McQUAID JESUIT

COURSE DESCRIPTION BOOKLET

2019 – 2020

TABLE OF CONTENTS

2019-2020 COURSE SELECTION PROCESS

Here is an outline of the steps you need to complete in choosing your courses for next year.

1. Read the policies described on the next page to understand requirements.

2. Review the course descriptions in this booklet.

3. If necessary, there will be an assembly and a course selection fair at which you will receive additional information about the selection process and the course forms.

4. Discuss options with your parents and subject teachers.

5. Bring your course recommendation sheets you receive in homeroom to your teachers for their signatures. Then meet with your counselor to with these recommendations to fill out an official selection form.

6. Sign and date the form yourself, and leave it with your counselor.

7. Final date for concluding the process will be March 31 for all years.

8. Verification sheets will be printed and distributed in mid-April for parental and teacher approval. You will have the opportunity to appeal departmental decisions if you were denied entry into a course, or switch electives during the month of May. Any student doing so must obtain a "Course Change Request Form" from the Assistant Principal for Academics. Any such changes will require approval and signatures from parents, counselors, department chairpersons, and or teachers of specific courses depending on the courses involved.

DEPARTMENT CHAIRPERSONS

Theology----------	Mr. Andrew Hoelperl
Computer Science----------	Mr. Scott Simkins
English----------	Mr. Daniel Gorton
Fine Arts----------	Mr. Kevin Karnisky
Foreign Language----------	Ms. Erin-Kathleen McMahon
Mathematics----------	Mrs. Tracey O'Brien
Physical Education----------	Mr. Matthew Thomas
Science----------	Mr. William Hochadel
Social Studies----------	Mr. James Purtell

POLICIES ON ACADEMICS

Normally, students must take a full schedule of courses each year and must pass all courses, required and elective, to be eligible for promotion or graduation. Students enrolled in three or more Advanced Placement courses may forgo a full elective credit and substitute an open period in their schedules. At the school's discretion, some students may be enrolled in a resource/study skills period in place of their elective credit.

The limit on Advanced Placement course enrollment for any student is three. Any student wishing to enroll in four or more AP courses must obtain permission from their parent or guardian, their counselor, and the Assistant Principal for Academics. The counselor and assistant principal will employ a holistic approach to any such approval, considering factors that include past academic performance, scores on previous standardized/AP testing, and level of extra-curricular involvement.

Each student's program of studies must meet the requirements of New York State and McQuaid Jesuit. The following sequences are necessary: 4 units of English, 3 units of the same Foreign Language, 3 units of Laboratory Science, 3 units of Mathematics, 1 unit of Fine Arts (Art, Band, Chorus, Drama or Music), 4 units of Social Studies and ½ unit of Health.

Certain courses have prerequisites (usually a minimum grade in that subject and approval of the department). Advanced Placement courses may have additional conditions.

Some course requests may not be able to be honored due to over-subscription, course cancellation or course conflicts.

Once a program of course requests is approved by you, your parents and your counselor and is ready for scheduling, courses may not be dropped or added without obtaining, completing, and submitting a "Course Request Change Form." The deadline for completing this form is June 1st. Course changes requested after that may be made by appointment with Mr. Cavacos only, starting in late August. During the configuration of the master schedule (June 2nd-August 20th) no requests for course changes are permitted. **Finally, no course changes are permitted after the first full cycle of classes in September (with the exception of half-credit courses 2nd semester – students have a full cycle to make changes after January exams).**

Please note that requests for specific teachers cannot be honored.

In order to graduate or to be promoted to the next grade level, a student must successfully complete all his courses by earning a passing grade for each course within the designated time limits. Since McQuaid Jesuit does not allow a student to repeat any course in the next academic year, remediation of a failure must be made prior to the start of the next fall semester. McQuaid also does not allow a student to repeat an entire year at McQuaid.

THEOLOGY DEPARTMENT

The Theology program at McQuaid Jesuit is a thorough academic program that is an integral part of the goals and objectives of a Jesuit education. It is designed to educate and to form students of all religious backgrounds whose parents wish their sons to be a part of the Jesuit tradition of excellence. It is an essential part of McQuaid Jesuit's formation for all students.

The academic nature of this program distinguishes it from other types of religious formation that take place both in our school and in the individual student's faith community. Those activities are catechetical in nature, i.e., they help to initiate and incorporate a student into a particular faith community. These catechetical experiences complement the academic program at McQuaid Jesuit in a young man's religious formation as a Man for Others.

MIDDLE SCHOOL:

Theology 7:
Faith & Covenant: Themes in the Hebrew Bible and the Gospel of Luke:

This course is devoted to the study of the rich store of writings contained in the Hebrew Bible (Old Testament). Our chief aim is to develop an appreciation of the Hebrew Bible as a sacred text both for Jews and Christians. In doing so, we will explore historical, geographical, literary, and theological aspects of the Bible. Students will come to appreciate the faith experiences of the biblical people. They will also learn of ways in which the message of the Bible can be relevant to their own life situation and use that knowledge to enhance their own personal faith. The focus of the first half of the course is on the sequence from Genesis and Exodus through Joshua and Judges. Experiencing the profound and engaging narratives contained in that literature, students will learn about the foundation of God's people from their conquest of Canaan to their eventual defeat and exile in Babylon. Particular emphasis will be given to biblical law and the implications it has for young men who wish to deepen their Christian faith. During the second half of the course students will have an opportunity to engage with the poetic and wisdom books. Topics such as the suffering of innocents as well as some of the ethical questions which faith can help us to confront successfully will be covered at an age-appropriate level. From the perspective of a general survey, then, this course seeks to introduce all students to the major spiritual truths found in the Old Testament and to the variety of ways in which the truths of scripture are relevant to the lives and experiences of young men in the twenty-first century. (1 credit)

Intended for: students in grade 7
Prerequisite: none

Theology 8: Jesus Christ & the Church:

The goal of this course is for students to come to better know and learn from Jesus Christ. Through a yearlong study deepening their understanding of Jesus and his teachings students will progress on their journey to become more intellectually competent, open to growth, religious, loving, and committed to justice. Students will study and reflect on the New Testament and the gospels in particular. Theological reflection, prayer, and social analysis, and Church teaching will also be a central part of this course. (1 credit)

Intended for: students in grade 8
Prerequisite: Theology 7

FRESHMAN YEAR:

Theology 1: Jesus Christ: Biblical Theology and Christology:

The first semester aims to provide students with a general knowledge and appreciation of the Bible. Through their study of the Bible they will come to encounter Jesus Christ. In the course they will learn about the Bible, how it is inspired, how it is interpreted, and its value to people throughout the world. The students will pay particular attention to the Gospels and biblical criticism.

The second semester introduces students to the Mystery of Jesus Christ, the Living Word of God, the second Person of the Trinity and the Christological debates that led to this deepening understanding. 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. (1 credit)
Intended for: students in grade 9
Prerequisites: none

SOPHOMORE YEAR:

Theology 2: The Mission: Soteriology and Ecclesiology:

The purpose of the first semester of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn about the human condition and Catholic views of human destiny and how Christ's sacrifice is the redemptive act that offers us salvation. Students will learn that they share in this Redemption in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails.

The second semester of the course turns to the nature of the Church. They will be introduced to the story of the founding of the Church and how it is sustained through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both Divine and human elements. In this course, students will learn not so much about events in the life of the Church but about how the Church has viewed itself. (1 credit)
Intended for: students in grade 10
Prerequisite: Theology 1

JUNIOR YEAR:

Theology 3: Life in Christ: Sacraments, Morality, and Social Justice:

Building upon the foundation set by the first four semesters, this course invites students to explore and reflect upon their experience of Jesus Christ. The first semester focuses on the ritual elements of the Roman Catholic Church and looks closely at the sacraments as privileged encounters with God.

Once we experience such privileged encounters we are challenged to live in a particular way: the life of a Christian. The second semester focuses on the moral life, and how the Church invites Christians, indeed all humans, to act both as individuals and as a corporate member of society.

Religious Studies 3 encourages the student to perform critical analysis and incorporate personal reflection to become a man for others in the twenty-first century. (1 credit)
Intended for: students in grade 11
Prerequisite: Theology 2

SENIOR YEAR ELECTIVES

All seniors will take *Senior Theology: Companions of Jesus* during first semester. During the course selection process, students will be asked to choose their preferred elective courses of the four available for second semester. Both *Senior Theology* and the elective are half-credit courses.

Senior Theology: Companions of Jesus

This course provides a theological and experiential foundation in Ignatian Prayer, consolidated in the *Spiritual Exercises* of St. Ignatius. Emphasis is placed on how the *Exercises* facilitate human development and spiritual maturation in the life of the McQuaid Senior. Since this is best observed through case study, careful analysis of the psychological and spiritual development of St. Ignatius of Loyola will provide a template to understand how the *Exercises* contribute to forming the McQuaid Senior as a Grad at Grad. Coursework integrates theory and praxis of the *Spiritual Exercises* giving students the opportunity to articulate and appreciate his own sacred story in preparation to transition into collegiate life and beyond. (1/2 Credit)
Intended for: students in grade 12
Prerequisite: none

Applied Philosophy and Ethics

We will explore eternal questions philosophers have pondered through the ages: For what purpose was I made? What is reality? What is truth? What is the connection between the Mind and the Body? Does God exist? Do we have Free Will? What is the good life? What is friendship? In the process of attempting to answer these questions, we will familiarize ourselves with Socrates, Plato, Aristotle, Aquinas--among others--and delve into the application of philosophy to various dimensions of life and decision-making. (1/2 credit)
Intended for: students in grade 12
Prerequisite: none

Christian Faiths and World Religions

This course is designed to invite students to learn about other Christian faiths as well as non-Christian religions in greater depth. Drawing upon texts and core writings from various foundational documents we will use appropriate critical techniques and analytical skills in order to compare these various religions to our own personal religious experiences. It is our hope that such an educational experience will invite us into greater understanding and relationship with others so that we can better become men for and with others. (1/2 credit)
Intended for: students in grade 12
Prerequisite: none

Social Justice and Contemporary Issues

As Jesus Christ called his first followers and friends to discipleship, he calls us to the same work in the twenty-first century. We need to continue Christ's mission to the world, especially to the poor and marginalized. This course is intended to be an in-depth study of the Church's Catholic Social Teaching. Drawing from both sacred scripture and sacred tradition we will be looking at contemporary issues such as poverty, sexism, and racism. How are we as Christians called to respond to uphold justice and bring forth the Kingdom of God on Earth as it is in Heaven?
Intended for: students in grade 12
Prerequisite: none

Theology of the Body
We humans are social creatures. We yearn to be in relationship with others in a variety of ways. But our society understands the nature and purpose of human relationships differently than God and the Church. With dysfunction, disappointment, and discontent being so prevalent in so many relationships, we need to find genuine truth in order to find lasting happiness. Using this as our premise, we will investigate what the nature of the true meaning of human love is, and how we can return to that vision in light of John Paul II's *Theology of the Body*.
Intended for: students in grade 12
Prerequisite: none

COMPUTER SCIENCE DEPARTMENT

General Philosophy:
All of the department's offerings are elective courses. With few exceptions, learners may enroll in any course without the need to take prerequisite classes. In some sense, the material covered in many classes is complementary. For example, digital images are often found on web pages so it may make sense to enroll in classes covering these topics sometime during your studies at McQuaid Jesuit. The point is that the department offers students greater flexibility to learn the things that they want. Within this freedom lies a danger that you will bypass the need to excel at the simple things like word processing, spreadsheets and making presentations. In our opinion, all high school graduates should know how to do these things well.

The department offers versatility in its courses. Students can explore the disciplines of computer science through its programming classes including the emerging discipline of game programming. They can also explore complimentary courses in web authoring and digital arts. Finally, students can refresh or master the important basics of calculating and graphing using spreadsheets, designing and using databases or simply word process. Many fascinating areas in the world of computing are made available by our department for your discovery.

Since the beginning of the 2015-2016 school year, McQuaid Jesuit has offered an engineering opportunity through Project Lead the Way. The following PLTW pre-engineering courses are listed in this department: **Introduction to Engineering Design,** and **Computer Science Principles**. Students enrolled in these courses may earn college credit at the Rochester Institute of Technology (RIT) through a PLTW end-of-course assessment or AP exam respectively. A full description of PLTW can be found in the Special Programs section on page 30.

Students are expected to purchase textbooks for some computer science department courses.

Animations:
This course teaches students how make stand-alone and Web animations using Adobe Flash. Students will create animations, navigation buttons, and menus. During this course, students will progress from creating simple animations to developing sophisticated presentations and movies. Students with a strong work ethic and problem-solving skills and the ability to understand and follow directions will excel in this course. Besides preparation for unit tests, this course requires very little homework for subject mastery. Since many animations are embedded within Web pages, this course's subject material is complementary to concepts taught in the Web Publishing course. Textbook provided. (1/2 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

AP Computer Science:
A continuation of our basic-level programming class, this course prepares students for the AP Computer Science exam. Students will design, develop and analyze solutions to problems, use common algorithms and data structures as they write programs within an object oriented framework. In specific, they will write, run, test and debug programs using standard Java library classes. This course is the next logical step toward expressing a deeper interest in a computer

or related STEM (Science, Technology, Engineering or Math) career. Taking the AP Computer Science Exam is required of all course participants. Textbook provided. (1 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: A final average of at least an 85 in the Introduction to Java Programming, Computer Science Principles or Computer Game Design course. Completion of a third year of math (Algebra/Trig) or at least simultaneous enrollment. A demonstration of general academic competence particularly in the math and science areas.

Architectural Design and Drafting
The focus of this ½-credit class is learning the fundamentals of AutoCAD software. AutoCAD is the industry standard program for computer-aided drafting (CAD). Students will master concepts and techniques for computer aided, 2-dimensional design and drafting. Since the course will primarily use examples and projects such as floor plans, elevations, lots, etc., students will gain knowledge concerning principles and concepts of architecture. Students will also be introduced to 3-dimensional design concepts. (1/2 credit)
Intended for: students in grades 8, 9, 10,11, or 12
Prerequisite: none

Computer Applications and Programming
This class combines an introduction/refresher to computer applications and programming as well as advanced topics. All high school graduates should possess a general knowledge of common applications such as word processing, spreadsheets, and presentation programs. An ideal applicant for college would have some additional exposure to a programming language. This course instructs using the MS Office Professional Productivity suite and MS Visual Basic to produce technologically competent graduates.
This course is ideal for 8th graders, new incoming freshmen and any sophomores, juniors or seniors looking to refresh and advance their office/programming skills. This practical course features lots of hands-on labs and unit testing. Many students find this combination refreshing and are encouraged to continue on to a more rigorous introductory programming course upon the completion. *Text book provided.* (1 credit)
Intended for: students in grade 8, 9th graders new to McQuaid, and students in grades 10, 11, or 12
Prerequisite: none

Computer Game Design:
Have you always wanted to learn how to make computer games? Well, this course teaches you how to do just that! Students will design, code, and test a number of different types of games (including text adventure, board, two player, space, 2D shooter, and 3D shooter) in a number of different platforms (including QBasic, Visual Basic and XNA Game Studio Express). Students will also have the opportunity to design and create their own games. Games will be created for the Windows environment. Additionally, the games created with XNA can be loaded and played on the Xbox 360 gaming system. The ability to work independently, persistence, and strong problem-solving, logic, and attention to detail skills will help students to be more successful. (1 credit)
Intended for: students in grades 10, 11, or 12, and 9th graders who have completed Algebra
Prerequisite: Algebra

AP Computer Science Principles:
This is a joint College Board/Project Lead the Way® certified course. It is a hands-on, project based, technology enriched course which concludes with two distinct options: taking the AP Computer Science Principles exam or the end of year PLTW assessment. The course is designed as an introductory college-level computer course with emphasis on using engineering design and problem solving methods to create computer applications. In this course, students work in teams to develop problem solving skills within a group context. The course does not seek to teach mastery of a single programming language but intends instead to develop computational thinking, to generate excitement about the field of computing, and to introduce

computational tools that foster creativity. In the course, students will explore tools such as Scratch, App Inventor, Python, GitHub, HTML/CSS/MySQL and Net Logo modeling software to gain a broad experience with computers. Building enthusiasm for rigorous computer science is a goal of the course, but providing students a solid foundation for use in all disciplines is the most desired outcome. Students must take the AP exam in May. (1 credit)
Intended for: students in grades 10, 11, 12
Prerequisite: completion of, or enrollment in Algebra II/Trigonometry

Digital Video Editing:
This course introduces students to producing digital video including finding stories, writing scripts, shooting and editing video, and making deadlines. Upon covering the basics, students will have opportunities to create video for the school website, film festival entry, e-newsletters and other media. At the conclusion of the course, students will be proficient in using Adobe Premiere video editing software, preparing stories/scripts/shot lists, as well as shooting and producing visual stories. It is a good course selection for those interested in related careers or students who prefer an active, hands-on approach to learning. Enrollment limited. (1 credit)
Intended for: students in grades 10, 11, or 12
Prerequisite: completion of Image Editing with Adobe Photoshop, Media Studies, Animations or instructor permission.

Image Editing with Adobe Photoshop:
Learning to create and manipulate images using Adobe Photoshop is the focus of this course. Students modify existing images as well as create original work using multiple rendering tools. Students will also learn how to edit, retouch, and enhance photographic digital images. This course utilizes a "learning through hands-on lab work" approach, which requires a student to possess good work habits, direction following and persistence, but requires very little outside of class work in order to achieve subject mastery. Material covered in this course is complementary to the animations, and Web Publishing courses offered by the department. Textbook provided. (1/2 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

Introduction to Engineering Design:
This is a Project Lead the Way® certified course designed to help students discover if a career in engineering meets their interests and abilities. This hands-on, project based, technology enriched course concludes with a PLTW end-of-course examination. The course includes the following units of study: design process, technical sketching and drawing, measurement and statistics, modeling skills, geometry of design, reverse engineering, documentation, advanced computer modeling, design team, and design challenges. This is a project-based course which also includes traditional lecture and teacher demonstrations, and team engineering challenges. Students will complete physical and virtual two-dimensional and three-dimensional models, learn team concepts, complete oral presentations, use spreadsheet and computer aided design (CAD) software to store, manipulate, represent, and analyze data, learn and incorporate engineering design principles, and apply mathematical and scientific methods to guide, test, and evaluate prototypes and solutions. Students successfully completing this course may earn RIT credit. To earn college credit, a student must attain a final course average of at least 85 and successfully pass an end-of-year PLTW examination. (1 credit)
Intended for: Grades 9,10,11,12
Prerequisites: Each student must have at home a Windows based computer with the following minimum requirements: Intel Xeon, i5 or i7, 250 gb hard drive, 5gb RAM, Windows 7 or 8 64 bit OS installed.

Introduction to Java Programming:
This course introduces complete beginners to the world of programming using the powerful Java language. Students work on a variety of lab projects including applets, games, and creating smart phone apps. A great deal of the class is spent working on lab projects with frequent lecture discussions and code demonstrations. The student grade is calculated using a

combination of assessments including labs, test/quizzes and occasional homework. The course is a great starting point for students who want to experience what it is like to program and who recognize that they will likely be taking at least one similar course in college. This class serves as the best prerequisite to AP Computer Science as both courses feature the Java language. Text book provided/one required for purchase (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: none

Media Studies:
With increasing media convergence and recently developed technologies, a new lexicon is emerging in electronic media consumption. This half year course will examine various aspects of "new media" and in particular, video games, web-based content and digital video. We will examine how these technologies are used to distribute advertising, promote ideology and affect the human experience via media consumption. Lectures are mainly electronic format and coursework includes research, experiments, creative arts and developing digital content. (1/2 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: none

Technology/Engineering Seminar:
This hands-on, project-based, technology and engineering enriched course's goal is to give you a good dose of the "T" and "E" of STEM. You are cruelly forced to take a lot of "S" courses. Similarly, most of you will have 4 or more years of "M" courses. So, here, you will be rounding out your STEM education in case you unwisely choose not to sign up for any more technology or engineering courses while you are here at McQuaid. The seminar will likely include the following topics: IPad essentials, PC essentials, school computer network and printing, Google Drive, Schoology essentials, digital citizenship concerns, etiquette, and expectations at McQ and in the world, communicating and presenting effectively, engineering design process including an egg drop competition, engineering software use including Autodesk Inventor and 3D printing, and computer programming culminating in drone missions. (1/2 credit)
Intended for: students in grade 9
Prerequisites: none

Web Publishing:
This half-credit course provides students with opportunity to learn more about how the Internet works and the field of web publishing. Topics include creating HTML documents and CSS stylesheets, embedding images and media with webpages and using JavaScript to enhance web content. It is taught with a hands-on, active learning approach as students create both structured and original content. As a lab course, it requires minimal out-of-class work with the exception of occasional unit test preparation. This is a smart, sensible elective for a student who wants to explore the dynamic world or web publishing. Textbook provided. (1/2 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

ENGLISH DEPARTMENT

The English curriculum at McQuaid Jesuit is based on the skills of reading, writing, speaking and critical thinking. Literature is the basis for building these skills.

As important as what we read, what we write, and what we speak is *how* we read, *how* we write, and *how* we speak. We must read critically, analytically; we must write clearly and concisely; we must speak clearly and confidently.

Critical thinking is the tool needed for each of these skills. We do not teach what to think, so much as how to think. Students' arguments must be based on facts, evidence and logic. They must search for the truth.

McQuaid Jesuit students read approximately 10 books a year. Students are tested on each book, which then becomes a source for discussion, speaking and writing. The short story, poetry and drama are studied each year. Testing in all its forms is carried out throughout the four marking periods, with grade levels determining major assessment experiences.

McQuaid Jesuit students write 20-25 essays per year. Writing is both creative and expository. A focus of all years is writing thesis statements and developing papers from these statements. Research papers begin in the ninth grade. The final paper for each year is a thesis paper based on discoveries each student has made from his study of literature that year.

Speaking at McQuaid Jesuit includes class discussion, the public reading of stories, poems and the student's own written work, participation in plays and skits, and some formal speaking. There is a unit of Public Speaking in the English 4 curriculum.

The ideal McQuaid Jesuit graduate is a young man who reads, can think on his feet, and can express himself clearly and concisely in both the spoken and written word.

English 1:
Instruction in the first semester focuses on developing the student's reading and writing skills utilizing the short story and novels. Grammar, usage and mechanics are taught based on the needs illustrated in the student's writing. Student's progress is assessed at the mid-term with an expository paper that replaces an examination. The paper is based on themes discussed in the novels and short stories covered throughout the semester. The second semester begins with poetry and a Shakespearean drama and continues to work on grammar/usage needs. A number of short papers are written and discussed and a final thesis paper, based on several literary works, replaces a June examination. The final unit of the year returns to drama. Vocabulary assignments and tests are given throughout the year as are the tests on assigned novels. (1 credit)
Intended for: students in grade 9
Prerequisites: none

English 2:
begins with a review of the grammar skills learned in English I. Creative writing pieces are assigned to practice these skills. A focus on the study of the short story follows. Concurrent writing assignments feature the expository paragraph and its components. The second semester is devoted to grammar, the thesis statement in exposition, poetry and connotative language, a Shakespearean play, writing essays and writing a term paper based on novels read at two- to three-week intervals during the year. Vocabulary assignments are also given regularly throughout the marking periods. (1 credit)
Intended for: students in grade 10
Prerequisite: English 1

English 2 Advanced:
This course is intended as preparation for the junior and/or senior year courses and their associated Advanced Placement examinations. There are extensive assignments in composition and literature. Qualified students should indicate their interest on the COURSE REQUEST FORM. (1 credit)
Intended for: students in grade 10
Prerequisite: Refer to the departmental policy in English for advanced placement. Further, students must have both an average of 92% in English 1 and the recommendation of their English 1 instructor.

English 3:
This course is a study in American literature from 1854 to the present. The course of study includes a more analytical and thorough study of the short story, the novel, the study of Shakespeare's MACBETH, and poetry. Writing is an integral part of each marking period with several written assessments from the paragraph to the essay the main avenues of expression. Oral presentation, small group experiences, too, assist the student in increasing his reading, writing, and oral skills. Students also study vocabulary as part of their junior year English experience and are expected to utilize vocabulary in their written and oral assessments. The end of the year assignment is the research paper, a persuasive argument, with textural support, that is well-documented with in-text citation, use of the interview, and a Works Cited page. The latter portion of the fourth marking period is dedicated to mastering the components of a research paper. This assignment serves as the final exam for the course. In January, students are tested on vocabulary, command of literary analysis, and an essay on one of the seven rhetorical methods taught during the first semester. (1 credit)
Intended for: students in grade 11
Prerequisite: English 2 or English 2 Advanced

Journalism and Media Literacy:
This elective course will provide students an authentic opportunity to experience the journalistic process as they are trained in the fundamentals of journalistic ethics, news gathering, fact checking, interviewing techniques, and journalistic writing style. A primary focus of the course will be on the transformation that journalism has undergone in the digital age. To this end, students will learn to vet the credibility of online sources while deciphering straight news from slant and balanced coverage from bias. Students in this course will serve as the primary staff writers for McQuaid Jesuit's student newspaper, The Lance. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: none

Advanced Journalism Assistantship:
This is an opportunity for an upper-level student who has excelled in the Journalism and Media Literacy course to deepen his study and, more importantly, his practical experience in the realm of journalism. This assistant will serve as Editor of The Lance, working closely with the instructor and students of the Journalism and Media Literacy course to support the school's newspaper. This role will include a number of responsibilities: writing articles frequently, editing student-produced articles and content, updating sports scores and breaking news, and managing The Lance's social media accounts. Those students with the highest cumulative averages in the Journalism and Media Literacy course will be eligible for selection to this assistantship by the course instructor. (1 credit)
Intended for: students in grades 11 or 12
Prerequisite: Journalism and Media Literacy

AP English Language and Composition:
This is an intensive college-level course in the study of rhetoric, analytical reading, critical analysis writing, and synthesis writing. The course prepares students for the AP examination, which students are required to take as part of this course, in May. Students who earn high scores on this exam may qualify for college credit or advanced standing in college courses. Students will analyze a challenging range of nonfiction prose as well as classical literature,

emphasizing the authors' use of rhetorical devices and language manipulation. Through close reading and frequent writing, students enhance their ability to recognize rhetorical strategies and to identify purpose and principles of language. Complementing the theme of junior year English courses, students will analyze what it means to be an American in a global environment. (1 credit)
Intended for: students in grade 11
Prerequisite: Refer to the departmental policy in English for advanced placement. Further, students must have both an average of 92% in English 2 and the recommendation of their English 2 instructor.

English 4:
This course critically examines the short story, poetry, the novel, and Shakespearean and other plays from a thematic perspective. There are several major thesis assignments of a critical and analytical nature for students to demonstrate accumulated knowledge and experience with written expression. Public Speaking is an integral part of English IV, Trimester 2, as is a cumulative essay, assessing four years of thought and expression, at year's end. A study of three hundred vocabulary words (Shostak, Level H) is an important component of the curriculum. (1 credit)
Intended for: students in grade 12
Prerequisites: English 3 or AP English Language and Composition

Advanced Placement Literature and Composition:
AP Literature and Composition is an intensive college-level course in the study of literature and in the writing of critical expository essays. It prepares the student for the CEEB (College Entrance Examination Board) AP Examination in May, which students must take to receive credit for the course. College credit or advanced standing can be earned by a strong score on this examination. Candidates for this course should have solid skills in grammar, mechanics, organization, development, and research methodology for the varied writing experiences the course demands. In addition, candidates must possess a solid vocabulary in order to handle the higher levels of reading the course offers. The course demands careful attention to literary conventions, terms, and genres. Analytical thinking, critical reasoning, and commensurate written expression are strengthened and improved through varied, continual, and challenging reading and writing assignments. (1 credit)
Intended for: students in grade 12
Prerequisites: A score of 550 or higher on the Verbal section on the PSAT , an average of 92 or higher in 11th grade English, and the approval of the 11th grade English instructor

The English Department's Policy for Advanced Placement

Listed below, by year, are the criteria used in determining acceptance into Advanced and AP English courses.

1. For students entering SENIOR year:
   a. The student should have at least a 550 Verbal score on the PSAT examination and a 92 average in junior English;
   b. The student must have demonstrated superior writing skills in previous years;
   c. The student must receive favorable recommendations from previous English teachers.

2. For students entering JUNIOR year:
   a. The student should have a 92 average in previous English courses;
   b. The student must have demonstrated superior writing skills in previous years;
   c. The student must receive favorable recommendations from previous English teachers.

3. For students entering SOPHOMORE year:
   a. The student should have scored in the 90th percentile on the verbal sections of the CAT/5 and/or PSAT 8/9.

b. The student should have earned a 92 average in freshman English;
c. The student must have demonstrated a superior ability in writing in his freshman English course;
d. The student must receive a favorable recommendation from his freshman English teacher.

FOR ALL YEARS
Class Size: If the number of students recommended for an advanced or AP class exceeds the class-size limit of 25, a qualifying examination may be administered.

FINE ARTS DEPARTMENT

Visual Arts

Studio Art:
This course is an introductory Visual Arts course. It is an overview and introduction to basic concepts, skills and a variety of media. Students are introduced to Drawing, Design, Painting and Sculpture. This course fulfills a student's Fine Arts requirement. (1 Credit)
*It is advisable that a student interested in Visual Art take **Studio Art** as early as possible, as it is a prerequisite for all upper level Visual Art courses.*
Intended for: students in grades 9, 10, 11 or 12
Prerequisites: none

Digital Art:
This course is a studio course open to students interested in developing creative solutions using original digital imagery. In this class, students will be making art with the desktop computer as an interface between the artist and the art work. Students will be using the software Adobe Photoshop in combination with mixed media applications and/or digital input. At the end of this class, students will be able to create and analyze professional digital designs. (1 Credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: Studio Art (required), Image Editing with Adobe Photoshop (recommended)

Drawing
This course is an advanced studio course focused on the practice and study of Drawing. It builds on skills and concepts introduced in **Studio Art.** A variety of drawing and design materials and concepts are studied. Traditional and contemporary modes of drawing are explored. (1 Credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: Studio Art and the recommendation of the teacher.

Graphic Illustration: Vector Drawing with Adobe Illustrator
This course is designed to introduce the benefits, complexities and application of vector illustration and design within a creative explorative environment. Learning to integrate traditional and digital image making techniques, students will be introduced to various methods of visual problem solving. The skills and ideas covered in this course are invaluable to students considering a career in advertising, fine art, design, illustration, print or web media, motion graphics, animation or other media related arts, or those seeking to explore interests in these disciplines. This course utilizes, mostly, Adobe Illustrator software but necessitates some "real world" hand making. The work is produced within the computer lab and studio and requires very little outside of class time to achieve subject mastery. (1 credit)
Intended for: students in grades 10, 11, 12
Prerequisite: **Studio Art**

Painting:
This advanced studio course explores the essential elements of painting utilizing acrylic paints. These include color theory, a variety of painting techniques and styles and an introduction to the conceptual and technical bases of painted imagery. As a final project, **Painting** students may choose to paint a mural in the school. (1 Credit)
It is advisable that students take Drawing and Design prior to taking painting, as strong Drawing skills are foundational to painting.
Intended for: students in grades 11 or 12
Prerequisites: Studio Art, and the recommendation of the teacher.

Beginning Sculpture:
This beginning studio course includes the study of Sculpture through the utilization of materials such as wood, ceramics, plaster, and wire. Students explore the aesthetics of Sculpture through the elements and principles of three-dimensional design. (1 Credit)
Intended for: students in grades 10, 11 or 12
Prerequisites: Studio Art and the recommendation of the teacher

Advanced Sculpture:
This is an advanced, full year course. Coursework will be self-directed, with students and teacher determining a course of work for the year. Student projects develop as a cohesive body of work. (1 Credit)
Intended for: students in grades 11 or 12
Prerequisites: Studio Art, Beginning 3-Dimensional Design, and the recommendation of the teacher

Film Studies:
This half-year course covers the history of cinema arts from the late 19th century until the present. Topics include the evolution of technology, genre study and auteur theory. Classes will be divided among screenings and discussions with a strong online and in-class participation component as well as creative production assignments. Students will complete the course with a greater appreciation for film both as an artistic medium and as American culture. Films will be viewed through several lenses, namely, criticism, textual analysis and historical perspectives.
Intended for: students in grades 10, 11, or 12
Prerequisites: none

Advanced Art:
This full year course is open to seniors who have taken several other Visual Art courses. This course offers advanced study of a variety of Visual Art disciplines. It is highly recommended for students interested in applying to a Visual Arts program at the college level (e.g., Architecture, Graphic Design, Fine Arts, etc.). Students will develop a portfolio with which to apply to such a program. At the discretion of the teacher, **Advanced Art** students may choose to paint a mural in the school. (1 Credit)
Intended for: students in grades 11 or 12
Prerequisites: Studio Art, at least one advanced studio course and the recommendation of the teacher

Comics and Sequential Art:
This is a full-year studio course. In exploring the language of Comics and Visual Narrative, students will complete projects that investigate the way in which comics and sequential imagery can be used to create narratives and convey information. As a final project, the class will conceive, execute and publish a comic anthology in magazine format. (1 Credit)
Intended for: students in grades 10, 11, or 12
Prerequisite: Studio Art

Printmaking:
Printmaking is a half-year Visual Arts elective. Prints are created by hand and with an etching press using traditional and contemporary Printmaking techniques such as Linoleum Cuts, Drypoint Etchings, Monotypes, Cardboard Cuts, Embossing and more.
Intended for: students in grades 10, 11, or 12
Prerequisites: none

Classroom Music

Applied Musicianship:
The class is intended for the student with no musical experience. It is an introduction to basic music theory and reading. Basic keyboard and guitar playing techniques will be taught and applied in this class. Students will be able to read music and perform at a basic level after completing this course. There is a playing and written component for the mid-term and final. (1 credit)
Intended for: students in grades 8, 9 or 10
Prerequisites: none

AP Music Theory:
This course is intended to further develop the musical skills of students past the beginner level to an advanced level of musical understanding. Through a study of form, harmonic progression, and other theoretical aspects of music, students gain an understanding of the complexity of music and its aesthetic value in society. The level of musical study is that of first semester college theory. Students need instructor approval to enroll in this class. (1 credit)
Intended for: students in grades 11 or 12
Prerequisites: Symphonic Band (2 years), High School Chorus (2 years), or High School General Music Courses (1 credit)

Guitar and Keyboard II:
This course is intended for the student who has some musical experience. More advanced playing techniques will be taught. We will perform individually and in groups. There will be a continuation of more advanced music theory as well as a listening component. Students will be able to read music and perform at an intermediate level after completing the course. This class will have performance opportunities outside of McQuaid. There are playing and written components for the midterm and final exams. (1 credit)
Intended for: Students in grades 9, 10, 11, or 12
Prerequisite: either Applied Musicianship (formerly known as Intro. to Keyboard/Guitar) or teacher approval

Performing Ensembles

Beginning Ensemble:
This ensemble is for any student interested in learning to play an instrument or is still a beginning instrumentalist. Students will learn fundamental skills in playing an instrument for band or orchestra. Students will perform music in a variety of styles. Instrumental lessons taken either privately or at McQuaid are required for this course. (1 credit)
Intended for: students at a beginner instrumental playing level
Prerequisites: teacher placement evaluation or instructor approval

Concert Band
The Concert Band is open to all student musicians at an intermediate level playing woodwind, brass, or percussion instruments only. Students playing guitar or piano may be interested in General Music or Middle School Chorus. This course will cover wide arrangements of musical styles and genres that will be challenging to the level of the students. Instrumental lessons taken either privately or at McQuaid are required for completion of this course.

Students will perform frequently throughout the year in school and community settings. (1 credit)
Intended for: students at an intermediate performance level
Prerequisites: teacher placement evaluation or instructor approval

Orchestra:
This course is a full credit class and seeks to develop technical proficiency, musicianship, and musical leadership through the performance of string orchestra repertoire. Students will perform orchestral repertoire frequently throughout the year in school and community settings. Individual lessons taken either privately or at McQuaid are required for completion of this course. Orchestra is open to musicians playing violin, viola, cello, and upright bass (not electric bass). (1 credit)
Intended for: Students in grades 6, 7, 8, 9, 10, 11, or 12
Prerequisite: ability to play a string instrument (violin, viola, cello, string bass)

Symphonic Band
This course meets every day for a full year and is open to musicians playing at an intermediate to advanced level of performance. Only woodwind, brass, or percussion instruments are included in this ensemble. Students playing guitar or piano may be interested in taking Applied Musicianship, High School Chorus, or Accompanying. This course will cover a wide arrangement of musical styles and genres that will be challenging to the level of the students. Instrumental lessons taken either privately or at McQuaid Jesuit are required for this course. Students will perform frequently throughout the year in school and community settings. (1 credit)
Intended for: students at an intermediate to advanced performance level
Prerequisites: teacher placement evaluation or instructor approval

Percussion Ensemble:
This course meets every day for a full year. A wide arrangement of musical styles and genres for percussion ensembles will be explored in this course. Instrumental lessons taken either at McQuaid Jesuit or privately are required for completion of this course. Students will perform frequently throughout the year in school and community settings. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: 1 year of a McQuaid instrumental ensemble (Concert or Symphonic Band) or instructor approval

Chorus:
Chorus will perform a variety of literature throughout the year. Students will learn to use their voices with a foundation in classical vocal technique. Lessons at McQuaid, or privately, are an integral part of the ensemble. All students wishing to enroll in this ensemble must demonstrate the ability to match pitch. Evaluations both individually and as an ensemble will take place throughout each grading period. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisite: teacher placement evaluation or instructor approval

Accompanying:
The purpose of this course is to provide an accompanist to the vocal ensembles during the daily rehearsals and performances. The course is open to students who have developed their skill as a pianist. Students wishing to enroll must have approval of the vocal director prior to registration. Lessons which will develop the skills necessary to accompany an ensemble and follow a director are required for this course. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: instructor approval

Theatre Tech:
The course will explore where theatre has come from and where might theatre be in the future. Students will study various production elements; including technical aspects, acting, management, as well as a look at periods in theatre history which better explain the development of the technical elements of the theatre. Projects include acting, scene design, sound and lighting design. Students in this class will be required to be part of the stage crew for one of the two McQuaid main stage productions. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: none

Acting Seminar:
This is a performance-based course that focuses on method, delivery and creative exploration. The drama course is not a prerequisite for acting, nor is this course a repetition of the skills covered in drama. Due to the performance nature of this course, class size is limited to 16 students. (1/2 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: none

FOREIGN LANGUAGE DEPARTMENT

Modern Languages: French, German, Italian, and Spanish

Level 1:
Level One modern foreign language begins the comprehensive study of the target language. Students will attain an acceptable degree of proficiency in the four skill areas of listening, speaking, reading and writing through the emphasis of active communication. Vocabulary and grammatical structures are presented in dialogues, readings and practiced in oral and written drills. These are chosen for their usefulness in everyday conversation, while dialogues prepare students to communicate topics of interest to them. Readings include cultural information to give students an understanding and appreciation of the contemporary world of the target language. English is used for grammatical explanations, but the target language is utilized as much as possible. Students are tested using a variety of techniques. (1 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

Level 2:
Using the basic vocabulary learned in Level I, this course emphasizes vocabulary development, more complex grammatical structures and idiomatic usage. As in first year, each lesson begins with a reading which becomes the basis of vocabulary acquisition. Much of the classroom time is spent on the assimilation and oral transposition of newly acquired structures. Emphasis remains on the development of communicative skills, specifically the ability to understand, to speak in correct idiomatic usage of the target language, to read and to write. It is structurally more demanding in that it presents various tenses and more complicated grammatical constructions. (1 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: successful completion of Level 1 or McQuaid's Placement Exam

Level 3:
This course builds upon the first two years of study and emphasizes the ability to comprehend and to relate details of various topics in the target language, both orally and in writing. Commonly useful vocabulary, language structures, culture and reading skills are also included. Authentic materials are used as a springboard for discussing current events, prices, cultural items, etc. and as a tool in the composition-writing process. A supplementary grammar exercise book keeps students in touch with the detail and precision that this study requires. The course brings students

from the novice level of oral proficiency to the intermediate level where they can create with the language, participate in progressively more challenging conversations and communicate successfully in basic survival situations. The course is supplemented with target-language films and newspapers. Evaluations include vocabulary and structure quizzes, dictations, speaking tests, as well as vocabulary and structure tests given during and at the end of each unit. (1 credit)
Intended for: students in grades 9, 10,11, or 12
Prerequisites: successful completion of Level 2 or McQuaid's Placement Exam

Level 4 or Level 5
This is a course in advanced idiomatic study in written and spoken language as well as an introduction to literary style. It includes conversational practice on given topics, a variety of literary works in several genres, expository writing, listening comprehension of contemporary programs from the mass media and vocabulary expansion. Language structures are reviewed as needed. Various works are studied for literary style and philosophical content. Discussion and criticism of all texts are the core of class work which will be in seminar form. This course is recommended to students who have excellent achievement in Level III or who have had substantial outside experience with the spoken language.(1 credit) (**NOTE: This course will be scheduled if a sufficient number of students enroll and staffing requirements are met.)**
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: completion of Level 3 with a grade of at least 85 and departmental approval (Students enrolled in Italian 4 or Mandarin Chinese 4 may have the opportunity to earn dual credit with Nazareth College for an additional fee.)

Advanced Placement Foreign Language:
This course is designed to prepare students for the Advanced Placement Exam in Language. It includes an intensive review and amplification of language structures. Previously learned vocabulary will be reviewed and new vocabulary will be introduced from a variety of sources. Students will practice the writing, listening and speaking components of the exam on a weekly basis. (1 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: completion of Level 4 with a grade of at least 90 and departmental approval

Classical Languages

Latin 1:
This course is designed to develop a concrete foundation in the basics of Latin grammar and vocabulary. Great attention is placed upon a logical analysis of the structure of the language, both for its own sake and also as an aid to general language skills. The skills learned in Latin I are used in English and modern languages. Translations of sentences and paragraphs are included from the very beginning in order to develop reading skills rapidly. The course also includes an introduction to Roman civilization and history. Christian (Church) pronunciation is used. (1 credit)
Intended for: grades 8, 9, 10, 11, or 12
Prerequisites: none

Latin 2:
This course provides further study of the basic skills and understandings acquired in Level I, along with the introduction of more advanced grammatical structures, additional vocabulary and more complex reading passages. Second semester is devoted to the reading of *Caesar's Gallic Wars* and other selections of Latin literature. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: successful completion of Latin 1 or McQuaid's Placement Exam

Latin 3:
Third year Latin uses the mastery of the language gained in previous years to introduce students to other classical authors such as Sallust, Cicero and Vergil. Medieval Latin is represented by passages from the *Latin Vulgate Bible*, St. Augustine, fables and medieval songs such as the

Carmina Burana. A constant review of grammatical forms and structures is maintained throughout the course. (1 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: successful completion of Latin 2 or McQuaid's Placement Exam

Latin 4:
This course is open only to students who have completed at least three years of Latin and who have not yet studied Plautus' *Menaechmi.* Students translate the play and creatively present selected scenes and dialogues in the original Latin or in their own translations. These translations capture not only the meaning, but also the spirit of the farce. Discussions and written reflections on selected themes from the play help students to articulate, explore and deepen their understanding of perennial issues faced by human beings. This prepares them to deal more adequately with contemporary challenges. (1 credit)
Intended for: students in grades 11 or 12
Prerequisites: successful completion of Latin 3 and departmental approval

Latin 5: Latin 5 has been designed with the input and as a response to a request for such a course by this year's Latin 4 students. In Latin 5 students will translate selections from various Latin authors chosen from the pre-classical period through the Middle Ages, Renaissance and Neo-Latin periods. Works can include history, philosophy, theology and science. They will be considered as literature, in their historical context, with their philosophical, theological, even scientific importance. Certain themes of interest to the class will be considered trans-historically. The goal of the course will be to foster, encourage and support students by enriching their present and future educational experience with in-depth considerations. (1 credit)
Intended for: students in grade 12
Prerequisites: successful completion of Latin 4 and departmental approval

One-year intensive language electives

The one-year language elective is designed for the student who would like to explore a second foreign language. All classes are one credit and meet daily. NOTE: Electives will be scheduled if a sufficient number of students enroll and staffing requirements are met. If a section of intensive language cannot be scheduled, students may be enrolled in Level I of that language.

Modern Languages: Gaelic, German, Italian, Spanish
Students will attain an acceptable degree of proficiency in the four skill areas of listening, speaking, reading and writing with an emphasis on active communication. Readings include cultural information to give students an understanding and appreciation of the contemporary world of the target language. (1 credit)
Intended for: students who are currently in or have completed a 3-year sequence in another language.
Prerequisites: none

Spanish through Film:
This elective course is open to juniors and seniors who have completed their 3-year sequence in Spanish. The course will be taught in Spanish and focus on issues pertaining to the Hispanic world: immigration, indigenous and modern peoples, art, economy, government corruption, drugs, family and sacrifice. We will focus on a certain country/area of the Hispanic world at a time and explore those places/issues through film, discussion and writing. (1 credit)
Intended for: students in grades 11 or 12
Prerequisite: completion of a 3-year Spanish language sequence

Teacher Assistant
This is an opportunity for a student who has excelled in his language study to maintain contact with the second language. The student will work with students and assist the teacher(s) in various classroom activities. This is also a chance for those considering teaching as a career to experience the many aspects of education. (1 credit)
Intended for: students in grades 11 or 12
Prerequisites: 3-4 years of language study and departmental approval.

MATHEMATICS DEPARTMENT

McQuaid Jesuit students are required to complete three years of Mathematics: Algebra, Geometry and Algebra II/Trigonometry. Class sections are formed according to Mathematics ability levels. All students are expected to relate concepts using knowledge, comprehension and application. In addition, all students will be required to use Analysis and Synthesis in relating concepts as they progress through the department's offerings. The ADVANCED sections demand higher-level skills beyond memorization, requiring knowledge, comprehension and, especially, application, analysis, synthesis and evaluation. The amount of work, its intensity and difficulty, and the teacher's expectations all increase with each successive ability level.

Placement in the ability groups is based upon performance and the department's recommendations.

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The first year of mathematics is **Algebra**. These courses contain: introduction to algebra; working with real numbers; solving equations and problems; polynomials; factoring polynomials; fractions; applying fractions; introduction to functions; systems of linear equations; inequalities; rational and irrational numbers; quadratic functions. (1 credit)

The second year of mathematics is **ADVANCED Geometry** or **Geometry**. The course is designed to develop: (1) an understanding of geometric relationships in a plane and in space, (2) the ability to think creatively and critically, in both mathematical and nonmathematical situations, and (3) an understanding of the meaning and nature of proof. These courses contain: review of algebra; lines and angles; congruent triangles; parallel lines, angle sums and quadrilaterals; circles; proportions involving line segments and similar triangles; areas of polygons; regular polygons and the circle; inequalities; locus; coordinate geometry; constructions; solid geometry. (1 credit)

The third year of mathematics is **ADVANCED Algebra II/Trigonometry** or **Algebra II/ Trigonometry**. The course is designed to enhance problem solving skills and develop reasoning skills such as analyzing information, making conjectures and giving convincing arguments.
The Texas Instruments TI-83 or TI-84 calculator will be used for the course. (1 credit)

These courses contain: basic concepts of algebra; inequalities and proof; linear equations and functions; products and factors of polynomials; rational expressions; irrational and complex numbers; quadratic equations and functions; variation and polynomial equations; analytic geometry; exponential and logarithmic functions; sequences and series; triangle trigonometry; trigonometric graphs and identities; trigonometric applications; probability and statistics.

All elective requests are subject to change based upon a student's final average in the previous Mathematics class. Students must satisfy the prerequisites of the elective in order to take the class the following academic year. Final approval rests with the department chair.

College Algebra This course is designed for the senior who does not intend to take Introductory Calculus and/or was in Algebra II/Trigonometry. The course requires the relating of concepts mainly on the comprehension, application and analysis levels. The course covers the following topics: algebra review; equations and inequalities; functions and graphs; polynomial and rational functions; exponential and logarithmic functions; topics in analytic geometry; systems of

equations; matrices and determinants; sequences and series; probability; statistics. (**NOTE**: This course will be scheduled if a sufficient number of students enroll.)
The Texas Instruments TI-83 or TI-84 calculator will be used for the course.
Prerequisite: For placement into College Algebra the student should have an average of 80 or better in both Algebra II/Trigonometry and his overall average. *Students with a Math PSAT score of 500 or greater will not be allowed to take College Algebra unless they are given permission by both their current Mathematics teacher and the Department Chair*. In the opinion of the department the student must demonstrate ability to do the required work of the course. Approval rests with the Algebra II/Trigonometry teacher and the Department Chair.

Pre-Calculus:
This course prepares students for Calculus by reinforcing and introducing algebraic skills required for success in Calculus. The first part of the course will focus on simplifying algebraic expressions, solving equations and inequalities, functions, graphing, transformations, higher degree polynomial functions, rational functions, and inverse functions. The next part of the course will focus on the transcendental functions of the exponential and logarithmic, and on trigonometry. Students will learn and apply fundamental identities and the Unit Circle to a variety of problems, and apply transformations to graph trigonometric functions. Inverse trig functions, and applying the laws of cosines and sines will also be covered. The course concludes with the introduction of the Calculus topics of differentiation and integration. (1 credit)
Prerequisite: Algebra II/Trigonometry
A Texas Instruments (TI) graphing calculator will be used extensively and is required. Students should see instructor for details.

Advanced Pre-Calculus/Calculus Intro.:
This course is designed for the student who has been in Algebra II/Trigonometry and intends to take Calculus at McQuaid Jesuit or in college. The student should have a **comprehensive** understanding of Algebra, Geometry and Algebra II/Trigonometry. The course requires the interrelating of concepts mainly on the application, analysis and synthesis levels. The Introductory Calculus course covers the following topics: polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs, limits and their properties, an introduction to differentiation and integration of the previously named functions, and the applications of differentiation and integration. (1 credit)
The Texas Instruments TI-83 or TI-84 calculator will be used for the course.

For placement into Introductory Calculus the student should have an average of 85 or better in both Algebra II/Trigonometry and his overall average. A minimum of 500 on the Mathematics portion of the PSAT. In the opinion of the department the student **must** demonstrate **ability** to do advanced work in mathematics. Approval rests with the Algebra II/Trigonometry teacher and the Department Chair.

Statistics:
This course is designed for the junior or senior who has completed at least three years of math. Statistics will deal in the collection, processing, analysis and interpretation of numerical data. This course contains: frequency distributions and graphs; data description; counting techniques; probability and probability distributions; normal distribution; confidence intervals and sample size; hypothesis testing; testing the difference between means and proportions; correlation and regression; chi-square; the F-test and analysis of variance; nonparametric statistics; sampling and simulation; quality control. (1 credit)
The Texas Instruments TI-83 or TI-84 calculator will be used for the course.

For placement into Statistics the student should have an average of 80 or better in his overall average and in his previous math class (either Algebra II/Trigonometry or Advanced Algebra II/Trigonometry, College Algebra, or Pre-Calculus or Advanced Pre-Calculus). In the opinion of the department, the student must demonstrate ability to do the required work of the class. Approval rests with the teacher of the course and the Department Chair.

NOTE: A student may take either Statistics or AP Statistics, but cannot take both courses while at McQuaid.

Calculus (CC):

This course is designed to prepare the student for a beginning college calculus program and it contains the major concepts of the AP Calculus AB, but not the depth. Students taking this course should take Calculus I in college. The course demands higher-level skills (application, analysis, synthesis and evaluation), a significant amount of work both in class and out of class. (**NOTE**: This course will be scheduled if a sufficient number of students enroll.) The course includes all concepts of Pre-Calculus, analysis of limits and their properties, explicit and implicit differentiation, applications of differentiation, transcendental functions, and techniques of integration with applications. Students may have the opportunity to earn dual credit with Nazareth College for an additional fee. (1 credit)

Intended for: students in grades 11 or 12

Prerequisite: Successful completion of Pre-Calculus or Pre-Calculus Advanced with an average of 80 or better in both the course and overall average. Approval rests with the Pre-Calculus teacher and the Department Chair.

AP Calculus AB:

This course is designed to prepare the student for the Advanced Placement Examination, which each student **MUST** take in May in order to receive credit for the course. It is expected that students taking this course will seek college credit and will take Calculus II in college, if they earned a 3 (qualified), 4 (well qualified) or 5 (extremely well qualified) on the examination. The course demands higher-level skills (application, analysis, synthesis and evaluation), a monumental amount of work both in class and out of class, and substantial amounts of time. The student **MUST** have a thorough knowledge of college preparatory mathematics, including algebra, axiomatic geometry, trigonometry and analytic geometry (rectangular and polar coordinates, equations and graphs, lines, and conic sections). (1 credit)

During the summer the student **MUST REVIEW** the entire Pre-Calculus course in preparation for a September examination. The course will culminate with the Advanced Placement examination that **MUST** be taken. The course includes all concepts of Pre-Calculus; analysis of limits and their properties, explicit and implicit differentiation, applications of differentiation, transcendental functions, and techniques of integration with applications.

The Texas Instruments TI-83 or TI-84 calculator will be used for the course.

Prerequisite: Successful completion of ADVANCED Pre-Calculus with an average of 80 or better in both the course and overall average or successful completion of Pre-Calculus with an average of 85 or better in both the course and overall average. Approval rests with the Pre-Calculus teacher and the Department Chair.

AP Calculus BC:

This course is designed for the student who has completed successfully the Advanced Placement Calculus AB program. This course demands higher-level skills (application, analysis, synthesis, and evaluation). Advanced Placement Calculus BC contains **all** AP Calculus AB topics. Some additional topics are: parametric, polar, and vector functions; slope fields; applications of integrals to physical, social, and economic models; improper integrals; logistic equations; and Taylor series. (1 credit)

The Texas Instruments TI-83 or TI-84 calculator will be used for the course.

Prerequisite: Successful completion of Advanced Placement Calculus AB and the approval of the calculus teacher.

AP Statistics:
This course is designed to prepare the student for the Advanced Placement Examination, which each student **MUST** take in May in order to receive credit for the course. The course concludes with a statistics research project in place of a June examination. Statistics will deal in the collection, processing, analysis and interpretation of data. This course contains: frequency distributions and graphs; data description; counting techniques; probability and probability distributions; normal distribution; confidence intervals and sample size; hypothesis testing; testing the difference between means and proportions; correlation and regression; analysis of variance. **The Texas Instruments TI-83 or TI-84 calculator will be used for the course. (1 credit)**

Prerequisite: Successful completion of ADVANCED Pre-Calculus, Calculus or AP Calculus with an average of 80 or better in both the course and overall average or successful completion of Pre-Calculus or ADVANCED Algebra II/Trigonometry with an average of 85 or better in the course and overall average. A minimum score of 600 on the Verbal portion of the PSAT is essential. Approval rests with the teacher of the prior mathematics course and the Department Chair.

NOTE: A student may take either Statistics or AP Statistics, but cannot take both courses while at McQuaid.

PHYSICAL EDUCATION

The Physical Education Program at McQuaid Jesuit consists of two phases. The Core Program is for students in grades 6, 7, 8, 9 and 10 while the Elective Program is for students in grades 11 and 12. In the Core Program, students are taught basic and intermediate-level skills in a variety of seasonal team sports. The Elective Program is centered on individual sports that possess "carry over" value. Each student has the ability to select an activity from a number of different offerings in order to meet his interests.

Incorporated into the Physical Education Program is a portion of the Health curriculum. Health Education is mandated for all 10th graders. 10th grade students meet once a cycle to meet their requirement for health studies. This is done to help fulfill the requirements mandated by New York State.

SCIENCE DEPARTMENT

Three years of high school science (including Biology) taken at McQuaid Jesuit are required for graduation. Chemistry, Physics and Forensic Science are electives available for students in the upper years. Advanced Placement courses in Biology, Chemistry, Environmental Science, Physics and Psychology are taken by those who wish to prepare for the AP Examinations and possible college credit. All science courses include laboratory investigations as well as classroom work. Sustained study is required in these courses in order to grasp the new language of symbols and equations used in science and in order to learn to relate numbers to measurable dimensions in the laboratory. A common thread runs through all the department's courses enabling concepts and skills assimilated in the first courses to be utilized and enlarged upon in the upper-level ones. Extensive use of computers is involved in many of the courses. Simulations, data gathering, spreadsheets and graphics, and on-line research are the specific areas in which this technology is utilized.

McQuaid Jesuit is offering an engineering opportunity through Project Lead the Way. Students completing PLTW courses at McQuaid Jesuit may elect to earn college credit through the Rochester Institute of Technology (RIT). **Principles of Engineering**, a PLTW course, is will be offered through the Science Department and is described in this section. A full description of PLTW can be found in the Special Programs section on page 30.

Conceptual Physical Science (CPS):
This is a physical science course offered to eighth graders and freshmen. The goal of this course is to give the students a solid foundation for the physical science courses that they will be encountering in the high school, especially chemistry and physics. Topics include: graphing, scientific notation, Newtonian physics, energy, the atom, the periodic table, chemical bonding, chemical reactions and atomic energy. Classroom work is enhanced by a strong hands-on laboratory component. Students are encouraged to use the scientific method in a cooperative-learning, team environment. Computer technology is incorporated into the course when appropriate.
Intended for: students in grades 8 or 9
Co-requisite: Algebra or Algebra Accelerated 8. Departmental approval required for 8th grade.

Biology
This *Biology* course utilizes an inquiry-based approach to teach life science and processes. The emphasis for this class is placed on teaching the students scientific methods, critical thinking, reading for information, and analysis in order to learn biological concepts. Students will take a "learning by doing" approach in the classroom, and will be able to apply the skills learned in this class to future courses, not just in science, but across all disciplines.
Intended for: students in grades 9 or 10
Prerequisites: CPS or Earth Science

Biology Advanced
This course continues the development of the scientific inquiry techniques that have been stressed in the freshman year courses. The *Biology Advanced* course is designed to present students with both the knowledge and the tools necessary to understand science. Every effort is made to teach students how to approach science in the proper way. In addition, mathematical concepts and skills are introduced that demonstrate biology is a quantitative science. The emphasis is on learning processes and approaches rather than pure content. Students are expected to prepare for and perform in laboratory situations, where the interpretation and analysis of laboratory data are expected. This survey of the major areas of biology includes: biochemistry, molecular biology, cell theory, cell physiology, genetics, evolution, reproduction/development, and human physiology. Students develop an insight into the role of living things in the complex world around them at an accelerated pace.
Intended for: students in grades 9 or 10
Prerequisites: The student must have completed Life Science, Earth Science, and CPS. (Accelerated 9th graders may be exempt from taking Earth Science.). Students must have a final average of 90% or higher in CPS. In addition, the recommendation of the CPS instructor and approval of the Biology Advanced instructor are also required.

Chemistry
This course is designed to give the student a thorough background in fundamental chemical concepts. This includes a study of matter and the changes that it undergoes. The course examines both qualitative and quantitative aspects of chemistry, with an emphasis on the latter. Laboratory experiments supplement the classroom lectures with practical applications of theory. This course is highly recommended for any student planning future study in the sciences. This class is not designed for students expecting to take AP Chemistry or AP Biology.
Intended for: students in grades 10 or 11
Prerequisites: Biology or Biology Advanced

Chemistry Advanced:
This course is designed to cover Chemistry in greater depth and breadth and at a faster pace than Chemistry. It is designed to prepare students for future AP Science classes, particularly AP Chemistry. It is the third course in the traditional science sequence, following CPS and Biology. In this course, the understanding of the physical nature of the world is developed through a two-pronged approach. Students will look at the topics using a conceptual particulate approach and tackle them with quantitative vigor. They should come to see chemistry as the "central science"

as it links together much of what they have seen before and will see in the future. There will be an emphasis on relating molecular structure to the properties of materials and their applications in the "real world". Numerous chemical demonstrations and laboratory experiments will compliment the classroom material, putting theory into action. Laboratory experiments reinforce basic lab skills and introduces students to new equipment, such as pH meters, conductivity probes and much more. Most importantly, students will learn how to organize data and carry out appropriate analysis and calculations. The level of work is expected to bring the course closer to the that at the AP level. A superior work ethic is essential .
Intended for: Students in grades 10 or 11
Prerequisite: The student should have at least a 93% average in Advanced Biology. The student must have a strong work ethic, and the approval of the instructor. Furthermore, a positive recommendation must be provided by the current Science instructor. Advanced Chemistry is a rigorous course and requires a significant amount of work to be done outside of the classroom.

Advanced Placement Chemistry:
This course is based on Six "Big Ideas" and new Science Laboratory Practices. The course covers the fundamental principle of Chemistry on a college level giving the student a deeper understanding than the introductory course. The course looks at Chemistry on a more "molecular" level and connects the properties observed in the "real world" with a basis in the molecular world. There is a new focus on critical thinking, problem solving, teamwork and collaboration. The laboratory is based on the collaboration of Laboratory teams which work together to produce a body of experimental work which serve as a basis for discussion and learning. The laboratories utilize a variety of equipment to include pH meters, spectrometers, temperature, pressure, and conductivity probes to name a few, thereby introducing the student to equipment they may see in the future. The laboratory experience mirrors the experience one may have in a University or Corporate research lab. A superior work ethic is essential! Students MUST take the AP Chemistry exam in May in order to receive credit for the course. (1 credit)
Intended for: students in grades 11 or 12
Prerequisite: Chemistry Advanced

Physics:
This elective course introduces the student to the most basic science - the behavior and structure of matter. Major topics include kinematics, dynamics, circular and planetary motion, momentum, work and energy conservation, thermodynamics, static and circuit electricity, magnetism, waves, optics and nuclear physics. This course is a combination of traditional lecture, teacher demonstrations, inquiry-based labs and concept-supporting labs. Students use Excel or Logger Pro to graph lab results. The course is for seniors and juniors who either have completed Algebra II/Trigonometry or will take Algebra II/Trigonometry concurrently with Physics. (1 credit)

Note: If Physics is taken the student may NOT take AP Physics 1 in a future year, however he may take AP Physics 2 if he achieves a 90 or higher.
Intended for: students in grades 11 or 12
Prerequisites: The student should have an 80 or better final average in both Chemistry and Algebra II/Trigonometry (or higher-level Math). If the student has not completed Algebra II/Trigonometry, permission of the instructor is required.

Principles of Engineering:
This is a Project Lead the Way® certified course designed to help students discover if a career in engineering meets their interests and abilities. This hands-on, project based course concludes with a PLTW end-of-course examination. Major topics include Energy and Power (energy applications and mechanisms) Materials and Structures (statics and material testing), Control Systems (machine control, machine design and fluids), and Statics and Dynamics. This is a project-based course which also includes traditional lecture and teacher demonstrations, and team engineering challenges. Students will build gear trains and sprocket systems, and design and control hydraulic and pneumatic devices through software. To earn college credit, a

student must attain a final course average of at least 85 and successfully pass an end-of-year PLTW examination. (1 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: The student should have completed or be enrolled in Algebra II/Trigonometry with an average of 80 or higher.

AP Biology
Advanced Placement Biology is taught using a comprehensive college textbook and the College Board approved laboratory manual. The emphasis of this course is an extensive survey of all areas of biology. The course is structured around the Four Big Ideas proposed within the AP Biology Curriculum Framework. Students will be asked to utilize their critical thinking skills and problem-solving abilities. This course includes the "Science as a Process" emphasis, which involves understanding how biological concepts are researched. Much of the laboratory experience is student-centered, mirroring the collegiate-level experience. Many of the labs are inquiry-based, stressing experimental design, mathematical reasoning, and interpretation and analysis of collected data. Students are required to take the AP Biology Exam in May in order to receive credit for the course. Completion of a summer homework assignment is required as well.
Intended for: students in grades 11 or 12
Prerequisites: The student must have a final average of 90% or higher in both Biology Advanced and Chemistry Advanced. (Averages of 95% are needed in Biology and Chemistry). In addition, it is strongly recommended that the student have a score of 600 or higher on both the Math and Verbal sections of the PSAT. Furthermore, it is strongly recommended that the student should have already completed AP Environmental Science before enrolling in AP Biology. Approval of the AP Biology instructor is also required.

Advanced Placement Chemistry:
This course is based on Six "Big Ideas" and new Science Laboratory Practices. The course covers the fundamental principle of Chemistry on a college level giving the student a deeper understanding than the introductory course. The course looks at Chemistry on a more "molecular" level and connects the properties observed in the "real world" with a basis in the molecular world. There is a new focus on critical thinking, problem solving, team work and collaboration. The laboratory is based on the collaboration of Laboratory teams which work together to produce a body of experimental work which serve as a basis for discussion and learning. The laboratories utilize a variety of equipment to include pH meters, spectrometers, temperature, pressure, and conductivity probes to name a few, thereby introducing the student to equipment they may see in the future. The laboratory experience mirrors the experience one may have in a University or Corporate research lab. A superior work ethic is essential! Students MUST take the AP Chemistry exam in May in order to receive credit for the course. (1 credit)
Intended for: students in grades 11 or 12
Prerequisite: The student should have at least a 93% average in Advanced Chemistry and Advanced Biology. The student must have a strong work ethic and the approval of the instructor. Furthermore, a positive recommendation must be provided by the current Science instructor. AP Chemistry is a rigorous course and requires a significant amount of work to be done outside of the classroom, including a summer assignment. The summer assignment is substantial and is due the first week of school. Additionally, an exam will be given the second week of school to assess preparedness.

AP® Physics 1 – Algebra Based:
This course has a narrower scope than regular physics, but investigates topics in much more depth. It is designed to be equivalent of a first semester introductory college-level algebra-based physics course. The course is a combination of teacher demonstrations, inquiry-based labs and concept-supporting labs. Students use computers to graph and interpret data and study from a college text, and will work in small groups to complete and in some cases develop labs to prove

concepts. Students will record observations and data in a detailed laboratory notebook. Solid mathematical ability is essential, especially trigonometry and solving multiple equations. Topics include Mechanical Physics (kinematics, dynamics, circular and planetary motion, momentum, torque and rotational motion, simple harmonic motion, waves, sound, work and energy conservation) and Electricity (static electricity and simple electric circuits). STUDENTS MUST TAKE THE AP PHYSICS 1 EXAM in May in order to receive course credit. (1 credit)
Intended for: students in grades 11 or 12
Prerequisites: AP Physics 1 may be taken without completing a previous course in Physics. The student should have a 90 or better final average in both Chemistry and Algebra II/Trigonometry (or higher-level math), and average of 80 or better in other subjects. A student that has a 90 in one subject and an 85 in another may still take the courses but only with approval of the instructor (Mr. DeBaise).

AP® Physics 2 – Algebra Based:
This course has a narrower scope than regular physics, but investigates topics in much more depth. It is designed to be equivalent of a second semester introductory college-level algebra-based physics course. The course is a combination of teacher demonstrations, inquiry-based labs and concept-supporting labs. Students use computers to graph and interpret data and study from a college text, and will work in small groups to complete and in some cases develop labs to prove concepts. Students will record observations and data in a detailed laboratory notebook. Solid mathematical ability is essential, especially trigonometry and solving multiple equations. Topics include heat (thermodynamics, ideal gases and kinetic theory), fluids (static and dynamic), electricity (electrostatics, electric fields, forces and potential, electric DC and RC circuits), magnetism and electromagnetic induction, optics (geometric and physical) and modern physics (quantum, atomic and nuclear). STUDENTS MUST TAKE THE AP PHYSICS B EXAM in May in order to receive course credit. (1 credit)
Intended for: students in grades 11 or 12
Prerequistes: Students must complete and pass AP Physics 1 or receive a 90 or higher average in regular Physics and have an average of 80 or better in other subjects.

Note: Only one Physics course per year is allowed at McQuaid Jesuit.

Advanced Placement Psychology:
The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Students MUST TAKE THE AP PSYCHOLOGY EXAM in May in order to receive credit for the course. (1 credit)
Intended for: students in grades 11 or 12
Prerequisites: It is strongly recommended that the student have a cumulative average of 90% or better in English. In addition, students are considered according to: reason for application, cumulative grade average (especially Biology), PSAT Verbal scores. All possible candidates are strongly recommended to meet with the instructor of the course to learn more about the depth and requirements of the course. Permission of the instructor is required.

Advanced Placement Environmental Science
This is an interdisciplinary course providing students with the scientific principles, concepts and methodologies required to understand the interrelationships in the natural world. Students will first investigate ecological and population biology principles in depth. Students will then learn to analyze natural and human-induced environmental problems, to evaluate the relative risks associated with these problems and to examine alternative solutions for resolving and/or preventing them. Field work, experimental design, and problem solving skills are heavily stressed in this course. Projects/field work include designing and building a self-contained living ecosystem, chemical and biological aquatic ecosystem analysis, producing biodiesel fuel from waste oil, designing and building a solar race car, and whitewater rafting in Letchworth Park.

Students MUST TAKE THE AP ENVIRONMENTAL SCIENCE EXAM in May to receive credit for the course. (1 credit)

Intended for: students in grades 11 or 12

Prerequisites/Co-requisites: Students must currently be taking chemistry or have taken chemistry with a final grade of 88 or better and must have an 88 or better in biology. It is strongly recommended that the student have a minimum of 550 on the Math portion and 600 on the verbal portion of the PSAT test. Permission of the instructor is required.

Introduction to Forensic Science:

Forensic Science is an interdisciplinary science course which incorporates biology, chemistry, physics, mathematics, technology, social studies, and higher level processing skills. The Forensic Science course will explore a number of main topics, including the history of forensics, types of evidence, crime scene processing, hair and fiber analysis, blood spatter analysis, fingerprinting, forensic anthropology, ballistics, and DNA analysis. The course will rely heavily on textbook readings, forensic science journal articles, laboratory exercises, and the utilization of videos. (1 credit)

Intended for: students in grades 11 (with instructor approval) or 12

Prerequisites: The student should have a final average of 85% or higher in both Biology and Chemistry, or the approval of the course instructor.

Introduction to Anatomy and Physiology

This is a demanding, college-preparatory elective science course designed for those interested in science-related fields, especially biology and health careers. This course will provide students an opportunity to explore the intricate and detailed relationship between structure and function in the human body. Topics students will cover include: homeostasis, anatomical structures, cytology, histology, physiological systems and disorders, and medical diagnosis and treatment. Laboratory activities will include microscopic analyses of tissues and a number of dissections, including a cat and other appropriate organs.

Intended for: students in grades 11 or 12

Prerequisites: The student must have a final average of 95% in Biology Advanced and a 90% in Chemistry Advanced. In addition, it is strongly recommended that the student should have a score of 600 or higher on the Math and Verbal sections of the PSAT, as well as having completed AP Biology. Approval of the Anatomy & Physiology instructor is also required.

Science Laboratory Assistant;

A student may ask to be considered for the position of laboratory assistant in any of the science courses offered above. The assistantship is a full-year course. The assistant's performance will be reviewed regularly and letter grades based upon performance will be given. Highly motivated and responsible students will be those most often accepted for the assistantship. Preference will be given to seniors. (1 credit)

Intended for: students in grade 12

Prerequisites: An 85 or better average in the subject in which the student will be assisting. Prior permission of the teacher of the subject or, if the student is qualified in several subjects and willing to help in whichever needs help most, prior permission of the department chairperson.

Chemistry Laboratory and Research Assistants:

The position of Chemistry Lab and Research Assistant is for the student who is curious and has a passion for science. The Chemistry Laboratory and Research Assistant Position(s) will involve setting up and cleaning up General and AP Chemistry Laboratory Experiments, chemical demonstrations, and generally providing support for the Chemistry group. It will also include an opportunity for a student to explore a topic of interest which could be developed into a General Chemistry Lab, or an Inter-disciplinary project between science classes. It is hoped that with the new STEM facilities that a relationship with local college faculty may be established such that the student(s) may participate in college level research. The work would be conducted at McQuaid in conjunction with Dr. Rogalskyj and college researchers. This type of activity is

invaluable in that it allows the student to further develop laboratory skills, critical thinking skills and provides them with an opportunity to showcase their interests and accomplishments in science while traversing the college process.The assistant-ship is a full-year course. The assistant's performance will be reviewed regularly and letter grades based upon performance will be given. Highly motivated and responsible students will be those most often accepted for the assistant-ship. The student must currently be enrolled in AP Chemistry or have taken AP Chemistry. Students must have permission from Dr. Rogalskyj. Preference will be given to seniors. (1 credit)
Intended for: students in grade 12
Prerequisite: Instructor permission

SOCIAL STUDIES DEPARTMENT

Four years of Social Studies are required for graduation.

FRESHMAN YEAR

Global Studies I:
This is the introductory course to social studies at the high school level. The course focuses on the study of the important dynamics at work in the world today, with the emphasis on the growth and development of those forces or pressures that bring change to the world. We will develop a better understanding and toleration of other cultures. Also, being an introductory course, the focus will be on acquiring skills for the current and future social studies classes. These skills are in the areas of: note taking, reading comprehension, map reading, test taking, and essay writing.

To accomplish these goals, we will examine the dynamics of geography, population (hunger, poverty), culture (religion, language, diversity), technology, political systems (power, war, leadership), social systems (family structures, roles), economic systems, environmental issues, human rights (international justice), and apply them to early humans, ancient civilizations, and regions such as: Latin America, China, Japan, Southeast Asia, Africa, and India. Students will study, examine, and express their ideas on these themes by using their acquired skills. (1 credit)
Intended for: students in grade 9
Prerequisites: None

SOPHOMORE YEAR

Global Studies II:
This course is a humanities-based program in which the major cultural achievements of the West are stressed. The course is chronological in approach. Its goal is to familiarize the student with major Western traditions and institutions as seen through the arts, architecture, literature, economics and politics. (1 credit)
Intended for: students in grade 10
Prerequisite: Global Studies I

A.P. World History:
Advanced Placement World History is a full year course offered to sophomores who have an aptitude for history and want to challenge themselves. This course satisfies the Global Studies II requirement. The general outline of the course follows that prescribed by the College Board to prepare for the A.P. exam in May and future college history courses. The course follows a chronological format from early man to modern times, emphasizing the similarities and changes between regions and societies throughout history. (1 credit)
Intended for: students in grade 10
Prerequisites: students must have a final average of 90% in both English 1 and Global Studies 1.

JUNIOR YEAR

American History:

This course is an economic, political and social history of American life and institutions. Emphasis is placed upon those historical experiences and developments that have been fundamental in the emergence of the American identity. The course places the American experience in a local and a global context. (1 Credit)

Intended for: students in grade 11

Prerequisite: Global Studies I and Global Studies 2

AP United States History:

This course is an introductory college-level course leading to **the Advanced Placement Examination, which students must take in order to receive credit for the course**. History is studied intensively, with greater attention to both detail and depth. There is a challenging workload of reading and writing assignments. For qualified juniors, AP United States History is an alternative to the regular American History course. (1 Credit)

Intended for: students in grade 11

Prerequisites: Global Studies I and Global Studies 2. Admission to AP American History is through application to the department. Consideration for the class will be given to students based on Global Studies 2 grades (cumulative average above 90%), English grades (cumulative average above 90%), PSAT scores, the recommendation of current teachers, and approval of the chairperson.

SENIOR YEAR

Economics & Finance*:

This is a one-credit full year course that fulfills the senior year social studies requirement. This course examines current issues involving our economic systems. Students will participate in an examination of microeconomics and macroeconomics. Concepts such as supply and demand, elasticity, consumer choices, factor markets, product markets, taxes, international trade, monetary policy, fiscal policy, money and banking will be covered. Additional emphasis will be placed on current events within these fields of study. The personal finance aspect of this course will focus on the topics of investing, budgeting, savings, taxes, credit, and loans. These topics will be related to the students' lives now and in the future. The course will be taught through lectures, group work, class discussion, and guest speakers. Assessments will include papers, quizzes, tests, presentations, projects, and class participation. (1 Credit)

Intended for: students in grade 12

Prerequisite: Global Studies I, Global Studies 2, American History or AP United States History

Government & Law*:

This is a one-credit full year course that fulfills the senior social studies requirement. The fall semester Government segment will explore the United States government through the U.S. Constitution and the three branches of government it established. Students will study basic principles of democracy, political behavior, and the role played by political parties, interest groups, and the media in the political process. Topics will include analysis of elections and a case study of the process by which a government decision is made. During the spring semester the Law segment will be a general survey of both criminal and civil law with a focus on the impact of our legal system on the average citizen. Assessments will include tests, papers, projects and class participation. (1 Credit)

Intended for: students in grade 12

Prerequisite: Global Studies I, Global Studies 2, American History or AP United States History

AP European History*:

This is an introductory college-level course leading to the **Advanced Placement Examination, which students must take in order to receive credit for the course**. For seniors who qualify, it is offered as an alternative to the Government and Economics course. The course begins in 1450 (High Renaissance). This leads to a detailed study of the Renaissance, the Age of Absolutism, Romanticism, Realism, World War II and post war and contemporary Europe. The course develops a student's oral and written skills as well as his knowledge of European History. (1 Credit)

Intended for: students in grade 12

Prerequisites: Global Studies I, Global Studies 2, American History or AP United States History. Admission to AP European History is through application to the department. Consideration for the class will be given to students based on American History grades (cumulative average above 90%), English grades (cumulative average above 90%), PSAT/SAT scores, the recommendation of current teachers, and approval of the chairperson.

AP Macroeconomics and AP Microeconomics*:

This is a full-year course that is designed to give students a thorough understanding of the principles of economics that apply to an economic system as a whole and to the individual. Macroeconomics deals with the study of national income and price determination and also develops a student's familiarity with economic performance measures (GDP, inflation, unemployment), economic growth and international economics. Microeconomics deals with the study of opportunity costs and trade-offs, production possibilities curves, alternative economic systems, supply and demand, elasticity, consumer choices, costs and revenue, and the role of government in our economy. The course is taught through lectures, group work and class discussions. Assessments will include essays, quizzes and tests. **The ADVANCED PLACEMENT EXAMINATION for each topic will be administered in May and STUDENTS MUST TAKE BOTH TESTS to receive credit for the course.** For those colleges and universities accepting AP credit, each test is worth 3 credits, for a total of 6 college credits. (1 Credit)

Intended for: students in grade 12

Prerequisite: Global Studies I, Global Studies 2, American History or AP United States History. Admission to AP Economics is through application to the department. Consideration for the class will be given to students based on American History grades (cumulative average above 90%), English grades (cumulative average above 90%), Math grades (cumulative average above 90%), PSAT/SAT scores, the recommendation of current teachers, and approval of the chairperson.

***Seniors can satisfy their social studies requirement by taking Economic & Finance or Government & Law or AP European History or AP Macroeconomics & AP Microeconomics**

ELECTIVES

U.S. History Through Film:

This elective course is open to eleventh and twelfth grade students. It is a full-year, 1 credit course. The class offers the study and analysis of classic American films, shorts and documentaries. Each film will be examined for its historical content. In addition, students will be presented lectures and readings that explore the era and circumstances under which each film was produced. When possible, the course adheres to a chronological approach, beginning with The American Revolution and concluding with the election of Bill Clinton. Student assessment includes class discussion, brief writing assignments and tests. Semester evaluations will center on written student reviews of films viewed outside of class. Film selection for both class and student assignments will include topics such as: propaganda, institutions, politics, injustice, racism, anti-semitism and war. (1 Credit)

Intended for: students in grades 11 or 12

Prerequisites: none

Current Events & Contemporary Issues:
This course has two main dimensions. First, ongoing discussion and analysis of current events will comprise the bulk of class activity. As today's history unfolds, it will be related to previous historical occurrences, ideas, and forces. Students will contrast and compare today's events with their precedents.

The second aspect of this course will be a thorough analysis of how information is obtained in the media age. Print, online, and broadcast sources will be compared throughout the year. Ownership of these sources will be explored. An international perspective will be achieved as students compare domestic media coverage of world events with the coverage provided by media in all other parts of our world.

Students will need Internet access on a daily basis for this course, and may be asked to subscribe to news and information sources in place of the usual textbook expenses. Daily monitoring of the news is required. (1 Credit)
Intended for: students in grade12
Prerequisites: none

American Military History:
This is an elective course that will examine the issues, events, and individuals that shaped American history during each of the major conflicts in which the nation has participated. The course will explore how industrial and technological change has influenced the American way of war and how American military power has been used to achieve national strategic objectives. Students will analyze the decision-making process used by military leaders at key moments during wartime. Assessments will include tests, written assignments and class participation. (1 Credit)
Intended for: students in grades 11 or 12
Prerequisite: enrollment in or completion of American History or AP United States History

Eco-Logic:
This course is designed to encourage a reconnection and better understanding of the natural world. Students will explore and research the dynamics of contemporary issues regarding the environment and our place within it. The course develops a better understanding of what being sustainable and a good steward means through hands on cultivation and maintenance of McQuaid's gardens and permaculture landscape area. (1 credit)
Intended for: students in grade 12
Prerequisites: none

Introduction to Speech and Debate:
This course will help students to become effective researchers, persuasive writers, and confident communicators. They will gain an understanding of basic argumentation and learn to formulate cogent arguments on both sides of an issue. Students will be required to write affirmative and negative cases for both Lincoln-Douglas and Public Forum debate topics and to research, prepare, and perform speeches for Extemporaneous Speech and Original Oratory. In so doing, they will become engaged with and informed about the myriad issues of social justice and public policy in the world around them. Students will also study diverse speeches and presentations in order to analyze the components of effective public discourse.
Students will be graded on their written work and oral presentations. Extra credit will be available to students who choose to participate in speech and debate tournaments throughout the competitive season. (1 credit)
Intended for: students in grades 9, 10, 11, or 12
Prerequisites: none

Advanced Speech and Debate

This course is designed for students who have demonstrated a commitment to excellence in competitive forensics. Students will conduct in-depth analyses of the Public Forum and Lincoln-Douglas debate topics each month and will continue to hone their research, case-writing, and debating skills through individualized coaching and intensive drills. Students will also gain increased confidence as public speakers by competing in both public address and limited-prep events at the local and/or national level.

Intended for: students in grades 9, 10, 11, or 12

Prerequisite: instructor permission

SPECIAL PROGRAMS

Christian Service Program

Serving others is an intrinsic part of the education and formation of McQuaid Jesuit students. High school students have yearly guidelines that include thematic service requirements related to pillars of Catholic Social Teaching. Students must fulfill these requirements to receive a diploma and graduate.

What is "service"?
Service involves any work done for the good of others without monetary compensation. Volunteer service is also done when students offer to work without promise of reward, or an achievement of rank or status in an organization. Volunteer work can be completed for any individual or organization that has legitimate need and is not a family member. Service for McQuaid Jesuit's program cannot also be counted for some other requirement such as: Confirmation projects, Eagle Scout projects, Counselor In Training programs, etc.
All students must complete a minimum of one hundred (100) hours of service during their high school career. Service hours are acquired any time between Freshman and Senior years, from the summer (July 1) preceding Freshman year until the day the Capstone Project is due, typically at the end of May, Senior year. However, the expectation is that each year students will complete the hours designated for that year. This will keep students on track and avoid being caught short in their upper class years. In addition, by making their service hours year by year, it will help them internalize being "men for others." Service may be done during the school year, on weekends, during summers, etc. Students who perform volunteer work while absent on a regularly scheduled school day will not receive credit for that time.
The following is the expected plan for all students to meet their service requirement. Service hours are divided into yearly "theme" and "non-theme" hours as described below. Theme hours are expected to involve direct contact with the people to be served as much as possible. For instance, in Sophomore year, the theme is "The Life and Dignity of the Human Person" and an example is volunteering at a nursing home. That service should involve direct contact with the residents, not cutting the nursing home's lawn. Non-theme hours include service to others, including McQuaid Jesuit, which do not fit within the themes described below.
FRESHMEN will volunteer at least ten (10) theme hours of service during their Freshman year or the summer preceding it. The theme is "Care of God's Creation." Examples of service for this theme include neighborhood clean-up, work with animal shelters or environmental organizations, park beautification, etc.
SOPHOMORES will volunteer at least twenty (20) theme hours of service during their Sophomore year or the summer preceding it. The theme is "The Life and Dignity of the Human Person." Fulfilling this thematic requirement can include working to help the elderly, the sick, and the unborn. Examples are volunteering at a hospice, a nursing home, a crisis nursery, walks to support Birthright, research for MS, breast cancer, the March for Life trip, the annual Break for Life conference, etc.
JUNIORS will volunteer at least twenty (20) theme hours of service during their Junior year or the summer preceding it. The theme is "Option for the Poor." Examples of service for this theme include volunteering at soup kitchens, homeless shelters, food banks, inner city neighborhood centers and schools, migrant ministry, and service trips.
SENIORS must participate in the Capstone Project. Students will choose an approved not-for-profit agency where they will volunteer a minimum of twenty-five (25) hours of service. The Capstone Project is intended to be the culmination of a student's service learning during his high school career. The Service Director must approve all Capstone Projects. A full description of this program can be found on the Capstone page on the website.
If a senior has completed at least seventy-five hours of service during his high school career (not including any middle school hours) he is only required to complete the twenty-five hours of service through his Capstone Project during Senior year. If a senior has not completed seventy-five hours of service during his high school career, he must volunteer enough hours during his Senior year to fulfill the one hundred hour service requirement for high school, including the required number of theme hours for each of the preceding three years.

ALL STUDENTS are encouraged to continue in the "MAGIS TRADITION", to go beyond the minimum requirements in the spirit of doing "the greater good" for others. Seniors who have gone well above the requirements are acknowledged at the Spring Honors Assembly.

Documentation of Hours

To receive credit for a volunteer activity, students must submit a timesheet to the Service Director. Service hours can be submitted on the McQuaid Jesuit website, and timesheets are also available in the Campus Ministry office. All submitted activities are reviewed and confirmed by the Service Director.

Failure to complete the service requirement and all of its components has the same penalty as failure to complete any school requirement for graduation: a student will not receive a McQuaid Jesuit diploma or graduate until the requirement is met.

Middle School Requirement

The Middle School has a separate requirement of 5 service hours per year for 6th, 7th and 8th grade. Students can see the Service Director for suggestions of appropriate volunteer activities.

Engineering Program

Project Lead the Way

McQuaid Jesuit offers the Project Lead the Way (PLTW) Engineering program in partnership with its New York State higher education affiliate, the Rochester Institute of Technology (RIT). PLTW is a nationally recognized organization dedicated to providing opportunities in Science, Technology, Engineering, and Math (STEM) subjects. These courses offer students the opportunity to explore engineering as a career option while at the same time earning college credit.

Students enrolled in PLTW classes participate in a hands-on, activity oriented program that utilizes team efforts, reinforces their study of math and science, and explores a major career path that, if they wish to continue, will prepare them for further education in the field of engineering or engineering technology.

Currently, McQuaid Jesuit offers three PLTW classes: Introduction to Engineering Design, Principles of Engineering, and Computer Science Principles. Students completing these courses may elect to earn college credit through RIT, or in the case of the Computer Science Principles class, via AP examination. RIT serves as New York State's national affiliate for PLTW.

To earn RIT credit, a student must attain a final course average of at least 85 and successfully pass an end-of-year PLTW examination. A student has until the following November after successful completion of the course to register with RIT for credit.

As part of the PLTW affiliation agreement, and in addition to the three courses currently offered, McQuaid likely will offer advanced classes depending on capacity and interest. Future classes will be drawn from the following options: Digital Electronics, Computer Integrated Manufacturing, Aerospace Engineering, Biological Engineering, and Civil Engineering and Architecture.

Engineering Courses:

Introduction to Engineering Design:

This is a Project Lead the Way® certified course designed to help students discover if a career in engineering meets their interests and abilities. This hands-on, project based, technology enriched course concludes with a PLTW end-of-course examination. The course includes the following units of study: design process, technical sketching and drawing, measurement and statistics, modeling skills, geometry of design, reverse engineering, documentation, advanced computer modeling, design team, and design challenges. This is a project-based course which also includes traditional lecture and teacher demonstrations, and team engineering challenges. Students will complete physical and virtual two-dimensional and three-dimensional models, learn team concepts, complete oral presentations, use spreadsheet and computer aided design (CAD) software to store, manipulate, represent, and analyze data, learn and incorporate engineering design principles, and apply mathematical and scientific methods to guide, test, and

evaluate prototypes and solutions. To earn college credit, a student must attain a final course average of at least 85 and successfully pass an end-of-year PLTW examination. (1 credit)
Intended for: Grades 9,10,11,12
Prerequisites: Each student must have at home a Windows based computer with the following minimum requirements: Intel Xeon, i5 or i7, 250 gb hard drive, 5gb RAM, Windows 7 or 8 64 bit OS installed.

Principles of Engineering:
This is a Project Lead the Way® certified course designed to help students discover if a career in engineering meets their interests and abilities. This hands-on, project based course concludes with a PLTW end-of-course examination. Major topics include Energy and Power (energy applications and mechanisms) Materials and Structures (statics and material testing), Control Systems (machine control, machine design and fluids), and Statics and Dynamics. This is a project-based course which also includes traditional lecture and teacher demonstrations, and team engineering challenges. Students will build gear trains and sprocket systems, and design and control hydraulic and pneumatic devices through software. To earn college credit, a student must attain a final course average of at least 85 and successfully pass an end-of-year PLTW examination. (1 credit)
Intended for: students in grades 10, 11, or 12
Prerequisites: The student should have completed or be enrolled in Algebra II/Trigonometry with an average of 80 or higher.

AP Computer Science Principles:
This is a joint College Board/Project Lead the Way® certified course. It is a hands-on, project based, technology enriched course which concludes with two distinct options: taking the AP Computer Science Principles exam or the end of year PLTW assessment. The course is designed as an introductory college-level computer course with emphasis on using engineering design and problem solving methods to create computer applications. In this course, students work in teams to develop problem solving skills within a group context. The course does not seek to teach mastery of a single programming language but intends instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. In the course, students will explore tools such as Scratch, App Inventor, Python, GitHub, HTML/CSS/MySQL and Net Logo modeling software to gain a broad experience with computers. Building enthusiasm for rigorous computer science is a goal of the course, but providing students a solid foundation for use in all disciplines is the most desired outcome. Students must take the AP exam in May. (1 credit)
Intended for: students in grades 10, 11, 12
Prerequisite: completion of, or enrollment in Algebra II/Trigonometry

THE MIDDLE SCHOOL PROGRAM

SCIENCE

Science 6:
Our Integrated Science course is designed to help students understand the importance of formulating scientific questions and developing the appropriate methodology to answer them. Students will learn how to make a hypothesis, participate in experiments, analyze data, and form conclusions. Students will be introduced to key concepts in both earth and life sciences, namely, the scientific method, the solar system, plate tectonics, earth systems, cell biology, evolution, genetics, plant structure, electromagnetism, mechanical waves, and magnetism. The ultimate goal is for students to appreciate the vast field of science and to develop analytic skills that can be applied to all areas of study.

Science 7:

The curriculum for life science is designed to provide a foundation for high school biology. Basic biological principles aimed at understanding the life processes common to all living things are covered. Students will begin by learning about life on the cellular level and proceed through the structure and function of organisms including human systems. Fields of study include cell biology, cell chemistry, genetics, evolution, taxonomy, botany, and human anatomy. This course includes laboratory investigations of life science concepts which utilize abstract and critical thinking, inquiry skills, and scientific reasoning.

Environmental Earth Science:
Environmental Earth Science is a modern take on the Earth Science curriculum, in which classic Earth Science topics such as Geology (the solid Earth) and Meteorology (the atmosphere) are blended with the basics of Environmental Science in an effort to understand the interaction of Earth's four spheres (the atmosphere, the hydrosphere, the geosphere, and the biosphere). Students of Environmental Earth Science will learn fundamental scientific principles, see the logic of the scientific method, develop the framework necessary to succeed in future science classes, become aware of important physical earth processes at work on our planet, begin to understand the complex interactions between humans and their impact on the world around them, and ultimately gain a deeper realization of themselves as part of the 'big picture.' (1 credit)
Intended for: students in grade 8
Prerequisites: Science 7

Conceptual Physical Science (CPS):
This is a physical science course offered to eighth graders and freshmen. The goal of this course is to give the students a solid foundation for the physical science courses that they will be encountering in the high school, especially chemistry and physics. Topics include: graphing, scientific notation, Newtonian physics, energy, the atom, the periodic table, chemical bonding, chemical reactions and atomic energy. Classroom work is enhanced by a strong hands-on laboratory component. Students are encouraged to use the scientific method in a cooperative-learning, team environment. Computer technology is incorporated into the course when appropriate.
Intended for: students in grade 8 or 9
Co-requisites: Algebra, Algebra Accel. 8, or Geometry

MATHEMATICS

Mathematics 6:
Mathematics 6 focuses on reinforcing and expanding basic skills necessary for a strong foundation in mathematics. In addition, we introduce and intensify the base for the study of four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

Mathematics 7:
This course is designed to provide a solid computational foundation for future mathematics courses. The topics include operations with decimals, fractions, percents and integers; geometry; as well as an introduction to algebra and graphing linear functions. There is a focus throughout on problem-solving skills.

- Students will apply mathematical concepts to real-world situations.
- Students develop organizational skills and effective study habits.

- Students begin to understand that the "why" and "how" of procedures are more important than just an answer.

Pre-Algebra:
Pre-Algebra is the 8th grade mathematics course before students begin their three required secondary-level courses. It is designed to build a solid foundation for students to succeed in these upper-level courses. The topics include solving algebraic problems; simplifying expressions with variables and integers, decimals, and rational numbers; graphing linear equations; polynomials; trigonometry; and surface area. Problem-solving is a focus throughout the course.

Accelerated Algebra 8:
Enriched Algebra begins a three- to four-year sequential study of college preparatory mathematics. Students will develop the ability to solve a variety of problems logically and critically. Some of the topics that will be addressed include but are not limited to: introduction to algebra; working with real numbers and polynomials including factoring; solving equations and word problems; applications of fractions; introduction to functions; systems of linear equations; inequalities; rational and irrational numbers; quadratic functions; and graphing. (1 High School credit)

SOCIAL STUDIES

Social Studies 6 is designed to provide a foundation for Middle School Social Studies and eventually High School History. Our mission is to develop students that will demonstrate democratic and global citizenship, economic and cultural proficiency, and the principles supporting social justice by becoming informed, life-long learners through literacy-based learning with a research-based foundation. Students will begin by learning the basic core concepts necessary to be successful in a Social Studies course. Students will gain an understanding of the geography, culture, and religions of the Ancient World. In doing so, we will explore the early civilizations of the Ancient Near East, Egypt and Nubia, China, Greeks, Rome, The Byzantine Empire, Islam, Africa and Asia, The Americas, and Europe. Along with the skills of map reading, note-taking, summarizing, unplanned discussion, public speaking, and interpreting resources students will be assessed on homework, in-class assignments, projects, and tests/quizzes. Some additional skills students will develop are organizational skills, effective test-taking strategies and study habits, while developing life skills, character traits, and how to be men for others.

Social Studies in the seventh and eighth grades are chronologically organized courses that cover the history of North America and the United States. Seventh grade covers European Exploration to the Civil War, and eighth grade covers the Civil War to the present. The courses focus on the political, economic, diplomatic and social development of the United States with an emphasis on the experience of the common person. One of the main objectives of each course is to enable the students to attain an understanding of where the country has been as a nation in order to create a vision of where it is headed in the future. "You can't be sure of where you are going if you don't know where you have been."

The other major objectives of the courses are the improvement and building of the critical thinking and writing skills of the students. Many of the homework assignments and test questions will require the students to utilize their critical-thinking skills, in combination with their writing skills, in order to form sound arguments that are backed up with facts and information. Many of the in-class activities and assignments are designed to promote critical-thinking skills as well as to accommodate the different learning styles of the students.

ENGLISH

English at McQuaid Jesuit is skills-based: reading, writing, speaking and critical thinking. Literature is the basis for building these skills.

Introducing students to literary analysis, sharpening critical-thinking skills, and practicing speaking and writing skills are our primary goals. We explore writing techniques and introduce and practice virtually all types of writing. Our work will take three general forms: literature, vocabulary and grammar. The McQuaid tradition of extensive novel reading and intensive study of literary genres is initiated at this level. Our literary studies focus particularly on the short story, poetry, the novel, mythology and medieval literature.

In the 6th grade English Language Arts course students will be challenged to increase their knowledge of English grammar and to write more effectively and confidently. Through their experiences in the course, students will appreciate and understand the necessity of using proper grammar and its important role in communication. This course also provides a solid grammar foundation for students to build on as they begin taking foreign languages in the years to come. Students will also work to Increase vocabulary both in writing and speaking and will develop stronger public speaking skills.

The 6th grade Literature course is designed to foster each student's love of reading and writing. The Literature course's strong emphasis on critical thinking and increasing reading comprehension and study skills prepares students for the rigor of the English courses they will take as they advance at McQuaid Jesuit. Students will have the opportunity to read and respond to texts from a variety of genres and will comfortably draw conclusions, compare and contrast, make predictions, make inferences, and write summaries. Students will understand the drafting and revision process and be will also become more comfortable with public speaking and making formal presentations.

The McQuaid 7th and 8th grades are a preparation for the high school. While the pace and quantity of work will be appropriate for this level, the focus is to prepare the student for the expectations and rigors of the high school.

THEOLOGY

Theology 6:
The study of Religion is not only essential to the mission and vision of McQuaid Jesuit; it is first and foremost our best approach to forming the whole character of the learner. The flexibility and rigor of the 6th Grade curriculum allows students to challenge preconceived notions, to exceed their geographical and cultural boundaries, and to begin developing a well-formed code of ethics and morality to their lives.

The Religious Studies course is specifically designed around an introduction to Judeo-Christianity. Students will delve into Old Testament readings and interpret them according to today's Catholic theology. Specific topics will begin with the story of Creation and how the Catholic interpretation is complimentary to the field of Science, and will end with the birth of Jesus Christ and the beginning of Christianity. Students will also develop project work designed to encourage expression and formulation of a system of faith. Class discussions are also a key part of the curriculum, as students will engage with each other in an effort to articulate, foster, and accept personal beliefs, regardless of creed.

Theology 7 - Faith & Covenant - Themes in the Hebrew Bible and the Gospel of Luke:
This course is devoted to the study of the rich store of writings contained in the Hebrew Bible (Old Testament). Our chief aim is to develop an appreciation of the Hebrew Bible

as a sacred text both for Jews and Christians. In doing so, we will explore historical, geographical, literary, and theological aspects of the Bible. Students will come to appreciate the faith experiences of the biblical people. They will also learn of ways in which the message of the Bible can be relevant to their own life situation and use that knowledge to enhance their own personal faith. The focus of the first half of the course is on the sequence from Genesis and Exodus through Joshua and Judges. Experiencing the profound and engaging narratives contained in that literature, students will learn about the foundation of God's people from their conquest of Canaan to their eventual defeat and exile in Babylon. Particular emphasis will be given to biblical law and the implications it has for young men who wish to deepen their Christian faith. During the second half of the course students will have an opportunity to engage with the poetic and wisdom books. Topics such as the suffering of innocents as well as some of the ethical questions which faith can help us to confront successfully will be covered at an age-appropriate level. From the perspective of a general survey, then, this course seeks to introduce all students to the major spiritual truths found in the Old Testament and to the variety of ways in which the truths of scripture are relevant to the lives and experiences of young men in the twenty-first century.

Theology 8 - Jesus Christ & the Church:
The goal of this course is for students to come to better know and learn from Jesus Christ. Through a yearlong study deepening their understanding of Jesus and his teachings students will progress on their journey to become more intellectually competent, open to growth, religious, loving, and committed to justice. Students will study and reflect on the New Testament and the gospels in particular. Theological reflection, prayer, and social analysis, and Church teaching will also be a central part of this course. (1 credit)

FOREIGN LANGUAGE

All seventh-graders are required to take **Introduction to Language 7**, a special course designed to prepare them for further language study. Seventh graders use the study of Latin to learn grammar that is essential to the study of language, including parts of speech, parts and types of sentences, and other concepts common to language instruction. Students are introduced to the processes of learning a language: mastering vocabulary, drilling, incorporating new concepts into old ones, translating single sentences, and sustaining a translation through increasingly lengthy passages. Also included in the course is an overview of the foreign language options offered to students beginning in 8th grade.

Eighth-graders begin the actual first year of the three-year sequence, selecting French 1, German 1, Italian 1, Latin 1, or Spanish 1. (1 High School Credit)

MUSIC

Applied Musicianship:
The class is intended for the student with no musical experience. It is an introduction to basic music theory and reading. Basic keyboard and guitar playing techniques will be taught and applied in this class. Students will be able to read music and perform at a basic level after completing this course. There is a playing and written component for the mid-term and final. (1 credit)
Intended for: students in grades 8, 9 or 10
Prerequisites: none

Music 6/7:
Students will be introduced to basic musical knowledge and skills. Aspects of the class will include history of music, multicultural music, and hands-on experiences in studying, listening, discussing, composing, and performing music. This course is also an introduction to music courses offered at the high school level. (1 credit)
Intended for: students in grades 6 and 7
Prerequisites: none

Middle School Chorus:
The middle school chorus is open to all students in grades 7 and 8 who sing in an ensemble. Students will sing a variety of choral repertoire appropriate to the level of the group. Students wishing to play piano during rehearsals or the concert are encouraged to see the chorus director prior to signing up since space is limited for this. Vocal lessons taken either privately or at McQuaid Jesuit are required for completion of this course. Students will perform frequently throughout the year in school and community settings. (1 credit)
Intended for: students in grades 6, 7 and 8
Prerequisites: none

Beginning Ensemble:
This ensemble is for any student interested in learning to play an instrument or is still a beginning instrumentalist. Students will learn fundamental skills in playing an instrument for ban or orchestra. Students will perform music in a variety of styles. Instrumental lessons taken either privately or at McQuaid are required for this course. (1 credit)
Intended for: students at a beginner instrumental playing level
Prerequisites: teacher placement evaluation or instructor approval

Concert Band
The Concert Band is open to all student musicians at an intermediate level playing woodwind, brass, or percussion instruments only. Students playing guitar or piano may be interested in General Music or Middle School Chorus. This course will cover wide arrangements of musical styles and genres that will be challenging to the level of the students. Instrumental lessons taken either privately or at McQuaid are required for completion of this course. Students will perform frequently throughout the year in school and community settings. (1 credit)
Intended for: students at an intermediate performance level
Prerequisites: teacher placement evaluation or instructor approval

Orchestra:
This course is a full credit class and seeks to develop technical proficiency, musicianship, and musical leadership through the performance of string orchestra repertoire. Students will perform orchestral repertoire frequently throughout the year in school and community settings. Individual lessons taken either privately or at McQuaid are required for completion of this course. Orchestra is open to musicians playing violin, viola, cello, and upright bass (not electric bass). (1 credit)
Intended for: Students in grades 6, 7, 8, 9, 10, 11, or 12
Prerequisite: teacher placement evaluation

ART

Important Note: *It is recommended but not required that these two full-year middle school art coursed be sequenced. Students may take art 6/7 only once.*

Art 6/7:
Students will be actively engaged in the creative art making process using the art elements: color, shape, value, form, line, space, and texture. Students will maintain a sketchbook to practice their drawing skills both inside and outside of class. Class presentations and discussions about art create connections and appreciation. Media such as pencil, colored pencil, marker, paint, collage, printmaking, and clay will be used, preparing students for the high school curriculum. (1 credit)
Intended for students in 6th or 7th grade
Prerequisites: none

Art 8:
Students will use the creative integration of the art elements by learning how they combine into the art principles of design: movement, contrast, variety, rhythm, balance, harmony, pattern, unity, emphasis, and proportion, to create original works of art. Students will learn to make connections by responding to historical and contemporary art during class critiques as well as to their own finished pieces. Sketchbooks will be used to practice drawing skills and to journal about the art making processes. A variety of media such as pencil, colored pencil, pastel, paint, collage, printmaking, and clay will be used, preparing students for the high school art curriculum. (1 credit).
Intended for students in 8th grade
Prerequisites: none

DRAMA

Drama 6/7:
"A culture is not to be judged by its material accomplishments alone, but also by the aspirations and ideals that motivate conduct." Dramatists use a variety of theatrical means to hold a mirror up to a society for the purpose of illuminating the human condition.

The theater is an imaginative process that blends together a variety of elements that enable a culture to see itself as it is or as it might like to be. In addition, by studying these various elements, successive generations are able to learn about that culture—its language, history, customs and beliefs—what issues were important and how people reacted to those issues. These elements include the play, its actions and language, and the method of staging—acting style, set, costumes, lighting, sound, and makeup.

In addition to becoming familiar with the drama of several periods including Greek, the Middle Ages, the Renaissance and the twentieth century, students will have an opportunity to engage in workshop-style classes involving relaxation exercises, theater games, improvisations and some scene work. Trips to local theater productions are encouraged and will provide opportunities for extra credit. The year-long course culminates with a unit on puppetry, for which students will make their own puppets and write and perform their own original scripts.
(1 credit)
Intended for: students in grades 6 or 7
Prerequisites: none

COMPUTER SCIENCE

Computer Literacy 6 and 7:
This course includes general knowledge of selected computer applications in Microsoft Office and Internet research skills needed to prepare students for academic success. Additionally, basic programming concepts will be studied, which will require that students examine how they organize their thoughts to solve problems. Students will be encouraged to refine their problem-solving strategies and to examine the application of these skills in other disciplines. This course features a "hands-on" approach to learning with some unit testing. Students are well prepared for further computer study or use in the high school program at the conclusion of the course. (1/2 Credit)
Intended for: students in grades 6 or 7
Prerequisites: none

Computer Applications and Programming
This class combines an introduction/refresher to computer applications and programming as well as advanced topics. All high school graduates should possess a general knowledge of common applications such as word processing, spreadsheets, and presentation programs. An ideal applicant for college would have some additional exposure to a programming language. This course instructs using the MS Office Professional Productivity suite and MS Visual Basic to produce technologically competent graduates.
This course is ideal for 8th graders, new incoming freshmen and any sophomores, juniors or seniors looking to refresh and advance their office/programming skills. This practical course features lots of hands-on labs and unit testing. Many students find this combination refreshing and are encouraged to continue on to a more rigorous introductory programming course upon the completion. *Text book provided.* (1 credit)
Intended for: students in grade 8, 9th graders new to McQuaid, and students in grades 10, 11, or 12
Prerequisite: none

Animations:
This course teaches students how make stand-alone and Web animations using Adobe Flash. Students will create animations, navigation buttons, and menus. During this course, students will progress from creating simple animations to developing sophisticated presentations and movies. Students with a strong work ethic and problem-solving skills and the ability to understand and follow directions will excel in this course. Besides preparation for unit tests, this course requires very little homework for subject mastery. Since many animations are embedded within Web pages, this course's subject material is complementary to concepts taught in the Web Publishing course. Textbook provided. (1/2 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

Architectural Design and Drafting
The focus of this ½-credit class is learning the fundamentals of AutoCAD software. AutoCAD is the industry standard program for computer-aided drafting (CAD). Students will master concepts and techniques for computer aided, 2-dimensional design and drafting. Since the course will primarily use examples and projects such as floor plans, elevations, lots, etc., students will gain knowledge concerning principles and concepts of architecture. Students will also be introduced to 3-dimensional design concepts. (1/2 credit)
Intended for: students in grades 8, 9, 10,11, or 12
Prerequisite: none

Image Editing with Adobe Photoshop:
Learning to create and manipulate images using Adobe Photoshop is the focus of this course. Students modify existing images as well as create original work using multiple rendering tools. Students will also learn how to edit, retouch, and enhance photographic digital images. This

course utilizes a “learning through hands-on lab work” approach, which requires a student to possess good work habits, direction following and persistence, but requires very little outside of class work in order to achieve subject mastery. Material covered in this course is complementary to the animations, and Web Publishing courses offered by the department. Textbook provided. (1/2 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

Web Publishing:
This half-credit course provides students with opportunity to learn more about how the Internet works and the field of web publishing. Topics include creating HTML documents and CSS stylesheets, embedding images and media with webpages and using JavaScript to enhance web content. It is taught with a hands-on, active learning approach as students create both structured and original content. As a lab course, it requires minimal out-of-class work with the exception of occasional unit test preparation. This is a smart, sensible elective for a student who wants to explore the dynamic world or web publishing. Textbook provided. (1/2 credit)
Intended for: students in grades 8, 9, 10, 11, or 12
Prerequisites: none

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