



ST. MICHAEL *the* ARCHANGEL CATHOLIC HIGH SCHOOL

KNOW TRUTH | LOVE GOD | SERVE OTHERS

Course Catalog
2024-2025

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MISSION STATEMENT

Through Jesus Christ, St. Michael the Archangel Catholic High School calls young men and women to embrace their God-given gifts in order to know truth, love God and serve others as His brave and humble disciples.

VISION

By the grace of God our Father, St. Michael the Archangel Catholic High School is a passionately Catholic academic community that, through the Holy Spirit, welcomes and forms heroically virtuous disciples by daily living encounters with Jesus Christ.

COMMITMENT TO EXCELLENCE

Catholic schools in the Diocese of Kansas City ~ St. Joseph are accredited, safe and staffed with certified instructors. As a commitment, the diocesan schools are distinctly Catholic, academically excellent, and committed to service. St. Michael the Archangel Catholic High School is a Catholic, diocesan, co-educational high school providing students in 9th through 12th grade a Christ-centered, safe environment in which to excel academically and to grow spiritually.

SMA curriculum is rooted in traditional Catholic values and committed to evangelization and discipleship of our Catholic Faith. Our instructors and administration have a passionate desire to teach our students to *know truth, love God, and serve others*.

The SMA Course Catalog provides parents and students with valuable information regarding learning opportunities and course selections. Each year programs and course selections are modified based upon student interest and school enrollment. **Please note that listed courses may not be offered due to lack of student interest or insufficient enrollment.** Course selections for the upcoming school year are made during the second semester of the current year. All information contained within the SMA Course Catalog is true and accurate at the time of publication; however, due to unforeseen circumstances some information may become inaccurate. Fees, requirements, and other circumstances may alter with time. For the most current information, contact school administration.

ACADEMIC SUCCESS

St. Michael the Archangel Catholic High School provides academic programs designed for individual success. Learning challenges are faced through individualized support and collaborative efforts.

Satisfactory academic progress is required for continued enrollment at SMA. Eligibility requirements for participating in sports and other extracurricular activities are detailed in the SMA Student Handbook and the SMA Activities Handbook. To achieve satisfactory academic progress, students must meet or exceed the following criteria:

- 7 credits and 25 verified service hours prior to starting the sophomore year
- 14 credits and 50 verified service hours prior to starting the junior year
- 20 credits and 75 verified service hours prior to starting the senior year
- 27 credits and 100 verified service hours for graduation

ST. MICHAEL INCLUSIVE LEARNING ENHANCEMENT (SMILE)

Students receiving SMILE Zone accommodations must have a SEP on file. St. Michael the Archangel Catholic High School is committed to assisting every student's academic, spiritual, and social growth.

In accordance with Student Education Plan requirements to meet the individual needs of students identified with exceptional needs, direct instruction may be provided in the core areas; Math, English, Science, Life Skills - 9th/10th grade year, and Career Exploration - 11th/12th grade year. SMILE Zone classes are individualized and assigned per the recommendation of the SMILE program to meet the individual needs of the student.

The SMILE Zone offers **Guided Learning (EXT 101)** which is a course designed to help students achieve academic success by providing structured study time to complete work from other courses and achieve better understanding. The instructor assists students in monitoring their grades and collaborating with each of the student's instructors to define how to best support student success. Guided Learning must be a course recommended by the teacher & or dictated by HSPT scores.

ACCESSING ACADEMIC INFORMATION

Grades, attendance, and conduct reports may be viewed using the SMA student information system. Login information may be obtained from Mrs. Rieger, mrieger@smacatholic.org. Projects and assignments may be viewed via Google Classroom. SMA reports grades as percentages and does not assign letter grades. Mid-term report cards are emailed to parents at mid-semester and report cards are emailed at the end of the semester. Students are not ranked. All official transcripts are the property of St. Michael the Archangel Catholic High School. Official transcripts are sent directly to a college from the Registrar's Office free of charge.

FAILING GRADES

For each semester passed, students receive $\frac{1}{2}$ credit toward graduation. Students do not receive credit toward graduation for any failing grades (**any grade that is below 60% is considered failing**). Any credit shortages must be obtained through an Administration pre-approved alternative method. Generally, courses offered by the local school districts and area Catholic high schools are preferred. Students are not allowed to repeat a course failed the first semester during the second semester of the same year. If a student fails a second semester course in world languages, mathematics, or chemistry they must repeat the entire year or take summer school to recover the credit. Students cannot start a core course in the second semester.

Students who fail the first semester of a yearlong course but pass the second semester with 75% or higher grade may still receive credit for the course. Consideration for this exception depends upon the course and verification that it would not be possible to earn a 75% second semester unless the work of the first semester had been learned. Courses generally meeting these criteria are world languages, mathematics, and science.

Seniors who do not attain the required credits must meet with the Administration to determine if they can participate in graduation activities.

ACADEMIC PROBATION PROGRAM

The goal of the Academic Probation Program is to help students stay on track for graduation. Failing two or more semester courses places a student on Academic Probation. If a student on Academic Probation fails two or more subsequent semester courses, they will be asked to find an alternative education plan. It is the responsibility of SMA to inform students and parents of their student's academic standing. This information may come via email, phone call, and/or parent-teacher conference. It is the family's responsibility to ensure their student is taking full advantage of the services provided by SMA. A student's dedication to improvement will be considered by the Administration when reviewing the student's academic probation status.

SCHEDULE CHANGES & WITHDRAWING FROM COURSES

Courses are offered based upon students' needs and interests. Careful and accurate course selection is essential for students to create a diverse and enriching academic experience. Great care is also taken by the Administration when determining which courses to offer. Budgets and staffing decisions are determined by enrollment and course request.

TESTING

Standardized Testing by Grade Level		
Grade Level	Test	Details
8th Grade	HSPT	Required for admission
Freshman	PreACT 8/9	PreACT (Spring Semester)
Sophomore	PreACT or PSAT	PreACT (Spring Semester) or PSAT
Junior	PSAT and/or ACT	PSAT in the fall ACT (Spring Semester)
Senior	ACT	ACT second attempt before November

College and career guidance are available for all students. The school counselor directs all testing programs. Standardized testing includes HSPT, PSAT, and yearly PreACT exams. The PSAT is used as a qualifier for the National Merit Scholarship Program.

ACT Testing measures academic readiness for college and is required by many colleges. The score requirements vary so students must check with chosen college(s). Exploring the ACT website provides students and parents with important testing information and tips. In accordance with most college requirements, SMA students are required to take the ACT. Students register for the *Student ACT Test* at www.act.org. Testing is administered at a third-party location of the student's choosing. St. Michael also hosts the District ACT for all our juniors. The St. Michael the Archangel Catholic High School code is **261-668**.

SAT Testing also measures academic readiness for college and is required by many colleges. The score requirements vary so students must check with chosen college(s). In addition to offering the core test, SAT Subject tests are offered in English, History, Languages, and Science. Exploring the College Board website provides students and parents with important testing information and tips. Students register for SAT testing at <https://collegereadiness.collegeboard.org>

ADVANCED PLACEMENT, HONORS & DUAL CREDIT

Advanced Placement

All courses at SMA are designed to challenge each student and to foster passion for lifelong learning. *Advanced Placement* (AP) and Honors courses are intended for those students who show an aptitude and a willingness to diligently pursue various subjects in-depth. Honors and AP Courses will move at an accelerated pace which also means less pre-teaching and review. Although not required for AP courses, Honors coursework provides critical alignment with AP course success. Honors and AP courses receive an additional 5% weighted semester grade to those who earned a 72.5% or higher. Honors and AP course requirements and prerequisites are noted under the specific course descriptions.

At the discretion of the university or college and depending upon the student's score on the AP Exam, students may be granted college credit upon graduation from St. Michael the Archangel Catholic High School. AP Exams are administered at SMA in May and are scored by the Educational Testing Service. The cost per exam fluctuates each year and is collected with tuition through the business office.

- Typically, students who master AP curricula are hard-working and dedicated to excellence.
- AP enhances a student's opportunities for scholarships and career possibilities.
- AP enhances a student's opportunities for admission into recognized universities and postsecondary programs.
- AP may reduce college costs and the time required to obtain a degree by providing postsecondary credit for courses and examinations completed successfully.
- Students must request their AP Scores sent to Colleges - thru their College Board Account.

Dual Credit

Through partnerships with the University of Missouri of Kansas City (UMKC) and Ozark Technical College (OTC), SMA is proud to offer a variety of dual credit courses. The following courses are planned to be eligible for dual credit:

- College Algebra
- Elementary Statistics
- Pre-Calculus
- Calculus
- Dual Credit Honors Modern World History
- Dual Credit Honors U.S. History
- Dual Credit Honors U.S. Government & Politics (1/2 credit)
- Dual Credit Honors Chemistry
- Dual Credit Honors Spanish IV & V

Requirements and cost information for UMKC and OTC will be announced at a later date. For additional information regarding dual credit at UMKC or OTC, please contact the applicable Mathematics, Science or World Language instructor. Generally, UMKC requires students to have a cumulative GPA of 3.0 or an ACT composite score of 21 for dual credit. ***The prerequisites for dual credit courses are set by the university and cannot be changed or waived to take the course at the high school level.***

COMMUNITY PARTNERSHIPS

Herndon Career Center

Raytown School District, in cooperation with five other area school districts, supports and operates the area career and technical center. The five participating school districts include: Center 58, Grandview C-IV, Hickman Mills C-I, Independence 30, and Lee's Summit R-VII.

Early consideration applications are due in February of the school year prior to attendance. GPA requirements vary by program, with the general minimum requirement being a 2.0. Sending districts pay tuition for students to attend Herndon Career Center. It is a privilege and an honor to provide rigorous programs of study for all interested students.

Summit Technology Academy

Summit Technology Academy (STA) is a pre-professional learning environment for high school students. It is operated by the Lee's Summit R-7 School District and is a member of an area-wide consortium of school districts called the Career Education Consortium. All the programs at STA are *Centers of Excellence* as designated by the Career Education Consortium. Sending districts pay tuition for students to attend Summit Technology Academy. SMA students attending STA **MUST** live in a school district that participates in the career education consortium. It is a privilege and an honor to provide rigorous programs of study for all interested students. Minimum GPA for acceptance is a 2.5.

Fort Osage Career & Blue Springs Technology Center

The Career and Technology Center (CTC) offers you the opportunity to explore a potential career field while earning college credit, advanced certifications, and new friendships. The five participating school districts include: Blue Springs, Fort Osage, Grain Valley, Independence, and Oak Grove. A student **MUST** live in one of the above-mentioned school districts in order to attend CTC.

Enrollment is limited. We factor grades, attendance, a letter of recommendation and the interview into our final decision.

COLLEGE ATHLETICS

Every student needs to take course selection, grade percent average (GPA), and test score requirements seriously, including students considering any possibility of playing a sport collegiately. Beginning with ninth grade course selection, student athletes need to be prepared for future opportunities by carefully selecting courses, completing coursework, and tracking his/her GPA each semester. Collaboration among the student, family, counselor, coaches, and athletic office is crucial. Students and parents need to refer to the NCAA (www.eligibilitycenter.org) and the NAIA (www.playnaia.org) websites for current guidelines.

GRADUATION REQUIREMENTS

SMA students must earn 27 credits to qualify for graduation.

Specific course requirements are shown in the Graduation Requirements Table in this section. For reference, comparative graduation requirements for various colleges are also provided.

GRADUATION REQUIREMENTS TABLE				
Course Requirements	SMA (27 credits required)	Competitive Private University (e.g., Notre Dame)	Missouri University System (e.g., MU, UMKC)	Missouri Public or Four-Year University (e.g., UCM, MSU)
Theology	4	0	0	0
English	4	4	4	4
Math	3	4	4	3
Science	3	4	3	3
Social Studies	3	3	3	3
World Language <small>(2 credits of the same language)</small>	2	4	2	0
Fine Arts	1	1	1	1
Practical Arts	1	1	1	.5
Physical Education	1	1	1	1
Health	0.5	0.5	0.5	0.5
Electives	3.5	Requirements Vary	3 credits from WL or CC	Requirements Vary
Additional Requirements	100 service hours	Requirements Vary	Minimum ACT score of 24	Requirements Vary

- Transfer students must have an official transcript on file with SMA prior to enrolling. A student with 7 transferable credits is considered a sophomore. A student with 13 transferable credits is considered a junior.
- SMA only accepts senior transfers when a family moves into the area.
- One half credit of Physical Education may be earned by actively participating in two full seasons of the same sport. Only one - ½ credit may be earned. A sports waiver must be completed.
- Students must take Personal Finance (½ credit) during their junior or senior year to fulfill the Missouri personal finance requirement.
- Students must pass Theology and have twenty-five service hours completed each year to advance to the next grade level.

Missouri A+ Program

The A+ program is a state-sponsored program designed to help students receive additional education or career training following high school. A+ students have 4 years from their high school graduation to utilize their A+ funds. A+ is designed to offer financial assistance for two-year community college and technical programs located in our state. Program details are outlined on the Missouri Department of Higher Education website <https://dhe.mo.gov/ppc/grants/aplusscholarship.php>.

Students interested in the A+ program will need to fill out a contract with our A+ Coordinator, Mrs. Wright. Additionally, students will need to stay in touch with Mrs. Wright over the course of their time at SMA to make sure all the documentation for the program is completed correctly. Our goal is to have ALL students actively participate in the program, not only to have a focus for success during their 4 years at SMA but also to keep all doors and opportunities open after high school. Many things can happen in the 4 years following graduation from high school. We all have our dreams, but LIFE happens, and plans can ALWAYS change! The goal of St. Michael the Archangel is for our students to be prepared for those life changes and maximize all available resources when they need them!

Benefits of participation in the A+ Program

- Being driven to see A+ through gives you the attitude of a college-bound student.
- Involvement in the program keeps your goals front and center.
- Mentoring others provides a feeling of worth, empowerment, and an opportunity to learn more about yourself.

Requirements for entry into the A+ Program

- Graduate with a minimum unweighted GPA of 2.5 (no rounding)
- Maintain 95% attendance throughout high school (no rounding)
- Maintain good citizenship, refraining from the use of drugs and alcohol
- Complete 50 hours of unpaid tutoring or mentoring
 - Job Shadowing can count for 25% (12.5 hrs.)
- Attain a qualifying Math score on one of the following:
 - Missouri Algebra I End of Course Exam
 - Proficient or Advanced
 - ACT Math Test
 - 17 with a 2.5 GPA
 - 16 with a 2.8 GPA
 - 15 with a 3.0 GPA

Courses by Department

BUSINESS TECH & PRACTICAL ARTS

Business courses instill essential skills, including analytical and critical thinking, problem solving, and marketing and sales, that the student utilizes throughout his or her life. All business courses are counted as Practical Arts credits.

Practical Arts courses include Computer/Business courses; career related courses such as Engineering, Aviation, and skilled application courses such as Modern Communication.

Personal Finance is required for graduation.

BUSINESS TECHNOLOGY COURSES

PERSONAL FINANCE (BUS201)

Required

Prerequisite: None

Credit: ½

Grade:
11, 12

An experiential course that provides hands-on experience at building and managing personal wealth, including financial ethics and Catholic Stewardship. Students will learn about what personal finance is and will be able to identify and practice the components of effective financial planning.

Required course by the state of Missouri for all students. Personal Finance counts as ½ of a required Practical Art credit.

BUSINESS ESSENTIALS (BUS203)

Prerequisite: None

Credit: ½

Grade:
9, 10, 11, 12

During this introductory business course, discover all phases of business, including ownership, marketing, finance, managerial controls, personnel, and the relationship of business to the social and economic environment in which it operates. Explore everything from large corporations to sole proprietorships through examinations of current events, global interactions, and real-world experiences.

ACCOUNTING I (BUS205)

Prerequisite: None

Credit: ½

Grade:
10, 11, 12

This course is designed to introduce students to basic accounting concepts and to allow students to explore accounting and related career opportunities. Students will complete accounting cycles for a proprietorship. Students will also be introduced to automated accounting systems and will complete accounting projects with available computers. Recommended for students planning to study business or accounting in college.

ACCOUNTING II (BUS206)

Prerequisite: Accounting I

Credit: ½

Grade:
10, 11, 12

This course is an introductory course in double entry accounting procedures. Students will learn to keep financial records for a service or retail business. Principles covered include the bookkeeping cycle, debit/credit theory, financial statements, use of various journals and ledgers, worksheets, and accounts receivable and payable. Computers may be used for simulation and projects.

MARKETING (BUS221) Prerequisite: None	Credit: ½	Grade: 10, 11, 12
This course outlines an instructional program for students who are interested in a career in the field of marketing and management. This class is designed to provide an understanding of the fundamental marketing processes and an orientation to the American free enterprise system. Course content will include seven functions of marketing with an in-depth look into: communication & interpersonal skills, promotion, selling, economics, buying, pricing, dos and don'ts of customer service and much more!		
COMPUTER BUSINESS APPLICATIONS (BUS222) Prerequisite: None	Credit: ½	Grade: 9, 10, 11, 12
This course focuses on integrating computer technology with decision-making and problem-solving skills. The course is designed to help students to develop skills in computer applications such as word processing, spreadsheet, and presentation software. Students will be trained in basic techniques of Microsoft Word, PowerPoint, and Excel.		
ECONOMICS (BUS241) Prerequisite: None	Credit: ½	Grade: 10, 11, 12
This course will give the students a greater understanding of economics ranging from the viewpoint of the individual consumer or small business owner to the global economy. The course will study the law of supply and demand, forms of business, labor unions, government finances and influence on the economy, money and prices, inflation, and deflation cycles. The course relates history and politics to the study of economics.		
COMPUTER SCIENCE PRINCIPLES (BUS250) Prerequisite: Concurrent with Algebra I	Credit: ½	Grade: 9, 10, 11, 12
Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implication of computing systems. The course emphasizes object-oriented programming and design using the Java programming language.		
AP COMPUTER SCIENCE PRINCIPLES (BUS251) Prerequisite: Concurrent with Algebra I	Credit: ½	Grade: 9, 10, 11, 12
AP Computer Science Principles provides students with a rigorous, fast-paced course that is designed to cover all learning objectives in the College Board's AP CS Principles framework and to prepare students to do well on the AP assessment. In specific CSP (Computer Science Principles) projects and problems, students create artifacts and associated writing as practice for the AP CS Principles Performance Tasks that can be submitted to the College Board. All students are encouraged to take the AP assessment.		

PRACTICAL ARTS COURSES

YEARBOOK - Magnum Opus (PA202) Prerequisite: None	Credit: 1	Grade: 10, 11, 12
Magnum Opus, the school yearbook, provides students with the opportunity to display their creativity in photography, journalism, marketing and management. Students will develop skills such as interviewing, photojournalism, writing, digital design, and editing. In addition, students will develop a marketing campaign to sell the yearbook. Expectations for this course include attending school events outside of the school day as well as adhering to publication deadlines.		
MODERN COMMUNICATIONS (PA203) Prerequisite: None	Credit: ½	Grade: 10, 11, 12
Modern Communications is an introductory course designed to instruct students to apply appropriate and professional skills with 21st century communication platforms. Topics will include professional interviewing, social media postings and its impact with employment opportunities, how to formally compose a business professional email, in addition to informative and persuasive speaking techniques that are applicable to small and large group settings.		
ENGINEERING EXPLORATION (PA126) Prerequisite: None	Credit: ½	Grade: 10, 11, 12
This course introduces important concepts in engineering, along with an introduction to the engineering design process. Students will learn about basic engineering concepts, then will work through the full engineering design process, including brainstorming, planning, budgeting, designing, building, and testing a project or process. Physics is helpful, but not required as a prerequisite.		
HEALTHCARE EXPLORATION (PA201) Prerequisite: None	Credit: ½	Grade: 11, 12
Introduces a variety of topics related to healthcare. Areas of study include ethical responsibilities, cultural considerations, teamwork within medical professionals, and the Catholic Church's history in healthcare. Guest speakers share experiences and insights regarding a variety of careers in the medical field. Students will engage in an off-campus healthcare related activity if possible.		
DIGITAL MEDIA I (PA261) Prerequisite: None	Credit: ½	Grade: 9, 10, 11, 12
Students will learn composition techniques, DSLR basic camera controls, and editing skills in Adobe Lightroom Classic. Students will have the opportunity to develop techniques for portrait, macro, landscape, long-exposure, events, and sports photography.		
DIGITAL MEDIA II (PA262) Prerequisite: Digital Media I or Teacher Approval	Credit: ½	Grade: 9, 10, 11, 12
Students will advance skills in photography composition, techniques, and skills as well as editing skills in Adobe Lightroom Classic. Basic videography elements will be introduced as well as using Adobe Premier Pro.		
PRODUCTION ARTS (PA265) Prerequisite: None	Credit: ½	Grade 9, 10, 11, 12
This course introduces set construction and tool use. The students will assist in building the set for the Fall Play and Spring Musical. The course will teach safety and practical use of hand and power tools and give the students the skill and confidence to use tools for home repair and small projects.		

INTRODUCTION TO EDUCATION PRACTICUM (PA402) <i>Peer Mentoring</i> Prerequisite: Administration approval	Credit: ½	Grade: 11, 12
<p>Students are assigned to a classroom to work with students with exceptional needs in the SMILE program as a peer mentor. Peer Mentor expectations include the following: Academic assistance in the traditional classroom setting and positive interaction with students throughout the school day. Peer Mentors will be asked to attend the FIRE Week Inclusion Mass and a small number of field trips with SMILE students. Formal instruction and training about working with students with special education services is provided by the Special Education Team. Open to Juniors and Seniors.</p> <p>Must complete Peer Mentor Application available in the SMILE Zone prior to enrollment. The SMILE zone team will interview and approve applicants to the program.</p>		
INTRODUCTION TO EDUCATION CAREER (PA410) Prerequisite: None	Credit: ½	Grade: 11, 12
<p>In the Introduction to Education course, students will explore the career of education. Students will learn the ins and outs of being a teacher through elementary and secondary. They will have the opportunity to work in an elementary classroom through observations and hands-on learning, Students will get the opportunity to learn how to lesson plan and deal with classroom management. The system of education will be taught through techniques and tips of current teachers in the elementary and secondary fields.</p> <p>Students must be able to have their own mode of transportation during the school day.</p>		
LAUNCHING INTO AVIATION (1st Semester Only) (PA301) Prerequisite: None	Credit: ½	Grade: 9, 10, 11, 12
<p>This course provides the foundation for advanced exploration in flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will look at the problem-solving practices and innovative leaps that transformed space exploration from the unimaginable to the common in a single generation. Students will also gain a historical perspective, from the earliest flying machines to various modern aircraft.</p>		
EXPLORING AVIATION & AEROSPACE (2nd Semester Only) (PA302) Prerequisite: None	Credit: ½	Grade: 9, 10, 11, 12
<p>This core aerospace and aviation course provides the foundation for both pathways and gives students a clear understanding of career opportunities in aviation and aerospace and the critical issues affecting industry. Students will also begin to drill down into the various sectors of aviation and the elements that make up the aerospace ecosystem. They will discover how advances in aviation created a need for regulation and learn about the promulgation of civil aviation oversight. Students will explore modern innovations and develop innovative ideas to address the aviation industry's real-world challenges. They will be exposed to various career options in aviation and aerospace and take an in-depth look at available opportunities.</p>		

INTRODUCTION TO FLIGHT AND AIRCRAFT SYSTEMS (PA303) Prerequisite: None	Credit: 1	Grade: 9, 10, 11, 12
<p>In the Introduction to Flight course, students pursuing the Pilot and UAS tracks will look closely at the aircraft they may one day operate. Students will begin an exploration of the types of aircraft in use today before learning how aircraft are made and how they fly. Students will understand how aircraft are categorized, be able to identify their parts, and learn about aircraft construction techniques and materials. They will gain an in-depth understanding of the forces of flight—lift, weight, thrust, and drag—including how to make key calculations. They will then touch on aircraft design, looking at stability, aircraft controls, and maneuvering flight. The course will focus on career skills related to these topics.</p> <p>In the Aircraft Systems and Performance course, students in the UAS and Pilot tracks will take an in-depth look at the systems that make crewed and uncrewed aircraft work. Beginning with aircraft powerplants and fuel systems, students will learn about the options available and how they affect aircraft design and performance. They will explore other key aircraft systems, including electrical, pitot-static, and vacuum systems. Throughout the course, they will learn about the flight instruments associated with each system and how to identify and troubleshoot common problems. This unit also covers aircraft flight manuals and required aircraft documents. Finally, students will learn about the factors that affect aircraft performance and how to determine critical operating data for aircraft.</p>		
THE FLYING ENVIRONMENT/FLIGHT PLANNING (PA411) Prerequisite: Introduction to Flight and Aircraft Systems	Credit: 1	Grade: 10, 11, 12
<p>This course is foundational for both crewed and uncrewed aviation. It will prepare students to take either Federal Aviation Administration tests: the Private Pilot Knowledge Test or the Part 107 Remote Pilot Knowledge Test. Topics include preflight procedures, airspace, radio communications, aviation terminology, regulations, airport operations, aviation safety, weather, cockpit management, and emergency procedures. Prerequisite Introduction to Flight and Aircraft systems and Performance.</p> <p>The Flight Planning course will cover the remaining topics necessary for students to take the Federal Aviation Administration's Private Pilot Knowledge Test. Students will learn about pilot and aircraft qualifications, cross-country flight planning, weight and balance, performance and limitations, human factors, chart use, night operations, navigation systems, and aeronautical decision-making. Students will be provided with the opportunity to participate in multiple practice examinations. At the end of this course, a school may choose to arrange for students to take the Federal Aviation Administration's Private Pilot written exam.</p>		
PREFLIGHT YOUR CAREER/THE CAPSTONE EXPERIENCE (PA412) Prerequisite: The Flying Environment/Flight Planning	Credit: 1	Grade: 11, 12
<p>Students will examine advanced aviation topics and career options after preparing for the Private Pilot Knowledge Test or Part 107 Remote Pilot Test in the previous year. Instrument flight, commercial aviation, and advanced aircraft systems begin the semester. Looking into the future, students will then explore new horizons in the aerospace industry. What might aviation look like five, ten, or twenty years into the future? The focus then turns to business development opportunities in aviation. Finally, students will learn about and conduct different types of research in preparation for their capstone project in the second semester. Prerequisite: The Flying Environment/Flight Planning</p> <p>The capstone course is the culmination of the student learning experience. The students will work individually or in small groups to study and report on an aviation topic of their choosing. The goal of this capstone course is to allow students to demonstrate an understanding of a contemporary topic in aviation. The curriculum will include presentations and activities to help guide student research and project development.</p>		

ENGLISH

English Department Mission Statement

Our mission as the English department is to help all students become strong communicators and critical thinkers while discovering Truth through the stories of others in literature.

ENGLISH COURSES

ENGLISH I (ENG101)

Prerequisite: None

Credit: 1

Grade: 9

Through reading and interacting with literature, students will explore how words can be used to embody goodness, truth, and beauty. English I is designed to offer students an introduction to a variety of literary genres, including short stories, poetry, novels, nonfiction works, and dramas. This course will provide students with a review of basic vocabulary skills, grammar, and syntax, and will build towards the larger language skills of analysis, synthesis, and judgment in the expression of ideas in class discussions and writing.

HONORS ENGLISH I (ENG151)

Prerequisite: Exemplary HSPT score or Teacher Recommendation

Credit: 1

Grade: 9

Through reading and interacting with literature, students will explore how words can be used to embody goodness, truth, and beauty. English I is designed to offer students an introduction to a variety of literary genres, including short stories, poetry, novels, nonfiction works, and dramas. This course will provide students with a review of basic vocabulary skills, grammar, and syntax, and will build towards the larger language skills of analysis, synthesis, and judgment in the expression of ideas in class discussions and writing.

Because this is an honors course, students will be held to a higher standard and will receive additional assignments to challenge them and improve their ability to think, read, write, and speak critically. Students will complete an additional unit, reading a more challenging novel and completing a more rigorous writing assignment. This course is designed to prepare students for AP level courses in their junior and senior year.

ENGLISH II (ENG201)

Prerequisite: English I

Credit: 1

Grade: 10

Students will continue to ask the question of what it means to be human and explore the answers given from various perspectives and sociocultural contexts in literary works. English II is designed to be a comprehensive study of World Literature, introducing students to classic literature from different time periods and regions of the world. Students will examine the art, culture, and social customs associated with each time period and geographical area to enhance their understanding and appreciation of the global community through the lens of the Catholic faith. Genres covered include short stories, poetry, novels, nonfiction works, and dramas. Additionally, students will conduct research that will culminate in a well-written research paper and presentation. In this course, students will enhance their vocabulary skills, knowledge of grammar and syntax, and will refine their language skills of analysis, synthesis, and judgment in the expression of ideas in class discussions and writing.

HONORS ENGLISH II (ENG251) Prerequisite: Teacher Recommendation	Credit: 1	Grade: 10
<p>Students will continue to ask the question of what it means to be human and explore the answers given from various perspectives and sociocultural contexts in literary works. English II is designed to be a comprehensive study of World Literature, introducing students to classic literature from different time periods and regions of the world. Students will examine the art, culture, and social customs associated with each time period and geographical area to enhance their understanding and appreciation of the global community through the lens of the Catholic faith. Genres covered include short stories, poetry, novels, nonfiction works, and dramas. Additionally, students will conduct research that will culminate in a well-written research paper and presentation. In this course, students will enhance their vocabulary skills, knowledge of grammar and syntax, and will refine their language skills of analysis, synthesis, and judgment in the expression of ideas in class discussions and writing.</p> <p>Because this is an honors course, students will be held to a higher standard and will receive additional assignments to challenge them and improve their ability to think, read, write, and speak critically. Students will complete an additional unit, reading a more challenging novel and completing a more rigorous writing assignment. This course is designed to prepare students for AP level courses in their junior and senior year.</p>		
ENGLISH III (ENG301) Prerequisites: English I and II	Credit: 1	Grade: 11
<p>The theme of this course is American Literature. Through reading and interacting with literature, students will explore What makes us American? and How have Americans defined themselves in the English language? At the foundational level, this course will provide students with a review of basic vocabulary skills, grammar, and syntax, and will build toward the larger language skills of analysis, and synthesis. English III is designed to improve students' critical reading, thinking, writing, and speaking skills. Students will be given the chance to engage in real-world discussions and through extensive writing, they will continue to perfect their research and communication skills.</p>		
AP LANGUAGE & COMPOSITION (ENG351) Prerequisite: Teacher Recommendation	Credit: 1	Grade: 11
<p>This Advanced Placement course engages students as skilled readers in a variety of social and historical texts while developing them as skilled writers who compose for various prompts and purposes. Specific emphasis is placed on content, purpose, audience, rhetorical analysis, argumentation, and synthesis of sources. The course aims to provoke successful arguments in support of the student's analysis of the text. The theme of this course is American Literature. Students will be given the chance to engage in real-world discussions upon specific topics derived from primary sources. Through extensive writing, they will continue to perfect their research and communication skills. Finally, this course endeavors to foster a greater appreciation and understanding of literature and its ability to help perfect the human person.</p> <p>Students are required to complete summer reading assignments as determined by the instructor.</p>		

ENGLISH IV (ENG401) Prerequisites: English I, II, and III	Credit: 1	Grade: 12
<p>The theme of this course is British and American literature. Students focus on effective written and oral communication for numerous audiences and purposes. Students apply their skills to further their mastery of the given texts. The goal of this course is to continue students' critical reading, thinking, writing, and speaking skills in preparation for the rigors of college careers. Students will be given the chance to engage in real-world discussions upon specific topics derived from primary sources and will be expected to write a variety of essays, research, and reflective/analytical works. Through extensive writing, they will continue to perfect their research and communication skills.</p> <p>The overarching theme of the course focuses on uncovering the decision-making strategies individuals use to shape their own lives, the lives of others, and even the structure of society.</p>		
AP LITERATURE & COMPOSITION (ENG451) Prerequisite: Teacher Recommendation	Credit: 1	Grade: 12
<p>This Advanced Placement course engages students in the careful reading and critical analysis of literature. Students deepen their understanding of writers' use of language for artistic effect and persuasive impact, with an emphasis placed on British authors. Through reading, discussion, and writing, students examine structure, style, and themes, as well as figurative language in fictional texts. The theme of this course focuses on uncovering the decision-making strategies individuals use to shape their own lives, the lives of others, and even the structure of society. This is a course designed to rigorously challenge students to analyze and interpret poetry, short stories, plays, and novels. It requires an extensive amount of reading and writing. Students are required to complete summer reading assignments as determined by the instructor.</p>		
<h2 style="margin: 0;">ENGLISH ELECTIVE COURSES</h2>		
FOLKLORE, FAIRY TALES, LEGENDS and MYTHS (ENG420) Prerequisite: A passion for reading!	Credit: ½	Grade: 10, 11, 12
<p>Folklore, fairy tales, legends, and myths are an important part of the literary traditions of cultures throughout the world and have influenced our modern-day literature, art, and storytelling. This class will center around the study of tales from across the globe to understand what common archetypes exist, the ways these stories have evolved, and how they have shaped the fairy tales we know and love today. This class will involve an extensive amount of reading, both in class and at home, as well as the study of literary criticism and engagement in the process of analytical writing.</p>		
CREATIVE WRITING (ENG421) Prerequisite: Enthusiasm for Writing!!	Credit: ½	Grade: 10, 11, 12
<p>A course for serious and committed writers, Creative Writing explores various forms of fiction writing including short stories, poetry, novella, and screenwriting. In this course, students build an extensive writing portfolio by writing every day and sharing their written work in a writer's workshop format. Students participate in the writing process continually and are required to do outside reading to enhance their understanding of the writer's journey. All works produced for the course are eligible to be submitted for publication.</p>		

FINE ARTS

The focus of the Performing & Fine Arts Department at St. Michael the Archangel Catholic High School is to encourage each student to identify, explore and practice their God-given talents. We encourage students to participate in activities that they have not previously had practice in to identify those gifts.

FINE ARTS COURSES

ART EXPLORATIONS (FA101)
Prerequisite: None

Credit: ½

Grade:
9, 10, 11, 12

During this introductory course, students explore the essential aspects of drawing, painting, ceramics, and sculpture. Students learn the different types of pencils and focus on the rendering form. Lettering utilizing one- and two-point perspectives is covered. Basic color theory is introduced with tempera paint and watercolor. Objects are constructed as students learn about three dimensional concepts.

DRAWING & PAINTING (FA104) ***\$25.00 Course Fee Required*
Prerequisite: Art Explorations

Credit: ½

Grade:
9, 10, 11, 12

Drawing and painting skills are taught with traditional media. Instruction focuses on composition value and craft. Each project may take a few weeks to complete, so students experience and understand the vast amount of time that creating art often takes.

CERAMICS & SCULPTURE (FA105) ***\$25.00 Course Fee Required*
Prerequisite: None

Credit: ½

Grade:
11, 12

The fundamentals of three-dimensional design are explored utilizing recycled materials, 3-D modeling and everyday objects. Students also explore various hand-building methods to construct ceramic work, and students also learn about the drying stages of clay and about glazing methods. From original designs, students create both functional and decorative objects.

GRAPHIC DESIGN (FA108)
Prerequisite: None

Credit: ½

Grade:
9, 10, 11, 12

Students utilize basic features of Photoshop and InDesign as a vehicle for artistic expression. Through tutorials of typography and image manipulation, each student gains working knowledge of Photoshop.

DIGITAL PAINTING (FA111)
Prerequisite: Art Explorations

Credit: ½

Grade:
11, 12

This course is an introduction to painting on the computer. We will use a variety of paint techniques to create 2-D artwork in Photoshop.

CONCERT CHOIR (FA201) Prerequisite: None	Credit: 1	Grade: 9, 10, 11, 12
<p>A choral ensemble that is open to all students who enjoy singing and want to explore a variety of choral literature. Students develop their singing and musical skills, working on breath-support, tone quality, posture, diction, theory, blend, and sight singing. Students also develop their own personal musical identity through the practice and execution of sung literature. All students are required to participate in scheduled concerts, contests, and, as needed, after-school and evening rehearsals. All members will be required to make a one-time purchase of a concert outfit that will be worn for each performance.</p>		
CHAMBER SINGERS (FA202) Prerequisites: Concert Choir AND Audition with Choir Director	Credit: 1	Grade: 10, 11, 12
<p>An advanced, auditioned choir ensemble for upperclassmen. Students must work diligently, maintain a positive attitude, and have a strong desire to perform. Students develop singing and musical skills, learning about breath support, tone quality, posture, diction, theory, blend, and sight singing. Students develop their own personal musical identity through the practice and execution of sung literature. In addition, members explore the lives and works of the world's most respected composers. All students are required to participate in scheduled concerts, contests, and after school and evening rehearsals. All members will be required to make a one-time purchase for a concert outfit to be worn for each performance.</p>		
MUSIC & INSTRUMENT EXPLORATION (FA207) Prerequisite: None	Credit: ½	Grade: 9, 10, 11, 12
<p>This class is designed for any student who wishes to learn about music. No prior musical knowledge is required. Students will learn about topics such as the many genres of music, music history, its prevalence in our society, film music, and digital music. This class also offers an instrumental learning experience at a beginning level. Students are given the opportunity to try the different instruments and choose one to focus on. Students will be supplied with lesson books but will need to provide their own instruments that are in working condition. Rental and purchase options will be discussed in class. If you enjoy a low-pressure, fun, conversational, explorative environment, this class is for you!</p>		
INSTRUMENTAL ENSEMBLE (FA208) Prerequisite: Open to all brass, woodwind, and percussion instrumentalists	Credit: 1	Grade: 9, 10, 11, 12
<p>An ensemble for ALL types of instrumental musicians who enjoy playing and wish to perform a variety of musical literature. Students develop their musical skills and technique, exploring such things as posture, bowing, embouchure, articulation, phrasing, breath support, tone quality, theory, intonation, and sight reading. All students are required to participate in scheduled concerts, contests, and, as needed, after-school and evening rehearsals. All members will be required to make a one-time purchase of a concert outfit that is worn for each performance.</p>		

DRAMA I (FA118) Prerequisite: None	Credit: ½	Grade: 9, 10, 11, 12
<p>Drama I introduces the student to various aspects of the theatre with the primary focus on how to read a play (teaching critical literacy, subtext, inference, historical reference), fundamentals of acting, and fundamentals of design. This course is designed to provide a theatre outlet for students who are not comfortable auditioning for a production, have scheduling conflicts that prevent play involvement and to foster the fledgling talent of students who are trying theatre for the first time.</p>		
DRAMA II (FA119) Prerequisite: Drama I or instructor permission AND a Sophomore, Junior or Senior.	Credit: ½	Grade: 10, 11, 12
<p>Drama II is an advanced theatre course focused on in-depth dramaturgical analysis, acting techniques, (Classical, Shakespearean, Stansloski), and play direction. Students will take what was learned in Drama I and on stage to the next level. This course is for students who have an invested interest in theatre and serious desire to take their knowledge of theatre and talent for acting to the next level.</p>		

MATHEMATICS

The mission of mathematics education at St. Michael the Archangel Catholic High school, while integrating the values and teachings of the Catholic Church, is to teach our students strategies to identify problems, organize information, devise plans, solve problems, and analyze solutions to communicate results. St. Michael the Archangel Catholic High School requires 4 credits of mathematics to graduate.

MATHEMATICS COURSES

ALGEBRA 1B (MATH111)

Prerequisite: Algebra 1A

Credit: 1

Grade:
10

This class immediately follows Algebra 1A and continues to build problem solving and critical thinking skills needed for mathematics. This class finishes the Algebra 1 curriculum and introduces topics that will lead students into geometry. Topics covered include solving linear equations and inequalities, polynomials, functions, rational expressions, factoring, and quadratics.

**This class fulfills one math credit requirement at SMA but may only count as a half math credit at some colleges/universities, especially those in the Missouri system.*

PRE ALGEBRA (MATH100)

Prerequisite: Department Head Recommendation and HSPT Score

Credit: 1

Grade:
9

The course instruction uses prescriptive lessons to improve student understanding of math principles. Students build on previously learned mathematics concepts to prepare them for Algebra I. *This course DOES NOT meet Board of Regents or NCAA requirements.*

ALGEBRA I (MATH101)

Prerequisite: HSPT score

Credit: 1

Grade:
9

Designed to acquaint students with algebraic concepts and thinking, students develop reasoning skills and apply algebraic techniques to solve word problems. Topics covered include solving linear and quadratic equations, operations of polynomials, factoring, solving inequalities, rational expressions, exponents and graphing equations in two variables.

MATH ASSIST (MATH102)

Prerequisite: Instructor Approval and/or HSPT score

Concurrent with PreAlgebra or Algebra I

Credit: 1

Grade:
9

Students receive intensive instruction in specific math skills in addition to their Algebra I class. Math Assist and PreAlgebra or Algebra I are taken concurrently, and credit earned in Math Assist counts as a general elective credit and will not be applied toward the minimum graduation requirement in math. *This is an additional math support class and therefore DOES NOT meet Board of Regents or NCAA requirements.*

GEOMETRY (MATH201) Prerequisite: Algebra I	Credit: 1	Grade: 9, 10, 11
<p>Geometry introduces students to deductive mathematical systems through theory and application. The topics covered include spatial visualization, lines and figures in planes, theorems, congruence, similarity and classification of triangles, polygons, circles, deductive proofs, transformations, area and volumes, two- and three- dimensional figures, and coordinate geometry. Algebraic skills are reviewed and strengthened through application in problem solving through geometry.</p>		
HONORS GEOMETRY (MATH202) Prerequisite: Algebra I AND HSPT score (9th grade) or teacher recommendation (10th grade)	Credit: 1	Grade: 9, 10
<p>This course is designed for students who have already completed Algebra I. Students review key algebraic concepts before starting the Honors Geometry curriculum. This is a fast-paced, honors-level course. It is designed for advanced students wanting to take Algebra I in 9th grade and still be ready for calculus by 12th grade.</p>		
ALGEBRA II (MATH301) Prerequisite: Geometry	Credit: 1	Grade: 10, 11, 12
<p>Students further develop algebraic skills through the study of quadratic equations and functions, polynomials, rational expressions and functions, systems of linear equations and inequalities, radicals, irrational numbers, exponential and logarithmic functions, and variations.</p>		
HONORS ALGEBRA II (MATH251) Prerequisite: Honors Algebra I & Geometry or HSPT score and Teacher Recommendation	Credit: 1	Grade: 10, 11
<p>Students further develop algebraic skills at a rapid pace. Topics covered include linear functions, quadratic functions and equations, polynomials, rational expressions, exponential and logarithmic functions, variations, and an introduction to trigonometry.</p>		
COLLEGE ALGEBRA/TRIGONOMETRY (Non-Dual Credit) (MATH304) Prerequisite: Algebra 2 or Teacher Recommendation	Credit: 1	Grade: 11, 12
<p>This course is designed for those who have completed Algebra 2 but are not ready for a college level math course. The course is less rigorous than Dual Credit College Algebra but prepares students for any future math courses. The course contains a semester of College Algebra and a semester of Trigonometry.</p>		
DUAL CREDIT COLLEGE ALGEBRA (MATH501) Prerequisite: 3.0 or composite score of 21 on the ACT	Credit: 1	Grade: 11, 12
<p>This is a course offered by University of Missouri-Kansas City at St. Michael the Archangel. It is a yearlong high school class that is equivalent to a single semester of College Algebra at UMKC. If enrolled in this class, students must enroll in UMKC Math 110 for college credit (3 college credit hours). This course will review elementary algebra, solution of equations, functions, exponential and logarithmic functions, inequalities, systems of linear equations, equations of second degree and their graphs, binomial theorem, complex numbers and polynomials.</p>		

DUAL CREDIT PRECALCULUS (MATH351) Prerequisite: Honors Algebra 2 or Teacher Recommendation	Credit: 1	Grade: 11, 12
<p>This is a course offered by University of Missouri-Kansas City at St. Michael the Archangel. It is a yearlong high school class that is equivalent to a single semester of Precalculus at UMKC. If enrolled in this class, students must enroll in UMKC Math 120 for college credit (5 college credit hours). This course covers solutions of equations, analyzing functions, systems of linear equations, exponential & logarithmic functions, trigonometric functions, trigonometric identities, equations of second degree their graphs, complex numbers, and polynomials.</p>		
DUAL CREDIT CALCULUS I (MATH415) Prerequisites: Instructor Approval	Credit: 1	Grade: 12
<p>This is a course offered by the University of Missouri-Kansas City at St. Michael the Archangel. It is a yearlong high school class that is equivalent to a single semester of Calculus I at UMKC. If enrolled in this class, students must enroll in UMKC Math 210 for college credit (4 college credit hours). This course covers functions and graphs, rational, trigonometric, exponential functions, composite and inverse functions, limits and continuity, differentiation and its applications, integration and its applications. If enrolled in this class, students must enroll in UMKC for college credit (4 college credit hours).</p>		
ELEMENTARY STATISTICS (Dual Credit Program) (MATH451) Prerequisite: Minimum GPA of 83% or composite score of 21 on ACT and College Algebra or Pre-Calculus	Credit: 1	Grade: 12
<p>This is a course offered by University of Missouri-Kansas City at St. Michael the Archangel. It is a yearlong high school class that is equivalent to a single semester of Elementary Stats at UMKC. If enrolled in this class, students must enroll in UMKC Elementary Stats 235 for college credit (3 college credit hours). This class is a non-calculus-based course, which introduces descriptive and inferential statistics. The course presents basic statistical concepts and methods and shows how they enhance critical thinking and reasoning. Statistical reasoning will be emphasized and statistical functions in Excel will be used.</p>		

PHYSICAL EDUCATION & HEALTH

St. Michael the Archangel Catholic High School is dedicated to the development of the spiritual, physical, emotional, and social health and well-being of each student. Physical Education and Health courses are directed toward developing and improving physical fitness knowledge and ability, knowledge of rules and interest in physical activities with individual and small group sports. It encompasses the general informational and educational needs of students in the areas of health and wellness.

All students are required to earn one Physical Education credit for graduation. Students must take a semester PE class at SMA and CAN earn the additional ½ credit of PE through two seasons of a team sport. (Credit earned is pass only.) Students must complete a P.E. Waiver form (available online or in the school office) to receive credit for sport participation.

PHYSICAL EDUCATION COURSES

GENERAL PHYSICAL EDUCATION I (PE101)

Required to take freshman year

Prerequisite: None

Credit: ½

Grade:
9, 10

This course is directed toward developing and improving students' fitness knowledge and ability. The aim of this course is to introduce students to sports theory, cooperative team sports, and individual physical fitness. Special emphasis is placed on the development of good sportsmanship and Christian behavior.

HEALTH & WELLNESS (PE102)

Required to take freshman year

Prerequisite: None

Credit: ½

Grade:
9, 10, 11, 12

This **required** course is directed toward developing and improving knowledge in the area of health and wellness. The aim is to encourage students to acquire healthy attitudes and habits that maximize physical health and happiness.

GENERAL PHYSICAL EDUCATION II (PE101)

Prerequisite: General PE I

Credit: ½

Grade:
10, 11, 12

A course to continue building student's knowledge and skills learned in General PE I. Students will participate in cooperative games, team sports, individual sports, and strength training while also improving social skills and building character.

GIRLS FITNESS (PE200)

Prerequisites: General PE I

Credit: ½

Grade:
10, 11, 12

A course for girls to work on their strength, endurance, and flexibility in a variety of activities. Some exercises will be walking, running, dance, weight training, and cooperative games. We will also focus on setting fitness goals and working on building motivation, relaxation techniques, and confidence.

LIFETIME FITNESS (PE201) Prerequisites: Physical Education and Health & Wellness	Credit: ½	Grade: 11, 12
As an advanced elective course, the primary objective is to help students understand the importance of achieving and maintaining lifetime physical fitness. The course includes an introduction to various recreational activities that can be enjoyed throughout life.		
WEIGHT TRAINING I (PE202) Prerequisites: Physical Education and Health & Wellness	Credit: ½	Grade: 11, 12
An introductory elective course for students interested in improving overall muscular strength and endurance. Includes an overview of the physiological basis for muscular strength and athletic power improvement, while emphasizing proper lifting techniques and safety procedures. In addition, this course is designed to improve flexibility, speed and agility.		
WEIGHT TRAINING II (PE203) Prerequisites: Physical Education and Health & Wellness and Weight Training I	Credit: ½	Grade: 11, 12
A course for students to continue improving overall muscular strength and endurance. In addition, this course is designed to improve flexibility, speed and agility.		

SCIENCE

The SMA Science Department inspires our students' curiosity, providing the tools to interact with our world and to recognize the complementarity of faith with science. Our Science Department provides world-class instruction, challenging and equipping our students to not only be faith-filled disciples, but also process, analyze, adjust to, and improve the world around us.

SCIENCE COURSES

INTEGRATED CONCEPTS OF HIGH SCHOOL SCIENCE (SCI100)

Prerequisite: None

Credit: 1

Grade: 9

Integrated Concepts of High School Science is a laboratory-based science course focusing on science and engineering practices through the concepts of chemistry and physics. The first semester concentrates on the processes of science using topics in chemistry to demonstrate these processes. The second semester concentrates on measurement and the collection, presentation and processing of data using physics (primarily motion concepts) to practice these concepts. In the second semester, there is a heavy emphasis on graphing techniques and the interpretation of graphs.

BIOLOGY (SCI101)

Required

Prerequisite: HSPT score & Teacher Recommendation

Credit: 1

Grade:
9, 10

An introduction into the study of all living things and environmental interactions, including cells, plant and animal life, genetics, evolution, classification, and ecology. Various laboratory experiences are included in each topic that enhances mastery.

HONORS BIOLOGY (SCI102)

Prerequisite: **Freshman:** HSPT score and co-enrolled in Honors Algebra I. **Sophomore:** 90% or higher in Physical Science, or Teacher Recommendation.

Credit: 1

Grade:
9, 10

This course covers the same subject matter as Biology in greater detail and at a rapid pace. Emphasis is given in developing critical thinking skills. This course is for those students who have demonstrated an aptitude in science and who plan to enroll in advanced science courses. Students should carefully consider the extra time needed for this challenging course.

CONCEPTUAL CHEMISTRY (SCI200)

Prerequisite: Biology & Enrolled in Algebra II

Credit: 1

Grade:
10, 11, 12

Conceptual Chemistry focuses on the basics of chemistry. In this course we will dive into the structure, function, and interactions of different matter. Students will learn to read and effectively use the periodic table and all of its symbols. We will be engaging in several laboratory activities to practice and see how chemical reactions occur.

CHEMISTRY (SCI201) Prerequisite: Biology & Enrolled in Algebra II	Credit: 1	Grade: 10, 11, 12
Provides background in the principles of chemistry: atomic structure, molecular structure, bonding, chemical reaction, stoichiometry, periodicity, gases, solutions, acids and bases. Topics are explored in conjunction with supportive laboratory activities. Designed for the college bound student who needs in-depth chemistry for science and math related fields such as medicine, nursing, medical technology, engineering, agriculture, and forestry, as well as chemistry.		
Dual Credit CHEMISTRY w/ Lab (SCI252) Prerequisites: 85% or higher in Chemistry; Teacher Recommendation	Credit: 1	Grade: 11, 12
This course covers the same subject matter as Chemistry in greater detail at a rapid pace. Emphasis is given to developing critical thinking skills. This course is for those students who have demonstrated an aptitude in science and who plan to enroll in advanced science courses. Students should carefully consider the extra time needed for this challenging course. There will be two offsite Saturday labs required in the fall for completion of this course. It is possible for some students to be eligible to enroll in dual college credit chemistry through UMKC by meeting required criteria.		
PHYSICS (SCI401) Prerequisite: Enrolled in Algebra II	Credit: 1	Grade: 10, 11, 12
Physics is an algebra-based, introductory physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound.		
ANATOMY & PHYSIOLOGY (SCI402) Prerequisite: Biology & Chemistry or instructor approval	Credit: 1	Grade: 11, 12
Anatomy and Physiology is an advanced biology course that focuses on the structure and function of the human body systems. Topics will be covered by body systems (ie. integumentary, skeletal, muscular, nervous, cardiorespiratory, endocrine, immune, etc.), covering anatomy (structure) and physiology (function). Students will gain a fundamental understanding of these systems and their interconnectedness, while also integrating concepts from medical sciences, kinesiology, exercise physiology and nutrition. This course will include labs, dissections, research projects and group projects.		
ASTRONOMY & METEOROLOGY (SCI403) Prerequisite: None	Credit: 1	Grade: 10, 11, 12
Meteorology and Astronomy is a science elective that spans a full year. Astronomy, taken first semester, covers the Sun and the major constituents of the solar system (planets, comets, minor planets, meteors, etc.), eclipses, the Moon, stars, light, telescopes, stellar evolution (white dwarfs, neutron stars and black holes), and the historical development of astronomical ideas and to recent developments in planetary astronomy. In the second semester, Meteorology provides students with an in-depth study of the processes that govern the climate and weather. Topics include world climate systems, climatic changes, human influence on climate, the causes of local weather systems, historical and technological contributions to meteorology, weather forecasting, observational and data collecting techniques and the processes that cause severe weather.		

AP BIOLOGY (SC/451) Prerequisite: Grade of 85% or above earned in Biology & Chemistry; Teacher Recommendation	Credit: 1	Grade: 11, 12
<p>Advanced Placement (AP) Biology is the equivalent of a two-semester college introductory course usually taken by biology majors during their first year. This course will prepare students for the AP examination and subsequent college-level science coursework. The course is designed around the new AP Biology curriculum framework that focuses on the Big Ideas: 1.) Evolution 2.) Energetics 3.) Information Storage and Transmission 4.) System Interactions in Biology and their connections. The AP Biology course also includes a college-level laboratory component that will require students to design experiments, collect and analyze data, and write college-level lab reports. The course covers a vast amount of material, is in-depth, and moves at a fast pace. Students taking this class must have strong reading comprehension and analytical skills as well as excellent study habits and be willing to devote an average of 5-10 hours per week to the coursework.</p>		
AP PHYSICS (SC/452) Prerequisite: Successful completion of Physics or Chemistry and an Algebra II grade of 85% or above	Credit: 1	Grade: 11, 12
<p>AP Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts of kinematics, dynamics, circular motion, gravitation, energy, momentum, simple harmonic motion, torque, and rotational motion.</p>		

SOCIAL STUDIES

The purpose of the Social Studies curriculum is to develop knowledgeable, active participants in a democracy and an interdependent world. Our department strives to prepare students to evaluate and act in accordance with Catholic values. The three required credits are fulfilled through three courses: American Government (9), World History (10), and U.S. History (11).

SOCIAL STUDIES COURSES

AMERICAN GOVERNMENT (SS102)

REQUIRED

Prerequisite: None

Credit: 1

Grade:
9

This course is a study of the origins, development, structure and functions of the state and national government. Topics include the creation of the United States Constitution and Missouri State Constitution, constitutional framework, the three branches of government, the three levels of government, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. Basic concepts of state and local government and their relationships with the federal government are also examined. **During the year, students take the United States and Missouri Constitution tests. As required by the state of Missouri, students must pass this test to qualify for graduation.**

MODERN WORLD HISTORY (SS101)

REQUIRED

Prerequisite: None

Credit: 1

Grade:
10

A broad survey of world events from the Renaissance and Reformation period to the present day. Emphasis is given geography, economic organization, politics and law, war and diplomacy, technology, religion, philosophy, science, the arts, social relations, and cross-cultural interaction. Students exercise many skills, including critical thinking, reading of primary sources for content, historical document analysis, identifying cause and effect, note taking, map interpretation, and essay writing.

DUAL CREDIT HONORS MODERN WORLD HISTORY (SS252)

REQUIRED option to Modern World History

Prerequisites: 90% cumulative GPA or higher **AND** an average of 90% or above in American Government **AND** English I classes.

Credit: 1

Grade 10

A college survey course examining the history of the world from 1450 to the present day with a special emphasis on historical thinking skills. Students are expected to read assigned texts and supplemental materials, participate in classroom discussions and research, and practice analysis and writing skills. Students who successfully meet UMKC criteria will earn three (3) hours of college credit. **Payment of fees to UMKC is required to earn dual credit. Students who earn a 74.5% or above will receive an additional 5% added to their weighted semester GPA.**

U.S. HISTORY (SS301) REQUIRED Prerequisite: None	Credit: 1	Grade: 11
A survey of the development of the United States from the pre-Columbian period to the present with particular attention to colonial development, early national period, age of Jackson, Civil War and Reconstruction, age of Roosevelt, WWI, Great Depression, WWII, the Cold War, Civil Rights, and Vietnam. There is a focus on social history regarding Native Americans, African Americans, immigrants, women, and laborers.		
DUAL CREDIT HONORS U.S. HISTORY (SS353) REQUIRED option to U.S. History Prerequisites: 90% cumulative GPA or higher AND an average of 90% or above in World History AND English II classes.	Credit: 1	Grade: 11
A college survey course examining U.S. history from 1492 to present day with a special emphasis on historical thinking skills. Students are expected to read assigned texts and supplemental materials, participate in classroom discussions and research, and practice analysis and writing skills. Students who successfully meet UMKC criteria will earn three (3) hours of college credit each semester. Payment of fees to UMKC is required to earn dual credit. Students who earn a 74.5% or above will receive an additional 5% added to their weighted semester GPA.		
<h2 style="background-color: #002060; color: white; padding: 5px;">SOCIAL STUDIES ELECTIVE COURSES</h2>		
PSYCHOLOGY (SS201) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 11, 12
Psychology is the science that studies human behavior and mental processes. This course introduces the field of psychology and its major perspectives including the biological basis of behavior, sensation, perception, learning, memory, motivation, emotion, personality, and stress. This course will also examine the areas of developmental, social, and abnormal psychology.		
SOCIOLOGY (SS202) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 11, 12
Sociology is the science of people, their behavior, and the impact of that behavior on society. It is concerned with how people relate to and influence each other's behavior, focusing more on the group than the individual. Sociologists accomplish this by examining social phenomena, or observable facts or events that involve human society. Students will be required to address and assess various hypothetical and real-life experiences related to human and societies' behaviors.		
CURRENT EVENTS (SS203) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 10, 11, 12
Students become conversant on the issues facing our world today, develop a context by which to interpret the news, and expand understanding about the role they play in those events. Emphasis is placed on the elements of media coverage to become informed consumers of the news.		

AMERICAN HISTORY THROUGH FILM (SS204) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 11, 12
A critical study of film, mass media, and social media. Through screenings, readings, and discussion students examine how film and mass media serve as powerful determinants of ideology, identity, and historical consciousness. Students gain an in-depth understanding of important events from American History and question the consequences of our passive consumption of mass media.		
WORLD HISTORY THROUGH FILM (SS205) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 11, 12
A critical study of film, mass media, and social media. Through screenings, readings, and discussion students examine how film and mass media serve as powerful determinants of ideology, identity, and historical consciousness. Students gain an in-depth understanding of important events from World History and question the consequences of our passive consumption of mass media.		
ANCIENT WORLD HISTORY (SS210) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 10, 11, 12
This course delves into the evolution of civilizations from the rise of ancient empires to the end of the Roman Empire. Comprehensive and organized by region, this course helps students understand the Earth's physical and human diversity. Students will investigate the reasons for the development of ancient societies, the effects of the emerging civilizations, their problems, and the progress made during different periods of social, economic, and political development, analyze effects of political conflicts and social issues on the development and interdependence among early civilizations, and the contributions that tied them with the modern world.		
HOLOCAUST STUDIES (SS302) <i>(elective)</i> Prerequisite: None	Credit: ½	Grade: 11, 12
Examine the causes, course, and consequences of the "Holocaust" as it developed in Nazi Germany during the period of 1932-1945. Emphasis is placed on the history of European Jewry before the Holocaust and on understanding how such a tragedy could take place in the "civilized world" of the modern 20th century. Other examples of discrimination, relocation, and genocide are examined, as well as the issues of social justice and bystander responsibility.		
DUAL CREDIT HONORS U.S. GOVERNMENT & POLITICS (SS452) Prerequisites: 3.0 cumulative GPA or higher <i>AND</i> an average of 85% or above in U.S. History <i>AND</i> English III classes.	Credit: ½	Grade: 12
A political science course for highly motivated students. Students examine the institutions, groups, beliefs, and ideas that make up American government. Emphasis is given to a political understanding of government, with a critical eye to the role that the people play in the process. Reading materials are extensive and challenging. Students read assigned texts and supplemental materials, participate in classroom discussions and research, and practice analysis and writing skills. Students who successfully meet UMKC criteria will earn three (3) hours of college credit. Payment of fees to UMKC is required to earn dual credit. Students who earn a 74% or above will receive an additional 5% added to their weighted semester GPA.		

CATHOLIC THEOLOGY

The St. Michael the Archangel Catholic High School Theology Department, along with the entire faculty and staff, is dedicated to passing on the teachings, traditions, and treasures of the Catholic faith to our students. The Theology Department provides students with the foundational knowledge of the Catholic faith based on strong catechetical instruction supported through the regular offering of Mass, serving others, spiritual direction, sacramental life, retreats, vocational awareness, and a culture of charity. All students must be enrolled in a theology course every semester for the entire four years of high school.

Christian Stewardship Program:

- Students complete 25 hours each school year).
- Service hours must be completed to move on to the next grade level and is a graduation requirement for seniors.
- Service must be done with one specific agency per year.
- Specific agencies should be chosen each year from an approved list.
- Students complete a project on their service aligned with the Corporal & Spiritual Works of Mercy. The project counts for 10% of their second semester Theology grade.
- Underclassmen present their project about their 25 hours of service for that year in their Theology class.
- Seniors give a presentation on all four years of service in the spring to a panel of faculty members.

THEOLOGY COURSES

REVELATION OF JESUS CHRIST IN SCRIPTURE (*THEO101*)

REQUIRED

Prerequisite: None

Credit: 1

Grade:
9

An introduction of sacred scripture and its significance to Jesus Christ in the Old and New Testaments. First semester is an overview of our knowledge of God and where the Bible comes from. Second semester is an examination of the Old and New Testaments and how Christ reveals Himself through them.

THE CHURCH AND THE SACRAMENTS (*THEO202*)

REQUIRED

Prerequisite: None

Credit: 1

Grade:
10

Sophomore theology builds on the freshman course. Students study how we experience Christ's Living Body through the Church. The first semester includes Christology and Ecclesiology and focuses on how the Church continues the mission of Christ. The second semester curriculum helps students understand how Christ's saving action is present in the Sacraments, especially through the Eucharist. Special attention is also given to the process of discerning God's call in our lives to our vocation.

CATHOLIC MORALITY (THEO310) REQUIRED Prerequisite: None	Credit: 1	Grade: 11
Junior theology helps students understand that it is only through Christ that they can fully live out God's plans for their lives. With an understanding of Salvation History and the sacramental life of the Church, students learn the moral principles that govern the lives of Christ's disciples. During the second semester, students examine John Paul II's Theology of the Body to expand understanding of human sexuality.		
APOLOGETICS (THEO403) REQUIRED Prerequisite: None	Credit: ½	Grade: 12
This <u>mandatory course</u> is designed to help students develop a response to the questions and challenges the secular world poses to their Christian faith. Responses are based on sound principles of logic and reason, as well as personal faith. This course is based on content from the Catechism of the Catholic Church, Scripture, as well as on encyclicals and other Church documents. Also involved in the work of apologetics is the recognition of the spiritual challenges it can pose to the person which requires a strong prayer life, as well as the interpersonal skills necessary to winning hearts rather than just arguments.		
CATHOLIC SOCIAL TEACHING (THEO410) Prerequisite: None	Credit: ½	Grade: 12
This course is an introduction to Catholic Social Teaching, sometimes referred to as Social Justice. Students learn how Christ's concern for others, especially the poor and needy, is present today in the Church's social teaching. While gaining a deeper understanding of the social aspect of the Catholic mission, students explore our responsibility to live out this mission. This course is one of the options that seniors may choose for their theology elective.		
CHURCH HISTORY (THEO420) Prerequisite: None	Credit: ½	Grade: 12
This course will focus on Catholic engagement with the world throughout history. We will examine the ways that the Church has called us to seek holiness, witness to our faith, and influence the culture. Time Periods studied include Early Church, Church Fathers, Rise of Monasticism, Scholasticism, Catholic Revival, and Modern Times. This course is one of the options that seniors may choose for their theology elective.		

WORLD LANGUAGES

Mission Statement: Building a compassionate, structured environment that fosters a student's personal growth through critical thinking, while fortifying their faith formation and giving them the tools to be lifelong learners.

There is a two-credit requirement of the same language in order to graduate from St. Michael the Archangel.

WORLD LANGUAGES COURSES

LATIN I (LN101)
Prerequisite: None

Credit 1

Grade:
9, 10, 11

This course introduces the student to the language of the ancient Romans. Each student builds a strong base of vocabulary and begins to read Latin prose. Students learn how Latin has affected modern languages, especially the vocabulary and grammar of English. This course also provides lessons on Roman culture from which many aspects of western civilization have evolved as well as the importance of the Latin language in the Catholic Church.

LATIN II (LN201)
Prerequisite: Latin I

Credit: 1

Grade:
10, 11, 12

Students will gain proficiency in reading Latin. The course will also offer additional activities on speaking and writing Latin. In terms of grammar, students will devote a significant amount of time learning how to conjugate verbs according to varying tenses, voices, and moods. Students will continue to study Roman history and culture, the influence of Latin on modern languages, and the role of Latin in the Catholic Church.

SPANISH I (SP101)
Prerequisite: None

Credit: 1

Grade:
9, 10, 11

A general introduction to Spanish I, language: sound system, pronunciation, functional vocabulary related to everyday life, cultural information, and basic grammatical structures. Basic conversations are mastered, and verb conjugation begins with the present indicative tense. The three modes of communication are emphasized. The main objectives include the ability to participate in simple conversations using phrases and simple sentences and to teach the students a basic understanding of Spanish culture, vocabulary, and grammar.

SPANISH II (SP201)
Prerequisite: Spanish 1

Credit: 1

Grade:
9, 10, 11, 12

Building upon knowledge gained in Spanish 1, emphasis is placed on perfecting pronunciation, mastering the basic grammatical structures, and improving communicative proficiency. Students are exposed to present and past tenses. Students are expected to apply grammar and vocabulary skills learned through the three modes of communication. This course introduces students to a variety of cultural aspects of Spanish speaking communities around the world.

HONORS SPANISH III (SP351) Prerequisite: Spanish II grade of at least 85% & instructor recommendation	Credit: 1	Grade: 10, 11, 12
<p>This course builds upon knowledge gained in Spanish I and II. Students expand their vocabulary range to include more sophisticated terminology, use advanced language expressions, verb tenses, and grammatical concepts such as the pluperfect and the subjunctive mood. Students view authentic Spanish language videos and read selected Spanish short stories. This is a fast-paced course to prepare students for Dual Credit Honors Spanish IV.</p>		
DUAL CREDIT HONORS SPANISH IV (SP452) (fall semester) Prerequisite: Honors Spanish III	Credit: ½	Grade: 11, 12
<p>This course prepares students to advance to a high proficiency level by implementing a fast-paced college level curriculum. Students communicate using rich, advanced vocabulary and linguistic structures as they build proficiency in all modes of communication towards the intermediate level. College credit is available for those students who meet OTC (Ozark Technical College) requirements and dual enroll through OTC and SMA as well as pay the course fees associated with the class.</p>		
DUAL CREDIT HONORS SPANISH V (SP453) (spring semester) Prerequisite: Dual Credit Honors Spanish IV	Credit: ½	Grade: 11, 12
<p>This advanced course is for students who have successfully completed 3 ½ years of Spanish. It emphasizes communication by applying interpersonal interpretive and presentational skills in real-life situations. To best facilitate the study of language and culture, the course is taught in Spanish. The course focuses on the integration of authentic resources including online, print, audio, and audiovisual resources. Students communicate using rich, advanced vocabulary and linguistic structures as they build proficiency in all modes of communication towards the intermediate level. College credit is available for those students who dual enroll through OTC (Ozark Technical College) and SMA as well as pay the cost per credit hour.</p>		