISITE: None

#### SPANISH II (LA3402)

Spanish II builds upon knowledge gained in Spanish I. This course will also reinforce the skills learned in Spanish I: listening, speaking, reading and writing. Emphasis is on improving pronunciation, mastery of the basic grammatical structures, and increased communicative proficiency. Acquisition of new vocabulary is expected.

1. Students will be exposed to the past tenses, future, conditional and subjunctive mood.

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#### **GRADES 11, 12**

1 Credit

1 Credit

1 Credit

## 1 Credit

1 Credit

GRADES 9, 10, 11, 12

- 2. Students will be expected to apply grammatical concepts in their writing and speaking.
- PREREQUISITE: Accomplishment of Spanish I with a GRADES 10, 11, 12 satisfactory grade no lower than C

#### SPANISH III LA3403)

1 Credit

1 Credit

Spanish III continues building knowledge gained in Spanish I and II. This course is a continuation and reprocessing of knowledge acquired in Spanish I and Spanish II, as well as an introduction to new advanced vocabulary, structures and expressions.

- 1. Students will be expected to expand their repertoire of vocabulary range and include more sophisticated terminologies, use advanced language expressions, verb tenses and grammatical concepts such as: the pluperfect and the subjunctive mood.
- 2. Students will view Spanish language films with different accents and dialects and read selected Hispanic American literature.

PREREQUISITE: Accomplishment of Spanish II with a GRADES 11, 12 satisfactory grade no lower than C

#### SPANISH IV - AP SPANISH LANGUAGE (LA3904)

Spanish IV-AP students continue working in cooperative learning through oral and written presentations, also learning and reinforcing knowledge from the past levels of Spanish. As this course is a higher-level in reading, speaking, listening and writing, students are encouraged to take ownership of their learning and keep up with the pace of content and reading assignments following deadlines. It is advised for students to take the AP Spanish placement test through the College Board.

PREREQUISITE: Accomplishment of Spanish III with a satisfactory grade no lower than C

GRADES 11,12