# Melbourne Central Catholic High School 2024-2025 Course Catalog



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# Contents

MCC Student Services/School Counseling	4
Mission Statement	5
Background	5
MCC Graduation Requirements	5
Course Selection Process	6
Sample Schedule by Year	6
Course Descriptions	7
Academic Support	7
Computer Science	8
English	10
Fine Arts	14
Health and Physical Education	18
Mathematics	20
Performing Arts	24
Science	29
Social Studies	33
Theology	37
World Language	40
Advanced Programs	42
MCC/Florida Tech Emerging Scholars Program	42
Advanced Placement Courses	43
Honors Courses	44
Florida Bright Futures Scholarship Program	44
Academic Information	45
FACTS Family Portal	45
Grading/Scale	45
Student Mid-Quarter Progress	46
Academic Probation	46
Grade Forgiveness	46
GPA Weighting	46

Principal's Honor Roll	47
Class Rank	47
Valedictorian/Salutatorian	47
Academic Support	48
Florida Virtual School (FLVS)	48
Semester Exams	49
Standardized Testing	49
Community Service	51
Co-Curricular Eligibility	51
Transcripts	51

# **MCC Student Services/School Counseling**

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# **Mission Statement**

Rooted in the tradition of St. Francis of Assisi, Melbourne Central Catholic High School is a transformative, college preparatory high school that develops young men and women in an inclusive community to become servant leaders of our global society.

# **Background**

Accredited by the Florida Catholic Conference, Melbourne Central Catholic High School, a coeducational Catholic high school in the Diocese of Orlando, serves all of Brevard County and surrounding counties, in the State of Florida.

We expect MCC students to carry seven (7) courses per year for their entire school experience. Enrollment in Honors and Advanced Placement courses requires successfully meeting prerequisites and teacher or counselor recommendation.

Our school counselors assist students with course selection and college planning.

# **MCC Graduation Requirements**

<b>Theology</b> Transfer students must earn one credit for each year of attendance at MCC	4 Credits
English	4 Credits
Mathematics Includes Algebra I and Geometry	4 Credits
Science Includes Biology and Chemistry	3 Credits
Social Studies Includes World History, U.S. History, U.S. Gov't, Economics	3 Credits
World Language Includes two consecutive years of the same language	2 Credits
Physical Education HOPE required	1 Credit
Practical Arts Includes one complete or combined credit from Art, Music, or Computer Science	1 Credit
Electives	6 Credits
Community Service (25 hours/year)	100 Hours/4 years
Personal Financial Literacy course (Beginning with the Class of 2027)	0.5 Credits

# **Course Selection Process**

- Course Catalog revision in October/November of each year
- Classroom presentations on reviewing course offerings will be in January and February.
- Students complete course requests through FACTS (January-March)
- Individual appointments with the school counselors (January-March)
- Students will take English, and Math courses all four years in high school. Theology will be taken each year of attendance at MCC.

# Sample Schedule by Year

Freshman	Sophomore	Junior	Senior
English	English	English	English
Math	Math	Math	Math
Theology	Theology	Theology	Theology
Science	Science	Science	Social Studies
Social Studies	Social Studies/Elective	Social Studies	Elective
World Language/Elective	World Language	Practical Art/Elective	Elective
НОРЕ	Elective	Elective	Elective

Honors Course Note: Honors courses require a greater demand on students through increased academic rigor. Academic rigor is obtained through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted. Students are challenged to think and collaborate critically on the content they are learning. Honors level rigor will be achieved by increasing text complexity through text selection, focus on high-level qualitative measures, and complexity of task. Instruction will be structured to give students a deeper understanding of conceptual themes and organization within and across disciplines. Academic rigor is more than simply assigning students a greater quantity of work.

*AP Course Note*: AP stands for Advanced Placement, which are college level courses that are operated by the College Board. These higher-level courses are offered at high schools to provide students an opportunity to earn college credits.

*Course Placement Criteria*: Course placement is based on a review of grades, teacher recommendations, and all standardized test scores.

# **Course Descriptions**

# **Academic Support**

Learning Strategies 7963080 0.5 - 1 Credit Grades 9-12

This course is designed to assist students in developing learning and study strategies that they will apply independently across the curriculum. During the course, students analyze their individual learning styles and learning modes and how these impact the student's approach to study. Other topics presented and applied to daily schoolwork include goal setting, organization, and time management, listening skills, note-taking techniques, reading textbooks, writing strategies, memory strategies, and preparation for taking tests. Course materials include related handouts, and the textbooks students utilize during the academic year. This course may be required of some incoming 9th grade students. This course may be repeated based on counselor recommendation.

Prerequisite: Student Services Recommendation

Peers as Partners in Learning (PIT CREW) 14003401 1 Credit Grade level: 12

Students intending to enroll in this course must complete an application from the Academic Support Office, must be in good standing academically, and should not have a significant number of school absences (excused or unexcused). For more information, please see the Vice Principal for Academic Support. This course provides students enrolled with reciprocal academic and social benefits to students with disabilities and their peers without disabilities. Students enrolled in this course will learn and apply knowledge and skilled practices in the areas of academic engagement, communication, social barriers, leadership, problem solving, and other disability related topics such as historical perspectives, inclusion, Universal Design for Learning, person-first language, presumed competence, and media representation of diverse people. Students enrolled in this course will serve assisting in specific classes or working with special education students.

Prerequisite: Students must complete an application from the Academic Support Office

Intensive Math 1200400 1 Credit Grade level: 9

Must be taken concurrently with Algebra 1 This course is a double-block course designed to provide students with support in the development of math skills. Students will work on math competencies to enhance mathematical performance. Topics include sets, variables, structure and properties of the real number system, first-degree equations/inequalities, relations, functions, graphs, systems of linear equations/ inequalities, integral exponents, polynomials, rational algebraic expressions, irrational numbers, quadratic equations, and mathematical problems. A TI-84+ CE graphing calculator is required for this course.

**Prerequisite:** Student Services Recommendation

# Intensive Language Arts Grade Level: 9-10

1000412

1 Credit

This course is designed for 9th and 10th grade students. The purpose of this course is to provide instruction that enables students to accelerate the development of reading and writing skills and to strengthen those skills, so they can successfully read and write grade level text independently. Instruction emphasizes reading comprehension, writing fluency, and vocabulary study using a variety of literary and informational texts encompassing a broad range of text structures, genres, and levels of complexity. The course will also emphasize the development and use of fundamental writing skills. Students enrolled in the course will engage in research, write in response to reading, and cite evidence to answer text dependent questions both orally and in writing.

Prerequisite: Student Services Recommendation

# **Computer Science**

# **Computer Fundamentals**

9003410

0.5 Credits

Students will explore computer skills and applications needed on a personal, school/college, and career level. The focus of this course is to provide knowledge and skills associated with computer skills needed in a student's future, regardless of career choice. A hands-on approach is used to create word processing documents, spreadsheets, charts, presentations, and databases using Office 365, Google APPs, and Adobe Creative Cloud. (Formerly Computer Applications)

# **Procedural Programming**

9007220

0.5 Credits

This is an introductory coding course that requires no previous coding experience. Students will learn Python in an interactive environment with graphics and animations. Students will start with the basics of variables, looping and conditional statements and then will explore graphics, random numbers, event handling and arrays. (Formerly Programming in Python)

**Prerequisite:** Currently enrolled in Geometry

# **AP Computer Science Principles**

0200335

1 Credit

The course is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students do programming in JavaScript. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs.

**Prerequisite:** Intro to Programming or Computer Science Discoveries Programming in Python or seniors in advanced math classes

### Foundations of Web Design

8208120

0.5 Credits

This course is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML and CSS and will use Adobe to create webpages and a student portfolio. By the end of this course, students will be able to explain how web pages are developed and viewed, analyze and fix errors in existing websites, and create their very own multi page websites. Students will learn the foundations of user interface design, rapid prototyping, and user testing, and will work together to create professional, responsive websites.

# **Principles of Scientific Visualization**

9400110

0.5 Credits

Industries of all types are hiring data scientists to analyze and highlight the hidden patterns in data. This course equips students with the essential skills of a data scientist which include data collection, cleanup, transformation, analysis, and visualization. Students will write algorithms, tell data stories, and build statistical models using Python libraries. They will use the same tools that data scientists use to draw meaningful insights and solve organizational problems.

# Game and Simulation Design

8208120

1 Credit

This is an introductory course that introduces students to game design and programming. Students use the p5play JavaScript library to design, develop, and publish games. Throughout the course, students learn about major programming topics like variables, functions, conditionals, and mouse/keyboard events while building fun and interactive games that they can play and share with others. Students practice computational thinking skills as they plan, develop, and test their programs. Students build two different games in the last two modules in this course.

Prerequisite: Intro to Programming or Computer Science Discoveries and/or Programming in Python

## **Computer Science Discoveries**

0200305

0.5 Credits

This is an introductory course to computer science. Students will program in JavaScript to create animations and games in the <u>code.org</u> environment. Students will also be introduced to artificial intelligence and machine learning with tabular data. Students explore how computers learn from data to make decisions, then develop machine learning projects around real-world data.

# **English**

### Scope and Sequence

9	10	11	12
English I	English II	English III	English IV
9	10	11	12
Honors English I	Honors English II	Honors English III	Honors English IV
9	10	11	12
Acc. Honors English I	Acc. Honors English II	AP Eng Language	AP Eng Lit and Comp

We determine placement in English courses for incoming ninth graders based on a review of middle school grades, the High School Placement Test (HSPT), and standardized test scores.

English I 1001310 1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from varied literary periods. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies.

### Honors English I 1001320 1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from varied literary periods. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies and prepare students for our sequential four-year honors and Advanced Placement English curriculum.

**Prerequisites**: Incoming 9th grade students must score in the 70th percentile or above on the standardized testing or entrance exam in reading and an A in their previous school year Language Arts Course. This course is designed for freshmen who have demonstrated above grade level skills in English Language Arts.

# Accelerated Honors English I

1001320

1 Credit

This course is a year-long preparatory class emphasizing the knowledge and skills for advanced language arts studies. It is the first of two such courses that directly support students pursuing the Advanced Placement track. Students will focus on building vocabulary skills, close reading of texts, advanced argumentative, critical, and narrative writing with textual support, and superior skills in literary discourse. Students will consider a variety of texts and may be required to purchase several editions. This course focuses on developing students' strengths in reading, writing, speaking, and listening. It goes beyond the curriculum expectations of both the standard college preparatory and traditional honors levels by increasing rigor, depth, and complexity. The class will be dynamic, high level, and will move at a faster pace than traditional honors courses.

**Prerequisites:** 75th percentile NPR or above across **all** categories in ELA HSPT entrance exam; a grade of "A" throughout 8th grade; a STAR reading test result placing the student at a 10th grade equivalent or higher; successful completion of a writing sample assigned, reviewed, and approved by a current MCC English department faculty member.

English II 1001340 1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from World Literature. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies.

Prerequisite: English I

# **Honors English II**

1001350

1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from World Literature. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies and prepare students for our sequential four-year honors and Advanced Placement English curriculum.

**Prerequisites:** "B" or above in English I Honors or an "A" in English 1 each semester and a minimum of "on-grade level" score on the STAR test. This course is designed for sophomores who have demonstrated above grade level skills in English I.

### **Accelerated Honors English II**

1001350

1 Credit

This is the second year-long course preparing students for the Advanced Placement track. Students will build upon the skills introduced in Accelerated 9th Grade Honors English Language Arts. Students should expect to participate in detailed textual analysis, formal commentary, and writing assignments at a superior writing level. Like its predecessor, this course goes beyond the curriculum expectations of both the standard college preparatory and traditional honors levels by increasing rigor, depth, and complexity. The class will be dynamic, high level, and will move at a faster pace than traditional honors courses.

**Prerequisites:** "A" throughout 9th grade Accelerated OR Honors English class at MCC; a STAR reading test result placing the student at an 11th grade equivalent or higher; successful completion of a writing sample assigned, reviewed, and approved by a current MCC English department faculty member; recommendation of 9th grade English teacher AND approval of Assistant Principal or Principal in consultation with English department chair.

### English III 1001370 1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from American Literature. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies.

Prerequisite: English II

# **Honors English III**

1001380

1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from American Literature. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies and prepare students for our sequential four-year honors and Advanced Placement English curriculum.

**Prerequisites:** "B" or above in English II Honors or an "A" in English 2 each semester and a minimum of "on-grade level" score on the STAR test. This course is designed for Juniors who have demonstrated above grade level skills in English II.

# English IV 1001400 1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from British Literature. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies.

Prerequisite: English III

### **Honors English IV**

1001410

1 Credit

The course acquaints students with literary genres through the analysis of short stories, novels, poetry, drama, and essays from British Literature. Grammar, usage, and vocabulary enhance the writing process which includes writing for varied purposes, using text-based evidence and reasoning to develop and support claims, and responding to literature for personal and analytical purposes. Class discussions and collaboration help develop effective listening, speaking, and viewing strategies.

**Prerequisites:** "B" or above in English III Honors or an "A" in English 3 each semester and a minimum of "on-grade level" score on the STAR test. This course is designed for seniors who have demonstrated above grade level skills in English II.

# **AP English Literature and Composition**

1001430

1 Credit

The course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of how writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works, as well as a full-length research paper. Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.

**Prerequisites**: English III or AP English Language and Composition, departmental entrance test, English III or AP teacher recommendation, standardized test scores: PSAT and STAR scores, GPA 3.5+ in content area.

### AP English Language and Composition

1001420

1 Credit

The course, part of the nationally recognized AP Program, is available to those students who manifest college skills in composition, analysis, and interpretation. Acceptance is determined by strict academic standards of achievement. Students may earn advanced college placement by successfully competing in the annual national testing program of the College Board. These are college-level classes stressing argumentation, composition, and sophisticated language analysis, including a required research paper.

**Prerequisites:** English II Honors, departmental entrance test, English II teacher recommendation, standardized test scores: PSAT and STAR scores, GPA 3.5+ in content area

### **Broadcast Journalism**

1006300

1 Credit

This course is a preprofessional-oriented course focused on conceiving, writing, and creating news for broadcast. Course content includes vocabulary and terminology in digital video production, quality story segments, camera and sound techniques, and production skills as well as explains the guidelines for using social and mixed media as a source of content in a newsroom. The class will produce a daily news show for the school.

# Social Media I/ Yearbook 1006375 1 Credit

Designed to focus on media and graphic arts, the course enables students to develop fundamental skills in the use of social media across print, multimedia, web, and broadcast platforms, including ethical and legal uses. Specifically, we will create and produce the school yearbook, focusing on photography and design. Requiring both in class and after school time, the class will explore exercises in creativity, while developing new skills in computer design, photography, copywriting, and project management.

## Creative Writing 1009330 1 Credit

The purpose of this course is to enable students to develop and use writing and language skills for creative expression in a variety of literary forms. Studying and modeling a variety of genres will be emphasized at this level of creative writing. This course is reserved for Juniors and Seniors.

### **Fine Arts**

### Scope and Sequence

2D Art	Drawing 2 S-1	Creative Photo I	Digital Art S-1
	Painting 2 S-2	Creative Photo II	Visual Tech S-2
		Creative Photo	3D Art S-1
			Ceramics S-2
			AP 2D Design
			AP Drawing
			AP 3D Art

### (All courses meet the Practical Arts graduation requirement)

### 2-Dimensional Studio Art

0101300

1 credit

Students experiment with the media and techniques used to create a variety of two-dimensional (2-D) artworks through the development of skills in drawing, painting, printmaking, collage, and/or design. Students practice, sketch, and manipulate the structural elements of art to improve mark making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

Students develop and refine technical skills and create 2-D compositions with a variety of media in drawing. Student artist's sketch, manipulate, and refine the structural elements of art to improve mark-making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

Prerequisite: 2-D Studio Art/ Drawing

Painting 0104370 0.5 Credits

Students develop and refine technical skills and create 2-D compositions in painting. Student artists manipulate and refine the structural elements of art to improve mark-making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

Prerequisite: 2-D Studio Art/ Painting

### 3-Dimensional Art 0101330 1 Credit

Students explore how space, mass, balance, and form combine to create aesthetic forms or utilitarian products and structures. Instruction may include, but is not limited to, content in green or industrial design, sculpture, ceramics, or building arts. Media may include, but are not limited to, clay, wood, plaster, and paper mâché with consideration of the workability, durability, cost, and toxicity of the media used. Student artists consider the relationship of scale (i.e., hand-held, human, monumental) using positive and negative space or voids, volume, visual weight, and gravity to create low/high relief or freestanding structures for personal intentions or public places. They explore sharp and diminishing detail, size, position, overlapping, visual pattern, texture, implied line, space, and plasticity, reflecting craftsmanship and quality in the surface and structural qualities of the completed art forms. Students in the 3-D art studio focus on the use of safety procedures for process, media, and techniques. Student artists use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

Prerequisite: 2-D Studio Art

Students explore how space, mass, balance, and form combine to create aesthetic forms or utilitarian products and structures. Instructional focus will be on ceramics and/or pottery. Media may include, but are not limited to, clay and/or plaster, with consideration of the workability, durability, cost, and toxicity of the media used. Student artists consider the relationship of scale (i.e., hand-held, human, monumental) using positive and negative space or voids, volume, visual weight, and gravity to create low/high relief or freestanding structures for personal intentions or public places. They explore sharp and diminishing detail, size, position, overlapping, visual pattern, texture, implied line, space, and plasticity, reflecting craftsmanship and quality in the surface and structural qualities of the completed art forms. Students in the ceramics and/or pottery art studio focus on the use of safety procedures for process, media, and techniques. Student artists use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

Prerequisite: 2-D Studio Art/ 3-D Art

### Creative Photography

### 0108310

0.5 Credits

Students explore the aesthetic foundations of art making using beginning photography techniques. This course may include, but is not limited to, color and/or black and white photography via digital media and/or traditional photography. Students become familiar with the basic mechanics of a camera, including lens and shutter operation, compositional foundations, printing an image for display, and evaluating a successful print. Student photographers may use a variety of media and materials, such as 35mm black and white film, single lens reflex camera, digital camera, darkroom, computer application, filters, various papers, digital output, photogram, cyanotypes, Sabatier effect, and pinhole photography. Craftsmanship and quality are reflected in the surface of the prints and the care of the materials. Photographers use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

### Creative Photography II

0108320

0.5 Credits

Students experiment with a variety of photographic media and techniques and make connections with historical and contemporary photographers to develop a focused body of work. This course may include, but is not limited to, researching the history of photography, making connections to contemporary and community photographers, critiquing with varied techniques, and experimenting with a variety of photographic media. Processes and techniques include, but are not limited to, handcrafted pinhole cameras, hand-tinted photographs, mixed media, cyanotypes, medium format, photo collage, cross-processing, creative filters, infrared and slide film, night photography, macro, panoramic, and/or digital output via a variety of media. Craftsmanship and quality are reflected in the surface of the prints, care of the materials, attention to compositional conventions, and expression of ideas and feelings. Photographers use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

**Prerequisite:** Creative Photography

### **Creative Photography Honors**

0108330

0.5 Credits

Students lead a focused investigation of a subject matter from ideation to completion. Students select a theme, develop a concept, and prepare the work for public viewing, portfolio, distribution, and/or exhibit. This course may include, but is not limited to, research, collaboration, installation, history of photography, making connections to contemporary and community photographers, and critiquing with varied techniques. Processes, techniques, and media may include, but are not limited to, video, film, high speed photography, studio lighting, flash, long exposure, formal portraiture, large format, HDR, RAW processing, and digital output on a variety of media, including non-traditional materials. Craftsmanship and quality are reflected in the surface of the print, care of the materials, attention to compositional conventions, the display setting, and expression of ideas and feelings. Photographers use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials.

Prerequisites Creative Photography and Creative Photography 2

# **Digital Art Imaging**

0108370

0.5 Credits

Students explore the fundamental concepts, terminology, techniques, and applications of digital imaging to create original work. Students produce digital still images through the single or combined use of computers, digital cameras, scanners, photo editing software, drawing, and painting software, graphic tablets, printers, new media, and emerging technologies. Through the critique process, students evaluate and respond to their own work and that of their peers to measure artistic growth. This course incorporates hands-on activities, the use of technology, and consumption of art materials.

Prerequisites 2-D Studio Art and Creative Photography

# Visual Technology

0107440

0.5 Credits

Students explore the fundamental concepts, terminology, techniques, and applications of digital imaging to create original work. Students produce animated digital images through the single or combined use of computers, digital cameras, digital video cameras, scanners, photo editing software, drawing, and painting software, graphic tablets, printers, new media, and emerging technologies. Through the critique process, students evaluate and respond to their own work and that of their peers to measure artistic growth. This course incorporates hands-on activities, the use of technology, and consumption of art materials.

Prerequisites 2-D Studio Art and Digital Art Imaging

### AP Studio 2D Design/ AP Drawing/ AP 3-D Art 0109350/0104300/0109360 1 Credit each

The AP Studio Art Program consists of three portfolio exams: 2-D Design, 3-D Design, and Drawing that correspond with the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level portfolios. Students must develop their own personal voice. Mastery of concepts, composition, execution, varied art mediums, mixed media, and themes, concepts, subject matter, and content are an expected outcome. Students demonstrate a thorough understanding of the elements and principles of art and design through an investigative experimentation of ideas, materials, and processes using electronic media in conjunction with traditional art mediums, materials, and processes. AP Portfolios will consist of 15 Sustained Investigative pieces and 5 Selective Works that each have a written section describing their process and materials. This course incorporates hands-on activities and consumption of art materials.

Prerequisite: 2-D Studio Art/ Drawing 2/ Painting 2/ AP Application

# **Health and Physical Education**

# Health Opportunities for Physical Education (HOPE) 3026010 1 Credit

The course provides students with opportunities to develop and enhance critical life management, necessary to make sound decisions and take positive action for healthy and effective living. It combines a classroom and physical activity component into one class. It includes communication, interpersonal and coping skills, responsible decision-making and planning, consumer education, chemical substance awareness, cyber awareness, physical fitness, nutrition, and basic first aid.

# Weight Training 1501360 0.5 Credit

The course provides students with opportunities to acquire basic knowledge and skills in weight training that may be used in physical fitness pursuits today as well as in later life, improve muscular strength and endurance, and enhance body image. The student will also learn nutritional practices and safety practices related to weight training.

# Power Weight Training I 1501410 0.5 Credit

The purpose of this course is to develop the physical skills necessary to be competent in many forms of movement as it relates to weight training. The integration of fitness concepts throughout the content is critical to the success of this course.

### Basketball 1503310 0.5 Credits

Students will gain an understanding of how a healthy lifestyle affects one's health, fitness, and physical performance. Understand basic basketball rules, terminology, and safety concerns. Demonstrate the basic basketball skills of running, jumping, passing, catching, dribbling, and shooting.

# Volleyball 1505500 0.5 Credits

The purpose of this course is to introduce students to basic skills and knowledge associated with volleyball. By applying these principles through active participation, students develop the necessary skills and knowledge to play volleyball. In addition, this course provides students with opportunities to improve physical fitness, acquire knowledge of fitness concepts and practice positive personal and social skills. Students will gain an understanding of how a healthy lifestyle affects one's health, fitness, and physical performance.

### Fitness Lifestyle Design

1501310

0.5 Credits

Students will identify, analyze, and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. Documenting food intake, calories consumed, and energy expended through physical activity and analysis of the results will enable students to reflect and recognize healthy patterns. The purpose of this course is to teach students how to live a healthy, active lifestyle.

Personal Fitness 1501300 0.5 Credits

The purpose of this course is to provide students with the knowledge, skills, and values they need to become healthy and physically active for a lifetime. This course addresses both the health and skill-related components of physical fitness which are critical for students' success.

### **Health Science Foundations**

8417110

1 Credit

This course is part of the Secondary Health Core designed to provide the student with an in-depth knowledge of the healthcare system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem-solving skills. Students will also learn first aid skills and demonstrate the measurement of vital signs. Students may shadow professionals throughout the course. This course is a Career & Tech Course credit, cannot be used for Bright Futures qualifications.

**Prerequisite:** Honors Anatomy & Physiology

# **Mathematics**

# Scope and Sequence

9	10	11	12
Algebra I	Geometry	Algebra II	Math for College Algebra
			Math for Data & Fin Literacy
			Probability & Statistics Honors
9	10	11	12
Honors Algebra I	Honors Geometry	Honors Algebra II	Honors Pre- calculus
			Honors Probability & Statistics
9	10	11	12
Honors Geometry	Honors Algebra II	Honors Pre- calculus AP Pre-calculus	Honors Calculus  AP Calculus AB  Honors  Probability &  Statistics
9	10	11	12
Honors Algebra	Honors Pre-	AP Calculus	AP Calculus BC
II	calculus	AB Calculus	AP Calculus AB
	AP Pre-calculus	Honors	Honors Calculus
		Probability & Statistics	Honors Probability & Statistics

We determine placement in mathematics courses for incoming ninth graders based on a review of middle school courses and grades, the High School Placement Test (HSPT), and standardized test scores.

# Algebra I 1200310 1 Credit

In Algebra 1, instructional time will emphasize five areas: (1) performing operations with polynomials and radicals, and extending the Laws of Exponents to include rational exponents; (2) extending understanding of functions to linear, quadratic and exponential functions and using them to model and analyze real-world relationships; (3) solving quadratic equations in one variable and systems of linear equations and inequalities in two variables; (4) building functions, identifying their key features and representing them in various ways and (5) representing and interpreting categorical and numerical data with one and two variables.

# Honors Algebra I 1200320 1 Credit

In Algebra 1 Honors, instructional time will emphasize five areas: (1) performing operations with polynomials and radicals, and extending the Laws of Exponents to include rational exponents; (2) extending understanding of functions to linear, quadratic and exponential functions and using them to model and analyze real-world relationships; (3) solving quadratic equations in one variable and systems of linear equations and inequalities in two variables; (4) building functions, identifying their key features and representing them in various ways and (5) representing and interpreting categorical and numerical data with one and two variables.

**Prerequisites**: Incoming 9th grade students must score in the 70th percentile or above on the standardized testing or entrance exam in math and an A average in their previous school year math course.

Geometry 1206310 1 Credit

In Geometry, instructional time will emphasize five areas: (1) proving and applying relationships and theorems involving two-dimensional figures using Euclidean geometry and coordinate geometry; (2) establishing congruence and similarity using criteria from Euclidean geometry and using rigid transformations; (3) extending knowledge of geometric measurement to two-dimensional figures and three-dimensional figures; (4) creating and applying equations of circles in the coordinate plane and (5) developing an understanding of right triangle trigonometry.

Prerequisite: Algebra 1

# Honors Geometry 1206320 1 Credit

In Geometry Honors, instructional time will emphasize five areas: (1) proving and applying relationships and theorems involving two-dimensional figures using Euclidean geometry and coordinate geometry; (2) establishing congruence and similarity using criteria from Euclidean geometry and using rigid transformations; (3) extending knowledge of geometric measurement to two-dimensional figures and three-dimensional figures; (4) creating and applying equations of circles in the coordinate plane and (5) developing an understanding of right triangle trigonometry.

**Prerequisites:** Algebra 1 Honors or Algebra 1 with teacher recommendation. B or above in Algebra 1 Honors, B or above in Algebra 2 Honors for 9th graders, or an A in Algebra 1 each semester.

# Algebra II 1200330 1 Credit

In Algebra 2, instructional time will emphasize five areas: (1) extending arithmetic operations with algebraic expressions to include radical and rational expressions and polynomial division; (2) graphing and analyzing functions including polynomials, absolute value, radical, rational, exponential and logarithmic; (3) building functions using compositions, inverses and transformations; (4) extending systems of equations and inequalities to include non-linear expressions and (5) developing understanding of the complex number system, including complex numbers as roots of polynomial equations.

**Prerequisites:** Algebra 1 and Geometry

# Honors Algebra II 1200340 1 Credit

In Algebra 2 Honors, instructional time will emphasize six areas: (1) developing understanding of the complex number system, including complex numbers as roots of polynomial equations; (2) extending arithmetic operations with algebraic expressions to include polynomial division, radical and rational expressions; (3) graphing and analyzing functions including polynomials, absolute value, radical, rational, exponential and logarithmic; (4) extending systems of equations and inequalities to include non-linear expressions; (5) building functions using compositions, inverses and transformations and (6) developing understanding of probability concepts.

**Prerequisites:** Geometry, placement exam, 3.0 GPA in content area, and teacher or counselor recommendation. Incoming ninth graders must (1) score a 90th percentile or above on standardized testing or entrance exam, (2) have an A in Algebra 1, and (3) score an 80 or above on the Diocesan Algebra 1 Proficiency Exam.

# Honors Pre-calculus 1202340 1 Credit

In Precalculus Honors, instructional time will emphasize six areas: (1) extending right triangle trigonometry to unit circle trigonometry and trigonometric functions; (2) extending understanding of functions to trigonometric; (3) developing understanding of conic sections; (4) representing and performing operations with complex numbers and vectors in the coordinate plane; (5) extending understanding of relations in the plane using parametric representations, including polar coordinates and (6) analyzing arithmetic and geometric sequences and series.

**Prerequisites:** Algebra 2, placement exam, overall GPA 3.0 in content area, and teacher or counselor recommendation

### AP Pre-calculus 1202305 1 Credit

AP Precalculus is designed to be the equivalent of a first semester college precalculus course. AP Precalculus provides students with an understanding of the concepts of college algebra, trigonometry, and additional topics that prepare students for further college-level mathematics courses. This course explores a variety of function types and their applications—polynomial, rational, exponential, logarithmic, trigonometric, polar, parametric, vector-valued, implicitly defined, and linear transformation functions using matrices.

**Prerequisites:** Algebra 2, placement exam, overall GPA 3.5 in content area, and teacher or counselor recommendation

# **Honors Probability and Statistics**

1210300

1 Credit

In Probability and Statistics Honors, instructional time will emphasize four areas: (1) creating and interpreting data displays for univariate and bivariate categorical and numerical data; (2) comparing and making observations about populations using statistical data, including confidence intervals and hypothesis testing; (3) extending understanding of probability and probability distributions and (4) developing an understanding of methods for collecting statistical data, including randomized trials.

Prerequisite: Algebra II

# Math for College Algebra

1200710

1 Credit

In Mathematics for College Algebra, instructional time will emphasize five areas: (1) developing fluency with the Laws of Exponents with numerical and algebraic expressions; (2) extending arithmetic operations with algebraic expressions to include rational and polynomial expressions; (3) solving one-variable exponential, logarithmic, radical and rational equations and interpreting the viability of solutions in real-world contexts; (4) modeling with and applying linear, quadratic, absolute value, exponential, logarithmic and piecewise functions and systems of linear equations and inequalities; (5) extending knowledge of functions to include inverse and composition.

Prerequisite: Algebra II

# Mathematics for Data and Financial Literacy 1200384

1 Credit

In Mathematics for Data and Financial Literacy, instructional time will emphasize five areas: (1) extending knowledge of ratios, proportions and functions to data and financial contexts; (2) developing understanding of basic economic and accounting principles; (3) determining advantages and disadvantages of credit accounts and short- and long-term loans; (4) developing understanding of planning for the future through investments, insurance and retirement plans and (5) extending knowledge of data analysis to create and evaluate reports and to make predictions.

Prerequisite: Algebra II

### Honors Calculus 1202300 1 Credit

In Calculus Honors, instructional time will emphasize four areas: (1) developing understanding of limits and continuity of functions; (2) finding derivatives and applying them to motions, slopes, related rates and optimizations; (3) applying limits and derivatives to graph and analyze functions and (4) evaluating integrals and applying them to areas, volumes, average values and differential equations.

**Prerequisites:** Honors Pre-Calculus, placement exam, overall GPA 3.0 in content area and teacher or counselor recommendation

AP Calculus AB 1202310 1 Credit

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

**Prerequisites:** Pre-Calculus, overall 3.5 GPA in content area, and teacher or counselor recommendation

AP Calculus BC 1202320 1 Credit

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses. It extends the content learned in AB to different types of equations (polar, parametric, vector-valued) and new topics (such as Euler's method, integration by parts, partial fraction decomposition, and improper integrals), and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

**Prerequisites:** AP Calculus AB, overall 3.5 GPA in content area, and teacher or counselor recommendation

# **Performing Arts**

(All courses meet the Practical Arts graduation requirement)

Band I 1302300 1 Credit

This year-long, entry-level class, designed for students having limited band experience with woodwind, brass, and/or percussion instruments, promotes the enjoyment and appreciation of music through performance of high-quality, beginning wind and percussion literature from different times and places. Rehearsals focus on the development of critical listening/aural skills; rudimentary instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

Prerequisite: Middle School Band program

Band II 1302310 1 Credit

This year-long, beginning-level class, designed for students with at least one year of woodwind, brass, and/ or percussion ensemble experience, promotes the enjoyment and appreciation of music through performance of high-quality wind and percussion literature. Rehearsals focus on the development of critical listening skills, instrumental and ensemble technique, and skills, expanded music literacy, and aesthetic awareness culminating in periodic public performances.

Prerequisite: Band I

This year-long, formative class, designed for students ready to build on skills and knowledge previously acquired in a middle or high school instrumental ensemble, promotes the enjoyment and appreciation of music through performance of high-quality, intermediate-level wind and percussion literature. Rehearsals focus on development of critical listening/aural skills, individual musicianship, instrumental technique, refinement of ensemble skills, and aesthetic engagement culminating in periodic public performances.

**Prerequisites**: Band I, II (audition video of any four Major Scales ascending/descending performed as eighth notes, metronome audible and set to 90 bpm, student visible in video and emailed to <a href="mailto:mcmullanm@melbournecc.org">mcmullanm@melbournecc.org</a> if student has not had prerequisites through MCC)

Band IV 1302330 1 Credit

This year-long, intermediate-level course, designed for students who demonstrate proficiency in woodwind, brass and/or percussion techniques, music literacy, critical listening/aural skills, and ensemble performance skills, promotes greater engagement with and appreciation for music through performance and other experiences with a broad spectrum of music, as well as creativity through composition and/or arranging.. Study includes cultivation of well-developed instrumental ensemble techniques and skills, music literacy and theory, and deeper aesthetic engagement with a wide variety of high-quality repertoire.

**Prerequisites**: Band I, II, III (audition video of any four Major Scales ascending/descending performed as eighth notes, metronome audible and set to 120 bpm, student visible in video and emailed to <a href="mailto:mcmullanm@melbournecc.org">mcmullanm@melbournecc.org</a> if student has not had prerequisites through MCC)

Chorus I 1303300 1 Credit

This year-long, entry-level class, designed for students with limited choral experience, promotes the enjoyment and appreciation of music through performance of beginning choral repertoire from a variety of times and places. Rehearsals focus on the development of critical listening skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

Prerequisite: Middle School Choral program

Chorus II 1303310 1 Credit

This year-long, beginning-level class, designed for students with one year of experience or less in a choral performing group, promotes the enjoyment and appreciation of music through performance of basic, high-quality choral music. Rehearsals focus on the development of critical listening/aural skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances.

Prerequisite: Chorus I

### Chorus III 1303320 1 Credit

This year-long, formative class, designed for students with previous participation in a school chorus who have basic knowledge of note-reading and vocal technique, concentrates on providing students opportunities to strengthen existing skills in critical listening, vocal techniques, and ensemble performance using high-quality three- and four-part choral literature. Rehearsals focus on gaining independence in music literacy and aesthetic engagement through critical listening and thinking skills.

**Prerequisite**: Chorus I, II (audition video of any four Major Scales performed as eighth notes, metronome audible and set to 80 bpm, vowel sound "ah", student visible in video and emailed to <a href="mailto:mcmullanm@melbournecc.org">mcmullanm@melbournecc.org</a> if student has not had prerequisites through MCC)

Honors Chorus 1303350 1 Credit

This year-long, intermediate-level class is designed for students with previous participation in a high school chorus and moderate skills in critical listening, vocal techniques, music literacy, and choral performance. Rehearsals focus on enhancing these skills and students' aesthetic engagement with music through a variety of high-quality three- and four-part choral literature, providing students with the means to learn how to reflect and use a combination of analytical, assessment, and problem-solving skills consistently to improve their own and others' performance.

**Prerequisites:** Chorus I, II, III (audition video of any four Major Scales performed as eighth notes, metronome audible and set to 100 bpm, vowel sound "ah", student visible in video and emailed to <a href="mailto:mcmullanm@melbournecc.org">mcmullanm@melbournecc.org</a> if student has not had prerequisites through MCC)

Guitar I 1301320 1 Credit

This year-long, entry-level class is designed for students with little or no experience in order to develop basic guitar skills and knowledge, including simple and full-strum chords, bass lines and lead sheets, barre and power chords, foundational music literacy and theory, major scales, simple finger-picking patterns, and ensemble skills for a variety of music. Beginning guitarists explore the careers and music of significant performers in a variety of styles. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course requires students to obtain a serviceable (e.g. playable) musical instrument (e.g., borrow, rent, purchase) from an outside source.

Guitar II 1301330 1 Credit

This year-long class is designed for students with previous guitar experience to build upon their skills and knowledge, adding chords, new strumming and finger-picking patterns, movable major and minor scales, basic music theory, more complex bass lines and lead sheets, and ensemble skills for a variety of music. Beginning guitarists explore the careers and music of significant performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course requires students to obtain a serviceable (e.g. playable) musical instrument (e.g., borrow, rent, purchase) from an outside source.

Prerequisite: Guitar I or verifiable equivalent

Guitar III 1301340 1 Credit

This year-long class is designed for students with previous experience to strengthen their guitar skills and knowledge, adding a variety of chords; refining fingerpicking and strumming patterns; reading notation in 1st, 2nd, and 5th position; and learning stylistic nuances, left-hand technique, and alternative fingering. Guitarists readily use tablature and standard notation, study the work of significant musicians, and develop significant self-assessment skills. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course requires students to obtain a serviceable (e.g. playable) musical instrument (e.g., borrow, rent, purchase) from an outside source.

Prerequisite: Guitar II or verifiable equivalent

Honors Guitar IV 1301350 1 Credit

This year-long class is designed for students with considerable experience to broaden their guitar skills and knowledge, adding left- and right-hand techniques and stylistic nuances; work with classical etudes and ensemble performance literature; and become familiar with modes and jazz chords. Guitarists extend their reading and theory skills and add to their knowledge of significant musicians through history. In keeping with the rigor expected in an Honors course, students undertake independent study that includes synthesis of learning and experience. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course requires students to obtain a serviceable (e.g. playable) musical instrument (e.g., borrow, rent, purchase) from an outside source.

Prerequisite: Guitar III or verifiable equivalent

Music Theory I 1300300 1 Credit

Students learn how music is constructed and developed, and acquire a basic understanding of the structural, technical, and historical elements of music. Student theorists develop basic ear-training, keyboard, and functional singing skills, and engage in the creative process through individual and collaborative projects. Public performances may serve as a resource for specific instructional goals. Students may be required to attend one or more performances outside the school day to support, extend, and assess learning in the classroom.

# Honors Music Theory II 1300310 1 Credit

Students with prior music theory training study composition, form, and analysis, and develop individual aural skills. The aural, analytical, and cognitive skills expanded in this class inform the serious musician's performance abilities over a variety of styles and genres. Public performances may serve as a resource for specific instructional goals. Students may be required to attend one or more performances outside the school day to support, extend, and assess learning in the classroom.

Prerequisite: Music Theory 1 or verifiable equivalent

### Theater I 0400310 1 Credit

This course is designed for students with little or no theater experience and promotes enjoyment and appreciation for all aspects of theater. Classwork focuses on the exploration of theater literature, performance, historical and cultural connections, and technical requirements. Improvisation, creative dramatics, and beginning scene work are used to introduce students to acting and character development. Incorporation of other art forms in theater also helps students gain appreciation for other art forms, such as music, dance, and visual art.

Theater II 0400320 1 Credit

This course is designed for students with a year of experience or more and promotes enjoyment and appreciation for all aspects of theater through opportunities to build significantly on existing skills. Classwork focuses on characterization, playwriting, and playwrights' contributions to theater; while improvisation, creative dramatics, and scene work are used to help students challenge and strengthen their acting skills and explore the technical aspect of scene work.

Prerequisite: Theater 1 or verifiable equivalent

Honors Theater III 0400330 1 Credit

This course is designed for students with significant experience in theater and promotes depth of engagement and lifelong appreciation for theater through a broad spectrum of teacher-assigned and self-directed study and performance. Students regularly reflect on aesthetics and issues related to and addressed through theater and create within various aspects of theater in ways that are progressively more innovative. In keeping with the rigor expected in an accelerated setting, students assemble a portfolio that showcases a significant body of work representing personal vision and artistic growth over time; mastery of theater skills and techniques in one or more areas; and evidence of significant oral and written analytical and problem-solving skills based on their structural, historical, and cultural knowledge.

Prerequisite: Theater I, II or verifiable equivalents

Honors Theater IV 0400340 1 Credit

This course is designed for students with extensive experience in theater and promotes significant depth of engagement and lifelong appreciation for theater through a broad spectrum of primarily self-directed study and performance. In keeping with the rigor expected in an accelerated setting, students assemble a portfolio that showcases a significant body of work representing personal vision and artistic growth over time; mastery of theater skills and techniques in one or more areas; and evidence of sophisticated oral and written analytical and problem-solving skills based on their structural, historical, and cultural knowledge.

Prerequisite: Theater I, II, III or verifiable equivalents

### **Science**

### Scope and Sequence

9	10	11	12
Physical Science	Biology	Chemistry	Science Elective
9	10	11	12
Biology/Honors Bio	Chemistry/Honors Chem	Advanced Science Elective	Advanced Science Elective

We determine placement in science courses for incoming ninth graders based on a review of middle school courses and grades and standardized test scores.

Physical Science 2003310 1 Credit

Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the high school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (National Research Council, 2006, p. 77; NSTA, 2007).

Biology 2000310 1 Credit

In this one-year laboratory course the students will learn about some of the types of life that make up the world in which they live and, as a result, will gain some idea of man's place among living things. Basic concepts of plant and animal life, along with the fundamentals of structure, function, ecological relationships, genetics, and evolution, are all topics that will be presented.

Honors Biology 2000320 1 Credit

In this one-year laboratory course the students will learn about some of the types of life that make up the world in which they live and, as a result, will gain some idea of man's place among living things. Basic concepts of plant and animal life, along with the fundamentals of structure, function, ecological relationships, genetics, and evolution, are all topics that will be presented.

**Prerequisites**: Incoming 9th grade students must score in the 70th percentile or above on the standardized testing or entrance exam in science and an A average in their previous school year science course.

AP Biology 2000340 1 Credit

This college level course includes biological chemistry, cytology, cell energy, molecules and genetics, heredity, evolution, principles of taxonomy, a survey of the kingdoms, basic plant physiology, and ecology. There will be substantial emphasis on laboratory and library research work. At the conclusion of the course, all students must take the national AP Biology Exam and may earn college credit.

**Prerequisites:** Honors Biology, Honors Chemistry, a 3.5+ GPA in content area and teacher or counselor recommendation

Chemistry 2003340 1 Credit

This course is an introduction to the basic principles of chemistry. Among the topics covered are measurement, phases of matter, gas laws, kinetic theory, atomic structure, bonding, the periodic table, formulas, equations, mole concept, solutions, kinetic equilibrium, and acid-base theory.

Prerequisite: Biology

### Honors Chemistry 2003350 1 Credit

This course is a rigorous introduction to the basic principles of chemistry. Among the topics covered are measurement, phases of matter, gas laws, kinetic theory, energy, nuclear chemistry, atomic structure, bonding, the periodic table, formulas, equations, mole concept, solutions, equilibrium, acid-base theory, Redox Chemistry, and an introduction to organic chemistry.

**Prerequisites:** B or above in Honors Biology or an "A" in Biology each semester, and teacher or counselor recommendation

# AP Chemistry 2003370 1 Credit

This course is part of the nationally recognized AP Program. As such, it is an accelerated second year Chemistry that includes a comprehensive review and extension of the principles of inorganic chemistry. Emphasis is placed on laboratory and research skills. Students will be expected to take the AP chemistry exam at the end of the course.

Prerequisites: Honors Chemistry, 3.5+ GPA in content area, and teacher or counselor recommendation

### Environmental Science 2001340 1 Credit

The course provides students opportunities to develop knowledge of biology and physical sciences and enables students to associate this knowledge with real-life applications. The content will include but is not limited to the following topics: earth dynamics organism interactions, ecosystems/community, population principles energy/food webs, biodiversity, biotic/abiotic factors, human population issues food/nutrition, environmental quality issues as they relate to land, water, and air, environmental planning and waste management, environmental monitoring and policy human effects on land, water, and air.

Prerequisite: Biology

### AP Environmental Science

2001380

1 Credit

The AP Environmental Science course is the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

Prerequisites: Chemistry, 3.5+ GPA in content area, and teacher, or counselor recommendation

Forensic Science 2002480 1 Credit

Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the high school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (National Research Council, 2006, p.77; NSTA, 2007).

Honors Physics 2003390 1 Credit

While the content focus of this course is consistent with the Physics I course, students will explore these concepts in greater depth. In general, the academic pace and rigor will be greatly increased for honors level course work. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. Laboratory investigations in the high school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data.

**Prerequisites:** Honors Biology, Honors Algebra II, Honors Chemistry, and teacher or counselor recommendation.

AP Physics 2003421 1 Credit

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits."

Prerequisites: Honors Physics, 3.5+ GPA in content area, teacher, or counselor recommendation

# Honors Anatomy and Physiology

2000360

1 Credit

In this one-year laboratory course the students will learn about the structures and functions of the various parts of the human body systems. By discussing the cellular, tissue, and homeostatic components of each, students will discover how the various systems work together to keep humans alive. Systems to be covered will include the skeletal, muscular, digestive, nervous, reproductive, endocrine, circulatory, respiratory, and immune systems. Dissections and other lab activities will be used to increase understanding.

Prerequisite: Biology

Honors Genetics 2001320 1 Credit

This course discusses the principles of genetics with application to the study of biological function at the level of molecules, cells, and multicellular organisms, including humans. The topics include structure and function of genes, chromosomes and genomes, biological variation resulting from recombination, mutation, and selection, population genetics, use of genetic methods to analyze protein function, gene regulation, and inherited disease.

Prerequisite: Honors biology or biology with teacher recommendation.

### Honors Earth and Space Science

2001310

1 Credit

While the content focus of this course is consistent with the Earth/Space Science course, students will explore these concepts in greater depth. In general, the academic pace and rigor will be greatly increased for honors level course work. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the high school level, all students should be in the science lab or field, collecting data every week. School laboratory investigations (labs) are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the high school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (National Research Council, 2006, p.77; NSTA, 2007).

### **Social Studies**

### Scope and Sequence

9	10	11	12
9 World History Honors World History	AP World History Economics PF Economics PF H Florida Hist Psychology Sociology	US History Honors US History AP US History Florida History Psychology Sociology Comp Law	Economics (Sem)  Honors Economics (Sem)  US Government (Sem)  Honors Government (Sem)  AP US Gov  Florida History  Psychology
			Sociology

We determine placement in social studies courses for incoming ninth graders based on a review of elementary/middle school courses and grades, and standardized test scores.

World History 2109310 1 Credit

The course provides students with interdisciplinary knowledge, skills, and attitudes necessary to meet their responsibilities as citizens of their community, state, and nation in an increasingly interdependent and complex global society. The course will focus on the social, political, economic, cultural, and religious themes that shaped the history of Asia, Africa, Europe, Latin America, and the Middle East from the Medieval Era to the 21st Century.

### Honors World History 2109320 1 Credit

The course provides students with interdisciplinary knowledge, skills, and attitudes necessary to meet their responsibilities as citizens of their community, state, and nation in an increasingly interdependent and complex global society. The course will focus on the social, political, economic, cultural, and religious themes that shaped the history of Asia, Africa, Europe, Latin America, and the Middle East from the Medieval Era to the 21st Century. To earn honors credit, students will complete supplementary coursework designed to develop essential Advanced Placement and collegial skills including the ability to analyze primary documents, examine historiography, and synthesize content.

Prerequisite: Counselor recommendation

# AP World History 2109420 1 Credit

The course studies the history of the world from prehistory to the present day. Students will develop the ability to craft historical arguments from historical evidence, demonstrate chronological reasoning, evaluate comparisons and contextualization, consider historical interpretations, and synthesize content. The course will include primary source material, college-level textbooks, and outside readings. Students will be required to participate in discussion and become involved in both group and individual projects. Essay development and writing skills will also be stressed. Students taking this course will take the Advanced Placement World History Exam and may earn college credit.

**Prerequisite:** 3.5 GPA in Social Studies content area, placement exam, standardized test scores: PSAT, AP Potential, ACT

# United States History 2100310 1 Credit

The course consists of the following content area strands: United States History, Geography, and Humanities. The primary content emphasis for this course pertains to the study of United States history from Reconstruction to the present day. Students will be exposed to the historical, geographic, political, economic, and sociological events which influenced the development of the United States and the resulting impact on world history. So that students can clearly see the relationship between cause and effect in historical events, students will have the opportunity to review those fundamental ideas and events which occurred before the end of Reconstruction.

### Honors United States History 2100320 1 Credit

The course offers learning opportunities for students to develop the critical skills of analysis, synthesis, and evaluation in a more rigorous and reflective academic setting. Students are empowered to perform at higher levels as they engage in the following: analyzing historical documents and supplementary readings, working in the context of thematically categorized information, becoming proficient in note taking, participating in seminars/discussions, contrasting opposing viewpoints, solving problems.

Prerequisite: 3.0 in content area

### AP United States History 2100330 1 Credit

The course allows students to gain college credit for the equivalent of a two-semester U.S. History introductory course by stressing the development of historical analysis skills while covering a period from 1491 to the present. This time is broken into 9 segments and studies significant individuals, events, and historical change using primary and secondary sources, utilizing, chronological reasoning, argumentation, and historical comparison.

Prerequisites: Teacher or counselor recommendation, 3.5 GPA in Social Studies content area

### United States Government 2106310 0.5 Credits

The course provides the student an understanding of the American political system through which our government operates. The student is exposed to those historical events that have shaped American democracy in the development of the three branches of government on national, state, and local levels.

### **Honors United States Government**

2106320

0.5 Credits

The course provides the student an understanding of the American political system through which our government operates. The student is exposed to those historical events that have shaped American democracy in the development of the three branches of government on national, state, and local levels. The honors course will offer scaffolded learning opportunities for students to develop the critical skills of analysis, synthesis, and evaluation in a more rigorous and reflective academic setting. Students are empowered to perform at higher levels as they engage in the following: analyzing historical documents and supplementary readings, working in the context of thematically categorized information, becoming proficient in notetaking, participating in Socratic seminars/discussions, emphasizing free-response and document-based writing, contrasting opposing viewpoints, and solving problems.

Prerequisites: 3.0 GPA in content area, teacher, or counselor recommendation

### **AP United States Government**

2106420

0.5 Credits

This course will give students a critical perspective on politics and government in the United States. The course involves the study of the general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American landscape. The student will take the AP American Government Exam and may earn college credit.

Prerequisites: 3.5 GPA in Social Studies content area, teacher or counselor recommendation

### **Economics with Personal Finance**

2106420

0.5 Credits

In Economics and Personal Finance, instructional time will emphasize eight areas: developing fundamental concepts of economics; using microeconomic concepts to describe how individual consumers, businesses, and government make decisions in a market economy; using macroeconomic concepts to understand the key indicators that measure the economy and how fiscal and monetary policy can be used to influence the economy and reduce the swings of the business cycle; exploring international trade, analyzing the gains countries could receive through trade and understanding the stages of economic development; exploring personal financial decisions, including understanding cognitive biases' impact on decision-making, and developing personal or family budgets to weigh the costs and benefits of purchasing goods and services; understanding how wages and salaries are earned, the types of taxes owed, evaluating post-secondary paths, career options, and planning for future through investment accounts and retirement plans; analyzing the benefits of saving now by earning interest, comparing various savings accounts and services offered by financial institutions, determining the advantages and disadvantages of credit accounts and loans, and comparing investment choices by analyzing rates of return, risk, diversification, and associated fees; recognizing and mitigating risks that can result in lost income, health, or identity through insurance and other risk management strategies.

### **Honors Economics with Personal Finance**

2102305

0.5 Credits

In Economics and Personal Finance, instructional time will emphasize eight areas: developing fundamental concepts of economics; using microeconomic concepts to describe how individual consumers, businesses, and government make decisions in a market economy and understand the benefits of using the market to distribute goods; using macroeconomic concepts to understand the key indicators that measure the economy and how fiscal and monetary policy can be used to influence the economy and reduce the swings of the business cycle; exploring international trade, analyzing the gains countries could receive through trade and understanding the stages of economic development; exploring personal financial decisions, including understanding cognitive biases' impact on decisionmaking, and developing personal or family budgets to weigh the costs and benefits of purchasing goods and services; understanding how wages and salaries are earned, the types of taxes owed, evaluating post-secondary paths, career options, and planning for future through investment accounts and retirement plans; analyzing the benefits of saving now by earning interest, comparing various savings accounts and services offered by financial institutions, determining the advantages and disadvantages of credit accounts and loans, and comparing investment choices by analyzing rates of return, risk, diversification, and associated fees; recognizing and mitigating risks that can result in lost income, health, or identity through insurance and other risk management strategies.

**Prerequisites:** 3.0 GPA in content area, teacher, and counselor recommendation

Psychology 2107300 0.5 Credits

The course provides students with the opportunity to acquire an understanding of human behavior, behavioral interaction, and the progressive development of individuals. Theories and methods of study employed by psychologists regarding human growth and development, self-concept development, motivation and desire, intelligence, conditioning and learning, memory, personality and behavior, emotion and frustration, abnormal behavior, alienation, stress, and mental health will be covered.

Sociology 2108300 0.5 Credits

Through the study of sociology, students develop an understanding of group behavior and the impact of policies on individuals in a society. Discussions focus on the values/beliefs and customs of various cultures both locally and globally. Other topics include issues in education, healthcare, government, and families and how ideals have evolved over time as well as how technology and current events impact us today.

# **Honors Comprehensive Law**

2106375

1 Credit

The grade 9-12 Comprehensive Law course consists of the following content area strands: American History, World History, Geography, Humanities, Civics and Government. The primary content for the course pertains to the study of the components and processes associated with the American legal system and the comprehensive examination of the civil and criminal justice systems. Content should include, but is not limited to, the historical antecedents and purpose for laws, the impact of social values on the establishment and interpretation of laws, causes and consequences of crime, evaluation of the adult and juvenile justice systems, significance of the Bill of Rights to the American legal system and elements of constitutionalism, civil and criminal law, family and consumer law, rights and responsibilities under the law, and the adversarial versus inquisitorial systems of justice. This course will incorporate the development of a written appellate brief addressing a contemporary legal question and the presentation of oral arguments to defend their position legally.

Prerequisite: Honors English

Florida History 2100350 0.5 Credits

The grade 9-12 Florida History course consists of the following content area strands: World History, American History, Geography, Humanities, Civics and Government. The primary content emphasis for this course pertains to the study of the chronological development of the state of Florida by examining the political, economic, social, military, and cultural events that affected the state. Students will be exposed to the historical, geographic, political, economic, and sociological events which influenced the progression of Florida including, but not limited to, the evolution of Florida's diverse heritage through Spanish, French, British and American occupations, Florida's Native American population, United States annexation and territorial experience, statehood and an analysis of Florida's first constitution, Florida's system of slavery, Florida under the Confederacy and Reconstruction, Florida's role as a part of the new South, technological and urban transformations of the state, the evolution of Florida lifestyles and ideals over the centuries, the historic evolution of the Florida economy, Florida's diverse geographic regions and population groups, state government, modern day Florida's successes and challenges, and the projection of Florida's future development.

# **Theology**

#### Scope and Sequence

9	10	11	12
Intro to Christology	New Testament	Sacramental Life	Social Justice
	Church History	Catholic Morality	World Religions
Old Testament			Philosophy Hon (yearlong)

#### **Introduction to Christology**

2104320

0.5 Credits

The course introduces students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be.

#### Old Testament 0900300 0.5 Credits

The course gives students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible, they will come to encounter the living Word of God, Jesus Christ. In this course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. Students will learn how to read the Bible and will become familiar with the major sections of the Old Testament and the books included in each section.

New Testament 1005340 0.5 Credits

The course helps students understand all that God has done for us through his Son, Jesus Christ as portrayed in the New Testament. Through this course of study, students will learn that for all eternity, God has planned for us to share eternal happiness with him, which is accomplished through the redemption Christ won for us. Students will learn that they share in this redemption only in and through Jesus Christ. Through their study of the New Testament, students will also be introduced to what it means to be a disciple of Christ.

Church History 0900300 0.5 Credits

The course helps students understand that in and through the Church they encounter the living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will come to know that the Church is the Body of Christ today and, as such, has both divine and human elements. In this course, students will learn about the Church's 2000 years of history and about how the Church is led and governed by the successors of the Apostles.

#### Sacramental Life 2105340 0.5 Credits

The course allows students to explore the Seven Sacraments of the Catholic Church. Students will see how each of the Sacraments, instituted by Christ, continue his ministry in the life of the Church. Students will discover how these are much more than liturgical rituals.

Catholic Morality 2105350 0.5 Credits

The course explores how the moral teaching of the Catholic Church is based on the natural law and the divine law. Students will learn how the Church's moral concepts and precepts allow Christ's disciples to truly live free from the bondage of sin.

Social Justice 2105350 0.5 Credits

The course allows the students to consider the Catholic Church's social teaching and how it strives to live out Christ's concern for others, especially the most vulnerable members of society. Students will have the opportunity to see how Catholic Social Teaching responds to contemporary issues.

#### World Religions: Ecumenical and Interreligious Issues 2105310 0.5 Credits

The course helps students understand the way the Catholic Church relates to non-Catholic Christians as well as to other religions of the world. It is also intended to help them to recognize the ways in which other systems of belief and practice differ from the Catholic faith.

#### Honors History of Philosophy 2120910 1 Credit

This introductory course covers the historical trajectory of thought from the early Greek philosophers to modern philosophy. Students will become familiar with major thinkers and philosophical positions in the western philosophical tradition. This course will concentrate on epistemology (theory of knowledge), ontology (study of being), ethics, and philosophy of God. We require students to read and interact with textbooks and primary sources.

Prerequisite: Recommendation from current Theology and English teacher; 12th grade only

# Freedom and Virtue THE 312 1 Credit

(Barry University Dual-Enrollment)

The course is an examination of the meaning of human freedom, nature, and search for virtue as a means and goal of human behavior and because of our actions. Accountability as part of free human action will be considered in the context of decisions of conscience.

Prerequisite: 3.0 unweighted GPA; 440 Reading/Math SAT score and/or 19 Reading/Math ACT score

# Christian Understanding of God THE 333 1 Credit (Barry University Dual-Enrollment)

The course is an examination of the Christian doctrine of the trinity and its implications for the human understanding of the world, history, the self, and the Church. After an introduction to the biblical and patristic origins of the doctrine, students will examine a contemporary statement of it in conversation with modern cultural, philosophical, and political sensibilities.

Prerequisite: 3.0 unweighted GPA; 440 Reading/Math SAT score and/or 19 Reading/Math ACT score

# For Barry University Courses an MCC student must:

- Be enrolled in a course of study which will fulfill requirements for high school graduation.
- Have a 3.0 unweighted high school GPA.
- Standardized college placement tests indicating college readiness. Satisfy any course prerequisites; and,
- Meet any additional criteria set by Barry as a postsecondary institution.

To continue in the program, students must maintain a cumulative 3.0 unweighted GPA in their high school academic work and earn a 3.0 or better cumulative GPA in college-level work, as confirmed by the school.

To ensure student readiness for post-secondary instruction, all students in grades eleven (11) through 12 must meet high school GPA and present standardized college placement tests indicating college readiness to be able to participate in dual enrollment at Barry. Barry may establish additional, initial student eligibility requirements to ensure student readiness; students, however, who have demonstrated the ability to master advanced courses can participate in dual enrollment courses

# **World Language**

#### Scope and Sequence

9	10	11	12
Spanish I	Spanish II	Honors Spanish III	Honors Spanish IV AP Spanish
9	10	11	12
Spanish II	Honors Spanish III	Honors Spanish IV	Spanish 5 AP Spanish

We determine placement in world language courses for incoming ninth graders based on a review of middle school courses and grades, a placement test, and teacher recommendations.

FLVS courses may incur a fee.

Spanish 0708340 1 Credit

The course introduces the student to basic Spanish. The student will develop introductory listening and speaking skills through conversational activities supplemented by a comprehensive communicative approach using interactive activities. Global awareness is developed by the study of the culture of Spanish speaking countries.

# Spanish II 0708350 1 Credit

The course reinforces the fundamental skills acquired by the student in the first year. The student will develop more advanced speaking, listening, reading, and writing skills. By the end of the year the student will have mastered the important patterns and grammar of the language. The culture of Spanish speaking countries is studied.

Prerequisite: Spanish I or appropriate high score on Spanish I placement test

# Honors Spanish II

0708810

1 Credit

The course reinforces the fundamental skills acquired by the student in the first year. The student will develop more advanced speaking, listening, reading, and writing skills. By the end of the year the student will have mastered the important patterns and grammar of the language. The culture of Spanish speaking countries is studied.

Prerequisite: Completion of Spanish I or recommendations or appropriate score on placement test

#### **Honors Spanish III**

0708360

1 Credit

The course will include expansion of authentic vocabulary and grammatical skills. Speaking, writing, and listening skills are emphasized through interactive activities based on thematic selections. Compositions, comprehensible language immersion, and authentic literature are used in preparation for the advanced placement class as the primary objective. This course is taught mostly in Spanish.

**Prerequisites:** 3.0 weighted GPA in Honors Spanish II or in Spanish II, and teacher or counselor recommendation

# **Honors Spanish IV**

0708370

1 Credit

The course will include advanced language structures and idiomatic expressions to improve conversational skills. A literature-based curriculum and advanced grammar studies coupled with extensive conversational activities are used to attain mastery. This course is taught in Spanish.

Prerequisites: 3.0 weighted GPA in Honors Spanish III, and teacher or counselor recommendation

#### Honors Spanish V

0708380

1 Credit

The course develops communication skills through the presentation of oral reports on literary and cultural topics, current events, and personal experiences. Modern literature selections and advanced vocabulary and grammatical structures are used to attain mastery. This course is taught in Spanish.

Prerequisite: 3.0 weighted GPA in Honors Spanish IV, and teacher or counselor recommendation

0708400

1 Credit

AP Spanish Language and Culture is equivalent to an intermediate level college course in Spanish. Students cultivate their understanding of Spanish language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges. **Students are required to take the AP exam** 

**Prerequisite:** 3.0 weighted GPA in the content area, successful completion of Spanish 3 or higher and teacher or counselor recommendation

**FLVS World Languages:** French, Latin, American Sign Language, Chinese, Hebrew - check FLVS.net for the most updated list of world languages. (Fees may apply)

# **Advanced Programs**

# MCC/Florida Tech Emerging Scholars Program

To offer a variety of accelerated college level classes to advanced students, Melbourne Central Catholic partners with Florida Tech. Juniors and seniors who participate in Florida Tech classes may earn college credit at no additional tuition cost. Juniors may take one class per semester and seniors two classes per semester.

Program requirements include:

- Admission into Florida Tech
- A minimum overall GPA of 3.8
- A total minimum SAT score of 1100 to include a minimum score of 550 on evidence-based reading/writing and a minimum score of 550 on the math portion or a 24 composite ACT score or a 25 on the ACT math.
- CLT score of 78.

Applications are due during the spring prior to the school year in which students would like to enroll.

Juniors who meet requirements during the 1st semester may apply for admission for 2nd semester classes at Florida Tech.

Because highly qualified Florida Tech faculty members teach these courses, we expect MCC students to do college level work and recognize that the Florida Tech faculty will hold them to college standards for grading. MCC students take the courses during the MCC school day.

Florida Tech will record course grades on an official Florida Tech transcript, and we will record them on an MCC transcript (1.0 weighted designation). If a student withdraws from a Florida Tech course after the initial drop/add period, we will reflect WP/WF on the MCC transcript and potentially incur a charge.

We will not permit students who earn a D or lower at Florida Tech to enroll in the Emerging Scholars Program in future semesters.

# **Advanced Placement Courses**

Melbourne Central Catholic offers a variety of Advanced Placement courses that carry a 1.0 weighted designation. Admission requirements for Advanced Placement courses include:

- A 3.5 or above GPA in the content area
- An attendance record in good standing
- Required standardized test scores (PSAT/ACT/SAT)
- Qualifying score on the entrance test for all Advanced Placement classes (see course descriptions for details)
- Competitive grades in specific prerequisite courses
- Demonstration of initiative, ability to work independently, seriousness of purpose, a desire to learn, and to research beyond the required minimum
- A summer assignment is required for all AP courses.

Additionally, we require students in AP classes to sit for the course AP Exam in May (there is an additional cost for AP tests set by the College Board). For specific test dates, please refer to <a href="https://apstudent.collegeboard.org/home">https://apstudent.collegeboard.org/home</a>. The College Board sends test results to students, MCC, and specified colleges each year in July. It is important to note that these test results do not appear on the MCC transcript. Students may also request to have the scores sent to colleges through the College Board website.

#### **AP Course Offerings**

Computer Science	Science
AP Computer Science Principles	AP Biology
English	AP Chemistry
AP English Language	AP Environmental Science
AP English Literature	AP Physics 1
Fine Arts	Social Studies
AP 2-D Art and Design	AP US History
AP 3-D Art and Design	AP Psychology
AP Drawing	AP World History
Mathematics	AP US Government
AP Calculus AB	World Language
AP Calculus BC	AP Spanish
AP Pre Calculus	

#### **Honors Courses**

Melbourne Central Catholic offers honors courses in English, Mathematics, Science, Social Studies, World Language, and certain elective classes. Honors courses carry an additional .5 weighted designation.

Admission requirements for Honors courses include the following criteria:

- Overall GPA of 3.0. No grade lower than a B in core subject area
- Placement test
- Completion of required prerequisites
- Demonstration of initiative, organizational skills, teacher or counselor recommendation, seriousness of purpose, and to research beyond the required minimum
- Qualifying Standardized Test score
- We evaluate student continuation in Honors Courses each year

We may require students who do not have at least a C average in an Honors course to withdraw from the course.

# Florida Bright Futures Scholarship Program

The Florida Bright Futures Scholarship requires high school students to complete and document community service as a component of their eligibility requirements. MCC College preparatory courses meet the same requirements as those required by the Florida Bright Futures Scholar Program. Please consult the Florida Bright Futures Program website at: <a href="www.floridastudentfinancialaidsg.org">www.floridastudentfinancialaidsg.org</a> for the most up-to-date information.

# **Academic Information**

# **FACTS Family Portal**

MCC's Administrative Software is FACTS Family Portal. Through this digital service, students and parents can monitor classroom grades and lesson plans.

Teachers enter grades (updated weekly) into the gradebook which is duplicated live for parents to view in Family Portal. Projects/research papers/etc. may take longer than a week.

We encourage students and parents to access this information on a regular basis. Families create accounts using a parent email address given to MCC at registration or with the student's MCC email account. To log in, please go to: <a href="https://logins2.renweb.com/logins/ParentsWeb-Login.aspx">https://logins2.renweb.com/logins/ParentsWeb-Login.aspx</a>

# **Grading/Scale**

We distribute report cards through FACTS Family Portal to students/parents each quarter and compute final averages at the end of each semester. Each quarter averages count as 40% of the semester grade with the exam consisting of 20% of the semester grade.

Letter Grade	Score	Performance	
Glade			
A	90-100	Required work is excellent showing accelerated mastery of subject matter	
В	80-89	Required work is well done showing mastery of subject matter	
С	70-79	Required work is average showing some mastery of subject matter	
D	60-69	Required work is below average, shows limited mastery of subject matter	
F	59/below	Required work does not show mastery	
FA		Student failed to meet state mandated attendance requirements	
I	Incomplete	Student failed to meet course requirements due to missing work	

Any student who receives an "I" (Incomplete) on her/his report card is responsible for meeting with the course teacher to arrange to make up for the missing work. This meeting should take place in the last week of the grading quarter. If the student fails to complete the requirements within the arranged time frame, the "I" will be automatically changed to an "F".

Any student who received an "FA" on his/her report card is responsible for meeting with the teacher and Dean of Students to fulfill the attendance/seat time requirements. We will update grades once the student makes up the time. If seat time is not fulfilled, the student will NOT earn credit for those classes.

All questions regarding grades should be directed first to the teacher(s) involved, and then to the school counselor. Final decisions regarding grades or academic program rest with the Administration.

# **Student Mid-Quarter Progress**

Teachers will assess the general performance level for the student. Students receiving an I/D/F must set up a parent/teacher/student conference to develop a successful academic plan. Please contact the teacher or your school counselor for a specific time. Current grade reports are always available through the FACTS Family Portal. We will notify families to check student progress.

#### **Academic Probation**

We place students who do not demonstrate adequate academic progress on Academic Probation and create a plan to assist the student with academic improvement. If any of the following conditions exist, a student will be placed on Academic Probation.

- The student has failed two or more courses during any semester
- The student falls below a 2.0 cumulative GPA

We expect students on Academic Probation to comply with the actions listed on their plan. Failure to comply with the expectations may jeopardize the students' ability to remain at Melbourne Central Catholic High School.

# **Grade Forgiveness**

Students are eligible for grade forgiveness if they have failed a course for the semester. The student's counselor must approve grade forgiveness courses prior to the student enrolling in the course. Once the student earns course credit, we will place the grade on the student's transcript. Both the failing grade and passing grade will appear on the transcript and be calculated into the student's cumulative grade point average.

# **GPA Weighting**

We base Honor Roll on a student's weighted grade point average each quarter and each semester. The quality point values are as follows:

Grade	<u>Regular</u>	<u>Honors</u>	Advanced Placement	FLORIDA TECH/Dual Enrollment
A	4.0	4.5	5.0	5.0
В	3.0	3.5	4.0	4.0
С	2.0	2.5	3.0	3.0
D	1.0	1.5	2.0	2.0
F	0.0	0.0	0.0	0.0

# **Principal's Honor Roll**

Summa Cum Laude: 4.0; no grade lower than a B; or a C for AP courses

Magna Cum Laude: 3.75 - 3.99; no grade lower than C

Cum Laude: 3.5 – 3.74; no grade lower than a C

#### **Class Rank**

MCC does not rank its students, a decision rooted in our Franciscan Charism which encourages care for the individual, not necessarily in comparison to others, and also from a recognition that MCC is a school with a diverse student body and a rigorous, comprehensive curriculum. Therefore, class rank is not an accurate measure of individual achievement and could be misleading in determining a student's ability to complete college work successfully.

# Valedictorian/Salutatorian

We award the honor of Valedictorian and Salutatorian to two seniors who meet the following qualifications:

- Students attend MCC for a minimum of three consecutive years (Military families may appeal)
- Students earn a weighted cumulative GPA in the top twelve for 7.5 semesters
- Students have no grade below a B through 7.5 semesters
- Students with the top twelve grade point averages are eligible for the designation
- Each eligible senior will submit and deliver a speech to a faculty committee who will in turn choose the recipients

# **Academic Support**

The Academic Support Team works collaboratively with the Guidance Department to ensure students are provided with opportunities that support success. Support is provided for all students including those with learning challenges and identified as having exceptional needs. Available support includes elective courses designed to improve learning strategies, math, reading and writing skills. Some examples of academic support include:

- Peers as Partners in Learning students are trained to work with individual students as Academic Peer Coaches or to support students in specific classrooms
- Academic Enrichment Periods (AEPs)
- Summer Enrichment Programs may be offered
- St. Teresa's Academic Support Center a teacher is available every period, including lunch
- Academic Support Plans this plan indicates accommodations, written for students with documented diagnosed disabilities
  - Possible accommodations include extended time for testing, preferential seating, assistance with notetaking and testing in a small group setting
- Student honor societies (National Honor Society, Spanish Honor Society, French Honor Society, and Mu Alpha Theta, and others) offer extra help to students after school

Teachers are available during Academic Enrichment Periods and after school for extra help. School Counselors are also available to assist students in scheduling extra help. Students should schedule an appointment with the teacher or their school counselor.

# Florida Virtual School (FLVS)

While we would prefer all classes be taken at Melbourne Central Catholic, we understand there are rare occasions when it is necessary to take a course through Florida Virtual School (FLVS). Depending on the scholarship, the State has limits to the number of classes that can be taken and in some cases, the family is responsible for the cost of FLVS. MCC does not cover FLVS fees for any student. Read the <u>FLVS Scholarship Student Information</u> to learn more. **The State is continuing to make changes to this program and in some cases is also changing the scholarship your student may receive, which could affect FLVS courses.** If you are notified of any changes to your student's scholarship, please let our finance office know.

#### **Semester Exams**

A student must take semester exams as scheduled. There will not be make-up semester exams. In the event of a documented illness or an emergency, please contact the student's counselor.

#### Senior Exam Exemption Privilege

Seniors can be exempt from first semester exams if they meet the following criteria:

- 90% or above each quarter
- Nine (9) or less absences in the semester (per day and/or per class)
- Five (5) or less behavioral infractions
- Eight (8) or less tardies
- Any senior who receives a suspension or commits a major behavior infraction loses the exemption privilege
- There are no second semester exams for seniors
  - Eight (8) or less tardies in a semester
  - Community Service Requirement:
    - **First semester**: 75 hours of community service (or an average of 25 hours per year for transfer students.
    - **Second semester**: 100 hours of community service (or an average of 25 hours per year for transfer students.

# **Standardized Testing**

Students complete a series of standardized tests during their 9th, 10th, and 11th grade years. All freshman, sophomores, and juniors take a practice standardized test that aligns with either the SAT or the ACT. All juniors will take the official ACT in the spring at MCC. These exams help MCC students gain experience and practice for standardized tests that college bound students take during their junior and senior years for college admissions. Students who have documented learning educational plans on file may be eligible for testing accommodations. Please contact the Student Services Office for more information.

#### **CEEB Code: 101018**

# **Testing Timeline**

Freshman	Sophomore	Junior	Senior
PSAT/NMSQT	PSAT/NMSQT	PSAT/NMSQT	SAT/ACT (off- site/on your own)
	Pre-ACT	ACT	
		SAT (off-site/on your own)	

PSAT/NMSQT: We administer the PSAT/NMSQT (National Merit Scholarship Qualifying Test) to all 9th, 10th and 11th grade students each year in October. MCC registers and administers the test to students free of charge. These tests provide early feedback and continuous monitoring for college and career readiness preparation. The College Board uses 11th grade scores on the PSAT/NMSQT to qualify students for the National Merit Scholarship Program.

**Pre-ACT:** We administer the Pre-ACT Test to all 10th grade students in the Spring. MCC registers and administers the test to students free of charge. These tests provide early feedback and continuous monitoring for college and career readiness preparation.

ACT – We administer the ACT to all 11<sup>th</sup> grade students each year in the Spring. We recommend 11<sup>th</sup> grade students complete an additional ACT test prior to the start of their senior year. Students are responsible for registering for these additional tests independently. To register for the ACT, visit <a href="http://www.act.org/">http://www.act.org/</a>.

**SAT:** Students can schedule an SAT exam <a href="https://www.collegeboard.org">https://www.collegeboard.org</a> These are off-site and on your own.

**SAT II** - Some competitive colleges and universities require individual SAT II subject tests as part of their admissions requirements. Students should research the admissions requirements on individual college and university websites. Students typically take these tests during their junior or senior year. You can find more information at <a href="http://sat.collegeboard.org/practice/sat-subject-test-preparation">http://sat.collegeboard.org/practice/sat-subject-test-preparation</a>.

# **Community Service**

As a transformative institution rooted in the Franciscan tradition, MCC requires all students to perform community service. Community service helps MCC students develop social consciousness and make a commitment to a life of justice and peace. Additionally, community service hours completed during one's time at MCC may qualify your student for the Florida Bright Futures Scholarship as well as other awards. MCC's community service guidelines are as follows:

- We require students to complete a minimum of twenty-five (25) community service hours yearly.
- Students are to submit their service hours in FACTS.
  - They should select "web forms", "community service hours", and fill in the information that is asked for.
- Community service forms must include accurate dates of service, hours completed, and contact information of supervisor for verification.
- Please give a short description of the community service performed.
- Hours will be verified during school hours within 48 hours of submission.
- Please do not submit additional service hours until the previous hours submitted have been verified.
- Parents and students may check hours that have been verified in FACTS by selecting "Family," and choosing the appropriate student's name in the dropdown menu.
- Students who do not meet the Community Service requirement may jeopardize their opportunity to graduate from MCC.

#### **Co-Curricular Eligibility**

MCC is a member of the Florida High School Athletic Association therefore to participate in any FHSAA sponsored athletic activity, "a student must have a cumulative high school grade point average of 2.0 or above on a 4.0 unweighted scale or its equivalent, in all required courses that are required...." (FHSAA Handbook). If a student fails to meet these requirements, he/she will remain ineligible until their cumulative GPA rises above 2.0.

Participation in all other co-curricular programs also depends upon the same classroom performance. In addition, MCC requires that all student athletes pass core graduation requirements each quarter. We may suspend any student receiving an "F" in a core graduation subject from participation in games and from traveling with the team until the student achieves a passing grade.

We determine eligibility for fall activities by second semester grades from the preceding school year and determine eligibility for transfer students by the GPA of the marking period preceding their enrollment at MCC as well as the number of credits earned by the transferring student.

# **Transcripts**

Students need to have a transcript request form signed by a parent/guardian on file for us to send transcripts to colleges. Families should request transcripts through Naviance, Common Application, SendEDU or Coalition Application.