

Regina High School



Curriculum Guide 2020-21

PURPOSE OF THE GUIDE

Regina High School strives for spiritual, academic, and co-curricular excellence. It also recognizes individual diversity and, therefore, provides a setting for learning, creativity, thinking, and open-mindedness, all within the context of a virtue and value-centered environment.

The Curriculum Guide is designed to improve the quality of learning by fulfilling the needs of students and enabling them to plan a course of studies for four years. Parents must be involved in helping to choose classes. The school facilitates learning by setting up proper class size, the number and spacing of classes according to the nature of the subject, the type of instruction, and the level of student ability.

Regina High School is committed to providing all students with a learning environment in which they can become literate and proficient in the ethical use of modern and rapidly advancing technology. Technology is integrated throughout the curriculum in order to help students develop analytical and higher thinking skills that enable them to access and process information. Technology empowers them with the tools to compete and succeed in today's global work environment and to be flexible and adaptable to all new technological changes.

In all cases, it is advisable to check the graduation requirements, the required courses for each year, and any noted prerequisites before making course selections.

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CURRICULUM POLICIES

The development of the school's curriculum is based on Regina High School and State of Michigan graduation requirements; Archdiocesan, state, and national standards; a liberal arts college preparatory framework; and students' interests. All course offerings at Regina High School are reviewed and updated yearly. The annual Curriculum Guide, published at the time of registration, gives a description of each course's content and the credit it carries.

COURSE LOAD: Students need 27 credits to graduate. Specific department area requirements are listed in the Curriculum Guide. Freshmen, sophomores, and juniors carry seven academic classes each semester. Seniors need at least six academic classes each semester.

SENIOR SCHEDULES: Some seniors choose to take only the required six academic classes each semester. **NOTE:** Senior schedules are determined by course requests, not class period. Although seniors have the privilege of release time, there is no guarantee as to when the unscheduled time occurs. **The school does not consider requests by parents or students to schedule the free period during 7th hour, nor are changes allowed to create such a schedule.**

COURSE SELECTION: The school's master schedule is generated by students' course selections. The final list of course offerings, number of classes, class sizes, personnel assignments, and resource allocation are determined by students' course requests. This means that not every course listed in the Curriculum Guide has sufficient numbers to run. Also, a student's choices may conflict in the master schedule. When this occurs, a student's alternate selections are used to complete a schedule.

At registration time, students have an opportunity to consult with counseling staff who recommend classes based on achievement and students' long-term goals and plans. It is important that **parents and students give careful consideration to course selections prior to signing the Final Course Selection sheet. ALL course selections for both semesters of the upcoming year are final after parental approval has been given.**

PREREQUISITES: Students should note that the school strictly adheres to the written prerequisites.

CHANGE IN COURSE LEVEL: Final placement is not determined until after review of the student's second semester grades. It is possible for students to change course level based on performance. If a student wishes to move into an honors class and the course prerequisites are met, the student should consult with the counselor and submit a signed teacher recommendation form. Students must have a 3.14 cumulative GPA and "A"s for both semesters in a subject to change levels. Parents who ask to override the school's recommended placement must meet with the counselor and sign the Course Placement Change Request. Scheduling priority is given to students who meet the prerequisites and have the necessary teacher recommendations. Changes in course level are not made mid-year.

SCHEDULE CHANGE REQUESTS: The registration process is structured so that there is ample time for parents, students, counselors, and teachers to consult on appropriate placement and class selection for students. Because the development of the master schedule hinges on students' course requests, schedule changes because of a change in student's interest, a course's assigned teacher, or if a student has a passing grade (C-) or better are not considered. Due to school policy and scheduling limitations, requests regarding particular teachers cannot be accommodated.

Withdrawal and course change requests must be made within the first ten days of a course and are subject to administrative approval. Seniors who select two science courses may not withdraw from either once the signed course selection form is returned. In rare occasions, a teacher or counselor may initiate a change if a student is receiving a failing grade despite honest effort and a variety of

interventions. **Unless it is school-initiated, there is a \$30.00 fee for schedule change requests.** **NOTE:** A request is not a guarantee that a schedule change will be approved. Schedule changes are rare as they negatively impact the balance built into the master schedule. That is why families are asked to make initial decisions in an informed and thoughtful manner.

ONLINE CLASSES: Under certain circumstances, a student may be a candidate to complete an online course. Classes are available on a limited basis and are subject to guidelines determined by the school. Qualified students may select only one elective online class per semester. Students may not obtain online credit for required classes or courses that are offered at Regina unless the school cannot fit the class in the schedule. Students are required to take both semesters of a “full-year” course. No more than two total online elective credits can be counted toward the 27 credits needed to graduate. Only one of these credits may be weighted for honors/AP points in the G.P.A. calculation. Parents and students electing an online course must sign a contract prior to enrollment. A meeting with the counselor is recommended to discuss the full policy regarding online classes.

Students in online courses are scheduled into a daily study hall in the Media Center to work on the required class work. It is mandatory that students log in and work on online lessons during each study hall period. Semester exams are taken on school premises with a proctor on the scheduled Regina exam date.

DUAL ENROLLMENT: Dual enrollment allows students in grades 9-12 to take courses, including those online, at Michigan public or private colleges and universities. The State of Michigan pays for the tuition, fees, and books of students who qualify for the program but caps the total amount of funds allocated to each student. There are parameters on which classes may be selected and how a student qualifies for dual enrollment. Parents and students should check with the Counseling Office for the full policy on dual enrollment.

School administrators make the final decision on course offerings, student placement, and schedule changes. More information about the school’s policies on curriculum, class selection, and grade and graduation requirements are in the Student Handbook.

REQUIREMENTS FOR GRADUATION

Following the State of Michigan Merit Curriculum, the minimum requirement for a student who expects to graduate from Regina is 27 credits that must include the following:

- 3-1/2 credit in Theology
- 4 credits in English
- 4 credits in Mathematics (must complete credit senior year)
- 3 credits in Science (must include 1 credit of Biology and 1 credit of Chemistry)
- 3 credits in Social Studies (must include 1 credit in World History, 1 credit in U.S. History and Geography, 1/2 credit in Economics, and 1/2 credit in U.S. Govt.)
- 1 credit in Fine Arts
- 1/2 credit in Computer Applications (Intro. to Engineering Design fulfills requirement)
- 1/2 credit in Physical Education
- 1/2 credit in Health Education
- 2 credits in Foreign Language (two consecutive years of the same language)
- 5 or more credits in electives

The required State of Michigan online course work is integrated throughout the curriculum.

REQUIREMENTS FOR COLLEGE ENTRANCE: Although each university/college has final say in admissions decisions, most of Michigan's post-secondary institutions have agreed that students must meet the following requirements:

- 4 years of English
- 4 years of Mathematics
- 3 years of Science (includes 1 year of Biology and 1 year of Chemistry)
- 2 years of History and 1 year of Social Studies
- 2 years of a Foreign Language (3 years strongly recommended)

The standards and requirements for admission are different for each university and certain programs may have special requirements. Students should get detailed information about admission requirements from the counseling staff or from the proper admissions office. In considering a student's potential for success, each university looks at the high school record. Factors such as grade point average, test scores, rigor of the course work, special abilities, scholastic activities, community service, and work experience are also important.

REGINA HIGH SCHOOL STEM INITIATIVE

The Regina STEM Initiative provides students with authentic academic experiences inside and outside of the classroom. The focus is on a collaborative, interdisciplinary, and hands-on education where students lead the learning for real world applications.

As part of the STEM program, students:

- Join in school-wide STEM Days examining unique topics and their cross-curricular relevance.
- Code individually designed websites using HTML, CSS, SQL, and PHP.
- Develop Android mobile apps.
- Explore a variety of career fields through guest speakers and field trips.
- Design grasping and attachment systems for prosthetic hands using software patent invention.
- Simulate a surgical and casting lab in a medical setting.
- Lead Harkness discussions critically analyzing relevant literary content.

COURSES

Advanced Placement (AP)

- AP Biology
- AP Calculus AB
- AP Chemistry

Science

- Anatomy & Physiology
- Biology *
- Chemistry *
- Forensic Science
- Introduction to Clinical Medicine
- Honors Physics
- STEM Environmental Science
- Medical Terminology (MI Virtual HS)
- Oceanography (MI Virtual HS)
- Veterinary Science (MI Virtual HS)

Engineering & Technology

- Computer Applications
- Digital Design & Media
- Introduction to Engineering Design (PLTW)
- Marketing & Management
- Yearbook Management & Production
- Game Design & Animation (MI Virtual HS)

Mathematics

- Algebra 1 *
- Algebra 2 *
- College Algebra
- Geometry *
- Probability & Statistics
- Trigonometry/Pre-calculus *

* Also offered at the honors level

STEM PARTNERS

- American Assoc. of University Women Birmingham Branch Foundation Inc.
- American Red Cross
- Ascension Macomb-Oakland Hospital
- Detroit Economic Club
- Flagstar Bank
- Ford Motor Company
- Mascela Design
- Michigan Council of Women in Technology Foundation
- Michigan Virtual
- PatentDive
- Project Lead the Way

OTHER AFFILIATIONS

- Detroit Institute of Arts
- Macomb County Sheriff's Office
- Michigan State University Macomb Future DOcs

ENGLISH DEPARTMENT

The English Department believes it is imperative that students learn to actively engage in, and critically analyze, what they read in order to be successful in the classroom, the workplace, and life. These key skills are emphasized through two common strategies used at all grade levels: daybooks and Harkness discussions. Daybook assignments require that students independently notate, analyze, and react to important passages of their reading. The Harkness Method, established at Phillips Exeter Academy in 1930, encourages students to have meaningful discussions about curricular content using textual evidence. The daybooks provide a framework for refining communication and cooperative skills as students collaborate to share, expand, and defend their understanding of content material through the Harkness Method. Presentation skills and components of effective speech are scaffolded in each grade level course. Students in grades 9-12 are required to complete a summer reading assignment.

- 001**
9 **English 9/Composition I (1 Credit)** places emphasis on the written word as an important form of communication. Grammar, usage, vocabulary, and punctuation are reinforced through the writing of narrative and descriptive compositions. An introduction to the MLA (Modern Language Association) style and documentation is presented. Knowledge is acquired and appreciation of the various literary genres is encouraged through the study of the essay, novel, drama, short story, and poetry.
- 011**
9 **Honors English 9/Composition I & II (1 Credit)** develops in-depth grammatical usage and other skills needed to prepare students for advanced levels of writing and examining various literary genres. Research techniques are introduced. Students need strong independent reading, writing and analytical abilities. **Prerequisite:** Counselor recommendation.
- 021**
10 **American Literature/Composition II (1 Credit)** presents a study of American Literature chronologically and thematically. Key topics, ideas, literary periods, and the genres they represent provide the basis for the course. Students write in a variety of styles with an emphasis on audience.

- 031**
10 **Honors American Literature/Composition III (1 Credit)** studies literary trends in the chronological order of American writers and through key thematic elements. Students are expected to have strong writing and analytical skills. The writing focuses on the interpretative and arguable thesis, the universal introduction in argumentative and literary analysis essays, and usage of MLA style for documentation. **Prerequisite:** A minimum grade of “B” in both semesters of Honors English 9/Composition I & II or teacher recommendation.
- 041**
11 **World Literature/Composition III (1 Credit)** focuses on the literature of different countries and cultures. Common themes of humanity are analyzed. The literature of ancient Greece and Rome is included along with Asian, African, Middle Eastern and British selections. The writing focus is on creating essays with the divided thesis and universalized introductions. The production of the argumentative and literary analysis essays and usage of MLA style for documentation are included along with oral presentations of selected assignments.
- 051**
11 **Advanced Placement Language and Composition (1 Credit)** offers a rigorous college-level application of writing techniques emphasizing rhetorical devices and stylistic maturing of multi-paragraph essays using both fiction and non-fiction literature. Expository, persuasive and analytic writing are covered. Students engage in critical discussion of their own writing and that of published authors. Students must demonstrate a solid knowledge of structure and mechanics. The Advanced Placement Language and Composition examination is taken in May. **Prerequisite:** A minimum grade of “B” in both semesters of Honors American Literature/Composition III or teacher recommendation.
- 077**
11-12 **Creative Writing (1/2 Credit)** develops students’ writing abilities in both fiction and non-fiction prose and a variety of poetry styles. Students develop close observation, creative word choice, point of view, tone, and style in a number of genres and create a portfolio of works based on genres studied throughout the semester. Offered as an elective only.
- 079**
11-12 **Literature of the Screen/College Writing (1/2 Credit)** studies the relationship between literature and film to identify aspects of visual literacy and its impact on storytelling. Students gain an understanding of film techniques and recognize the interrelationship between storytelling in print and on screen including symbolism, characterization, plot development, and figurative techniques. Differences and similarities between literature and film are analyzed and presented to the class. Offered as an elective only.
- 065**
12 **English 12/College Writing (1 Credit)** prepares students to read critically, write effectively, synthesize complex information and engage in sophisticated literary discussions. The course offers a variety of reading experiences in all genres with an emphasis on the works of William Shakespeare, the writings of contemporary authors and women’s literature. Composition experiences build upon previous instruction and include mastery of the following modes: response, argument, analysis, synthesis and exposition.
- 061**
12 **Advanced Placement Literature and Composition (1 Credit)** engages students in close textual analysis and critical interpretation of works in several genres from a range of time periods. The course stresses the careful reading of works of literary merit in order to develop critical standards for literary appreciation and deepen student understanding of the way writers use language. Critical analysis skills and interpretative writing are emphasized. Students further develop skills of composing college-level prose. Modes of discourse, including oration, aims of discourse and rhetorical strategies, are studied. Students are expected to engage in critical discussion. The Advanced Placement Literature and Composition Examination is taken in May. **Prerequisite:** A minimum grade of “B” in both semesters of Honors World Literature/Research Paper or teacher recommendation.

FINE ARTS DEPARTMENT

- 511**
9-12 **Art I (1/2 Credit)** is a studio/lecture course designed to meet the needs of students with different skill levels. Students demonstrate the ability to apply learned skills in various media encompassing both two-dimensional and three-dimensional works of art. The Art curriculum includes art production, aesthetics, art history, and art criticism. Students are responsible for supplying their own sketchbooks. Students participate in a mandatory field trip to the Detroit Institute of Arts. A materials fee of \$35 is collected at the beginning of the semester to pay for other necessary supplies.
- 521**
10-12 **Art II (1/2 Credit)** is a studio/lecture course that focuses on two-dimensional and three-dimensional elements and principles of design. Students take an analytical approach to applying design and color theory in various media that include pencils, charcoal, acrylic paints, watercolors, pastels, plaster, and clay. The Art curriculum encompasses art production, aesthetics, art history, and art criticism. Students are responsible for supplying their own sketchbooks. A materials fee of \$35 is collected at the beginning of the semester to pay for other necessary supplies. **Prerequisite:** Art I.
- 531**
10-12 **Art III (1/2 Credit)** is a studio/lecture course that continues the examination of two-dimensional and three-dimensional elements and principles of design through an in-depth study of complex techniques including stain glass and/or pottery. The Art curriculum encompasses art production, aesthetics, art history, and art criticism. Students are responsible for supplying their own sketchbooks. A materials fee of \$35 is collected at the beginning of the semester to pay for other necessary supplies. **Prerequisite:** Art II.
- 541**
11-12 **Art IV (1/2 Credit)** is a studio/lecture course that provides students the opportunity to grow and develop the art knowledge and talents learned in prior art classes. The main goal is for students to use elements and principles of art to increase art ability and creativity. Areas of content media include oil, acrylic, and watercolor paints and mixed media using palette knives and other materials to gain abstract and original art work. Clay and/or plaster are used for a 3-D experience. Students are responsible for supplying their own sketchbook. A materials fee of \$35 is collected at the beginning of the semester to pay for other necessary supplies. **Prerequisite:** Art III.
- 545**
11-12 **Directed Study in Art (1/2 Credit)** emphasizes portfolio work. Students work one-on-one with the teacher to develop an individual curriculum based on students' goals and future educational and career plans. Students are responsible for supplying their own sketchbook when needed. A materials fee of \$35 is collected at the beginning of the semester to pay for other necessary supplies. Students may not receive more than two and one-half credits of art toward the 27 credits required for graduation. **Prerequisite:** Art III and teacher recommendation.
- 561**
9-12 **Theater Arts (1/2 Credit)** provides students with an introduction to theater and performance. Topics covered in this course include theater history, production, acting, and technical theater. Throughout the class, students are expected to complete projects including sets, lights, and make-up; explore character motivation; and participate in both individual and group performances. Students are also required to view a play and take part in the scheduled Drama Club production through class activities.
- 571**
9-12 **Music Appreciation (1/2 Credit)** is a non-singing music class covering a variety of musical genres including jazz, pop, classical, musical theater and more. Attendance at some live performances and field trips may be required.

572 **Beginning Choir (1/2 Credit)** is a performance-based class that introduces basic music theory, ear training, and beginning vocal and choral techniques. Music fundamentals are covered and applied to performance. No formal vocal training is necessary; however, this class is considered a prerequisite for participating in Ensemble. Students may be invited by the instructor to audition for Ensemble while in the class if previous experience or ability warrant.

581 **Instrumental Music – Beginning Piano I (1/2 credit)** introduces piano fundamentals to students with no prior experience. Students learn to read notes and rhythm, scales, and elementary fingering. A good portion of class time is spent in individual practice, with the teacher’s supervision, on rudimentary pieces that establish basic piano technique. Students also regularly perform what they have learned for each other. The number of students accepted into this class is limited.

583 **Instrumental Music – Beginning Piano II (1/2 credit)** continues to strengthen the fundamentals introduced in Beginning Piano I. Emphasis is placed on mastery of the major and all relative minor scales. Additional repertoire is added. The number of students accepted into this class is limited. **Prerequisite:** Instrumental Music – Beginning Piano I or audition for students with limited previous experience.

FOREIGN LANGUAGE DEPARTMENT

401 **French I (1 Credit)** presents the fundamentals of the language through functional dialogues and real-life situations, pattern practices, and audiofiles. Through authentic materials sequentially arranged, automatic response and self-expression are cultivated. Appreciation of French culture is encouraged through supplementary lessons on French civilization. **Prerequisite:** Counselor recommendation.

411 **French II (1 Credit)** complements French I with utilization of the same language techniques but affords an opportunity to increase and perfect language skills with an intense concentration of irregular verbs, extended vocabulary, and advanced grammatical structures. An emphasis is on oral communication and the promotion of reading, writing, and listening skills. The study of French culture is continued.

421 **French III (1 Credit)** emphasizes more advanced aspects of French grammar including extended verb tenses and formations and their use in sentence structure. Short stories and articles in French provide opportunities for literary analysis and topics for compositions. The study of French culture is broadened in these readings. The ability to speak French is enhanced with a variety of conversational techniques.

431 **French IV (1 Credit)** reviews grammatical structures and builds on previously learned skills to strengthen and perfect overall performance. The oral component of the language is emphasized. Audio skills are enhanced with varied performance techniques. Grammar lessons are presented and discussed in French. Reading, conversation, and writing flow from the study of various writing materials including poetry, proverbs, articles, and other cultural selections. The exploration of French culture is expanded.

441 **Spanish I (1 Credit)** presents the fundamentals of speaking, listening, reading, and writing skills. Basic grammatical structures are introduced and applied in everyday classroom use. Various cultural aspects of the Spanish-speaking world are explored. **Prerequisite:** Counselor recommendation.

- 451** **Spanish II (1 Credit)** strengthens the listening, speaking, reading, and writing skills developed in Spanish I. Students continue to build vocabulary and grammatical structures in order to advance to an understanding of more complex structures. Students practice oral communication skills daily. Cultural aspects of Spanish-speaking countries are studied.
- 10-11**
- 461** **Spanish III (1 Credit)** reinforces and deepens students' understanding of basic skills, vocabulary, and grammar concepts learned in Spanish I and II. There is continued focus on writing, reading, and creating original conversations in the Spanish language. Cultural elements are integrated in chapter projects. The class is taught primarily in Spanish and students are encouraged to speak in the target language most of the time.
- 11-12**
- 471** **Spanish IV (1 Credit)** reviews and applies Spanish vocabulary and grammar concepts learned in previous courses. Reading and listening comprehension skills are enhanced through frequent examination of written materials and short films. Students are exposed to various cultural elements of the Spanish-speaking world through content materials and field trips. The class is taught completely in Spanish and students are expected to respond in the target language exclusively.
- 11-12**

HEALTH/PHYS. ED. DEPARTMENT

- 601** **Physical Education (1/2 Credit)** offers a variety of activities including physical fitness, speed ball, weight training basics, volleyball, floor hockey, and cooperative games. Emphasis is placed on strength and cardiovascular endurance. The course is graded on a Pass/Fail basis.
- 9-12**
- 611** **Health (1/2 Credit)** explores adolescent growth and development. Issues discussed include social, mental, and emotional health; communicable diseases; the importance of proper nutrition and physical fitness; the dangers of tobacco and vaping; alcohol and drug use; and health and safety. Students learn state-mandated hands-only CPR training.
- 9-12**
- 631** **First Aid/CPR (1/2 Credit)** presents information on the proper administration of first aid care and develops skills necessary to perform CPR. Hands-on classroom practice provides opportunities to react properly in an accident and/or life-threatening situations. American Red Cross guidelines are followed and a fee is charged for ARC certification. Students not needing certification receive a letter of competency upon completion of the course.
- 9-12**
- 621** **Fitness & Nutrition (1/2 Credit)** provides students with physical education experience and an in-depth study of nutrition to promote overall health and well-being. Students participate in a variety of activities including traditional games such as volleyball, badminton, and basketball along with non-traditional activities like German battica, yoga, maizeball, and pilates. Students learn about meal planning, food selection, and how nutrition impacts overall performance in their daily lives. **PREREQUISITE:** Health.
- 11-12**
- 641** **Kinesiology (1/2 Credit)** studies the techniques involved in the performance of human movement skills along with developing a basic knowledge of physical fitness and weight training. Through a study of anatomy and physiology, students learn basic muscle structure and function, proper techniques for weight training and development of cardiovascular fitness, and the basic principles of setting up a personal fitness program to improve body toning and overall health. This course cannot be taken for science credit. In lieu of a textbook, a materials fee is collected at the beginning of the semester.
- 11-12**

MATHEMATICS DEPARTMENT

- 111**
9 **Honors Algebra I (1 Credit)** emphasizes the structure of algebra with an in-depth coverage of algebraic topics. Functional relationships provide the basis for equations. Data organization, numerical patterns, and relationships are presented to increase understanding of functions. Focus is on learning to express these relationships orally, pictorially, graphically, and symbolically. **Prerequisite:** Department recommendation.
- 101**
9 **Algebra I (1 Credit)** covers topics including the real number system and its properties, solving and graphing one- and two-variable equations and inequalities, polynomials, and problem solving. **Prerequisite:** Department recommendation.
- 131**
9-10 **Honors Geometry (1 Credit)** focuses on a theoretical study of the concepts of Euclidean plane and solid geometry, inductive and deductive reasoning, and transformational and analytical geometry. An axiomatic and rigorous approach for analyzing proofs is introduced. Also included is the study of right triangle trigonometry, laws of sines and cosines, and applications of trigonometry. **Prerequisite:** A minimum grade of "B" is required in both semesters of Honors Algebra I or teacher recommendation.
- 121**
10 **Geometry (1 Credit)** maintains and integrates algebraic skills and concepts. Geometric principles are applied to real-world situations through modeling, interdisciplinary connections, and deductive arguments for learning critical-thinking and problem-solving skills.
Prerequisite: Algebra I.
- 151**
10-11 **Honors Algebra II (1 Credit)** refines the understanding of the language of Algebra, structure of the number system, and manipulations of algebraic equations. Mathematical principles needed for the advanced study of mathematics including probability, counting methods, data analysis and trigonometry are covered. An emphasis is placed on the understanding of functions. Technology is used as a problem-solving tool. **Prerequisite:** A minimum grade of "B" is required in both semesters of Honors Geometry or teacher recommendation.
- 141**
11 **Algebra II (1 Credit)** uses functions as a unifying theme including linear, exponential, logarithmic, quadratic, radical, and polynomial functions. Graphing is emphasized and relationships between graphs and equations are developed. Technology is used as a problem-solving tool. Probability and data analysis are explored. **Prerequisite:** Geometry.
- 171**
11-12 **Honors Trigonometry/Pre-Calculus (1 Credit)** studies polynomial, rational, exponential, logarithmic, and circular trigonometric functions and their graphs in detail. It introduces, on an informal basis, the ideas of limits, continuity, and differentiation. **Prerequisites:** A minimum grade of "B" in both semesters of Honors Algebra II or teacher recommendation.
- 161**
12 **Trigonometry/Pre-Calculus (1 Credit)** presents an in-depth study of circular functions and the trigonometric functions of right triangles. Solving identities, graphing trigonometric functions, and application of the laws of sines and cosines in solving triangles are covered. There is a focus on applications of functions and their inverses. **Prerequisite:** A minimum grade of "B" is required in both semesters of Algebra II or teacher recommendation.

- 185** **Advanced Placement Calculus AB (1 Credit)** develops the basic concepts of calculus, limits, and continuity. Derivatives, differentials, and integrals and their applications are covered in depth. A wide variety of mathematical problems are examined including area, volume, and related rates. The Advanced Placement Calculus AB Examination is taken in May. **Prerequisite:** A minimum grade of "B" is required in both semesters of Honors Trigonometry/Pre-Calculus or teacher recommendation.
- 129** **Probability and Statistics (1/2 Credit)** explores real-world mathematics. The course introduces data analysis and presentation, surveying methods, the normal curve and basic probability. Technology is used to create and analyze data in a variety of ways. **Prerequisite:** Algebra II and teacher recommendation for senior math credit.
- 180** **College Algebra (1/2 Credit)** further develops the study of Algebra concepts including algebra essentials, linear equations and inequalities, polynomials, rational expressions, radical expressions and equations, quadratic equations and systems of equations. The emphasis is on computational skills and the relationship between equations and their graphs. The course is closed to students who have taken any honors math courses. **Prerequisite:** Algebra II and teacher recommendation for senior math credit.

SCIENCE DEPARTMENT

- 201** **Biology (1 Credit)** uses the scientific method and studies biochemistry, cells, microorganisms, photosynthesis, respiration, genetics, DNA/RNA, mitosis, meiosis, ecosystems, evolution, classification, and the human body. Investigative work in a laboratory setting reinforces critical and analytical thinking.
- 9**
- 211** **Honors Biology (1 Credit)** uses the scientific method and studies biochemistry, cells, microorganisms, photosynthesis, respiration, genetics, DNA/RNA, mitosis, meiosis, ecosystems, evolution, classification, and the human body. Investigative work in a laboratory setting reinforces critical and analytical thinking. In addition, students complete a research project every quarter based on topics covered at the time. **Prerequisite:** Counselor recommendation.
- 9**
- 231** **Chemistry (1 Credit)** examines the composition of substances and the changes they undergo. Major emphasis is on the structure and states of matter, reactions, the atom and its electronic structure, bonding, solutions, and acid-base theory. Through experimentation, observation, and measurement in the laboratory, chemical concepts and principles are developed and data from experiments are analyzed. Scientific calculations using algebraic skills are applied.
- 10**
- 241** **Honors Chemistry (1 Credit)** is designed for students preparing to major in science or engineering at the university level. Critical thinking and the scientific inquiry methods are used in laboratory investigations to study chemistry concepts and principles. Topics include the composition of matter, the atom and electron configuration, chemical formulas and reactions, stoichiometry, gas laws, solutions, and organic chemistry. Proficiency in solving formulas, interpreting and solving work problems, scientific notation, conversions, proportions, and solving for a variable in an equation is an integral part of the course. **Prerequisite:** A minimum grade of "B" is required in both semesters of Honors Biology; a minimum grade of "B" in both semesters of Honors Algebra I or Honors Geometry; or a minimum grade of "A" in both semesters of Algebra 1 and Geometry and teacher recommendation.
- 10**

- 284**
11-12 **STEM Environmental Science (1 Credit)** includes fundamental principles of ecology, hydrology, geology, population dynamics, land-use management, and related fields as the basis for understanding the major environmental issues that face our planet. Environmental concerns such as climate change, soil and water pollution, acid rain and related atmospheric pollution problems, habitat destruction, species extinction, waste disposal, and alternate “green” energy resource development are investigated.
- 251**
11-12 **Anatomy and Physiology (1 Credit)** provides an in-depth study of anatomical structures and the physiology of the systems of the human body. Use of visual aids, clinical cases, and the mechanisms of diseases facilitate learning and understanding. The required dissection of a fetal pig or cat in a lab setting is a culminating activity for a comparative anatomical study. **Prerequisite:** A minimum grade of “B” is required in both semesters of Biology or a minimum grade of “C” is required in both semesters of Honors Biology.
- 261**
11-12 **Advanced Placement Biology (1 Credit)** is designed to meet the objectives of an introductory college-level biology course. Topics include biochemistry, cell physiology, molecular biology, ecology, genetics, plant and animal anatomy, and physiology. Students are involved in extensive laboratory work. The Advanced Placement Biology Examination is taken in May. **Prerequisite:** A minimum grade of “B” is required in both semesters of Honors Biology and Honors Chemistry or teacher recommendation.
- 271**
11-12 **Advanced Placement Chemistry (1 Credit)** presents the equivalent of the general chemistry course taken during the first year of college. Students attain a depth of understanding of fundamentals and reasonable competence in dealing with chemical problems. The course includes topics that emphasize chemical calculations, mathematical formulation of principles, and laboratory procedures and investigations. The Advanced Placement Chemistry Examination is taken in May. **Prerequisite:** A minimum grade of “B” is required in both semesters of Honors Chemistry or a minimum grade of “A” is required in both semesters of Chemistry and teacher recommendation.
- 281**
12 **Honors Physics (1 Credit)** covers the basic principles of mechanics, waves, sound, and magnetism. Demonstrations and laboratory procedures are used to reinforce theoretical concepts. Rigorous application of trigonometric and higher mathematical skills are applied to topics covered. This course is intended for students who want to pursue careers in the medical and engineering fields that require a background in physics. This course cannot be taken for math credit. **Prerequisite:** A minimum grade of “B” is required in both semesters of Honors Chemistry or a minimum grade of “A” is required in both semesters of Chemistry and teacher recommendation, and a “B” average in Trigonometry/Pre-Calculus or concurrent enrollment.
- 287**
12 **Forensic Science (1/2 Credit)** is the science that helps “solve crimes.” Students learn how different types of evidence are analyzed, the procedures for processing a crime scene, and how scientific principles are applied to legal matters. A variety of other topics of an “organic” or biological nature are covered including fingerprinting, DNA analysis, forensic pathology, and hair analysis. “Inorganic” themes such as crime scene processing, firearms and tool mark analysis, fibers, and eyewitness evidence are also investigated.
- 288**
10-12 **Introduction to Clinical Medicine (1/2 Credit)** surveys health professions in a hospital setting. Topics covered include methods of diagnosis and treatment, medical and surgical subspecialties, hospital administration, and support professions. Tours may involve laboratories, operating rooms, intensive care units, and specialty areas. Classes meet after school two days a week at St. John Hospital (Macomb) during the second semester. Credit for Introduction to Clinical Medicine is not counted in the 27 credits needed for graduation.

SOCIAL STUDIES DEPARTMENT

- 310**
9 **World History Project (1 Credit)** focuses on the significant questions and changes in the history of the world including past and modern human history. The course weaves insights from many different disciplines to help understand people, civilizations, and our connection to everything around us. Students put the narratives of history into a context, seeking evidence to support, extend, and challenge their thinking. Students are required to read and write critically because they analyze and interpret information from a multitude of sources.
- 331**
10 **U.S. History and Geography (1 Credit)** reviews key events and concepts in United States history through the Civil War. The emphasis of the course is on the examination of key historical events, time periods, and concepts from Reconstruction (1877) to the present and the impact they had in shaping the American experience.
- 365**
10 **Honors Economics (1/2 Credit)** examines fundamental components of macro and micro economic concepts, theories, and applications. In so doing, a solid foundation for college economics is provided. Emphasis is placed on market functioning, business and labor, money and banking, and measuring economic performance. **Prerequisite:** A minimum grade of “B” is required in both semesters of Honors World History or teacher recommendation.
- 389**
10, 12 **Advanced Placement U.S. Government and Politics (1/2 Credit)** presents a college-level approach and understanding of the U.S. government. Students acquire knowledge of facts, concepts, and theories pertaining to U.S. government and politics; understand typical patterns of political processes and behavior and their consequences; and analyze and interpret data and relationships in U.S. government and politics. The Advanced Placement U.S. Government and Politics Examination is taken in May. **Prerequisite:** A minimum grade of “B” is required in both semesters of Honors World History or teacher recommendation.
- 351**
11 **Advanced Placement U.S. History (1 Credit)** stresses the careful reading and analysis of the history of our nation. Primary and secondary sources and suggested readings are utilized to enhance a conceptual and thematic approach to the units of study. Analytical and critical thinking skills are applied. Tools and methodologies of historical research are taught to prepare individual written assignments. The Advanced Placement U.S. History Examination is taken in May. **Prerequisite:** A minimum grade of “B” is required in both semesters of Honors Economics and AP Government or teacher recommendation.
- 361**
11 **American Government (1/2 Credit)** studies the meaning of democracy; the principles of constitutional government; federalism; the legislative, executive, and judicial branches of the United States government; and the presidential election process. The operations of local and state governments are reviewed.
- 363**
11 **Economics (1/2 Credit)** introduces key economic concepts and principles that provide a solid foundation for introductory college economics courses. The definition of economics, the concept of scarcity, supply and demand, costs, prices, and output in a competitive market are studied. In addition, business cycles measuring national income, the concept of money, and the role of business, labor, and government in the economy are explored.

- 371** **U.S. History Through Film (1/2 Credit)** explores modern American history through the
11-12 medium of film. Using historical and contemporary samples, students view, discuss and
write about topics related to the political, social, economic and racial history of the United
States. Themes in history such as slavery, the Great Depression, the Holocaust, the
Second World War, the Civil Rights Movement, and Vietnam are examined. The impact of
racism, poverty, corruption, patriotism, and historical ideology on contemporary American
culture is studied.
- 381** **Introduction to Law (1/2 Credit)** focuses on the history of the United States legal system
11-12 and the operation of the court system, specifically the Supreme Court. Emphasis is placed
on the Bill of Rights and how Supreme Court rulings have affected individual rights.
Criminal law and the criminal justice system, civil law, and the legal rights of families and
consumers are covered. Students are invited to participate in the Michigan High School
Mock Trial that occurs in the spring.
- 383** **Psychology (1/2 Credit)** covers the history of psychology, basic principles of learning,
11-12 theories of memory, the development of human behavior, and personality disorders and
their treatment. Discussions and experiments supplement the text.
- 385** **Sociology (1/2 Credit)** presents a critical examination of society and its institutions. Areas
11-12 of study include sociological history, early sociologists, and the development of theoretical
perspectives. Similarities and differences between cultures, variations within cultures, and
the various institutions within society are analyzed. The study of current social problems that
impact American social institutions is incorporated throughout the course.
- 387** **Advanced Placement Psychology (1 Credit)** examines human behavior in terms of
12 motivation, maturation, learning, altered states of consciousness, personality theories,
illness, and therapy. Research on theories and other relevant topics of psychology are
stressed. The Advanced Placement Psychology Examination is taken in May.
Prerequisite: A minimum grade of “B” is required in both semesters of Honors Advanced
Placement U.S. History or teacher recommendation.

TECHNOLOGY DEPARTMENT

- 701** **Computer Applications (1/2 Credit)** develops skills needed in typical student
9-12 applications including word processing, spreadsheet, and presentation software. Skills
learned are used in other curriculum areas and include operating system and file
management on a network, basic Google Drive management, productive internet search
techniques, and information presentation. Students gain an understanding of the ethical,
cultural, and societal issues related to technology as well as responsible use of
technology systems, information, and software. Students are required to touch type at a
rate of 30 adjusted words per minute by course end. All students are required to take
Computer Applications or Introduction to Engineering Design to fulfill the computer credit
requirement.

709
9-12 **Introduction to Engineering Design (PLTW) (1 Credit)** teaches students the engineering design process by applying math, science, and engineering standards to identify and design solutions to a variety of real problems. Hands-on activities and open-ended projects require students to develop planning, documentation, communication, and other professional skills such as project management and peer review. Students work individually and in collaborative teams to develop and document design solutions using engineering notebooks and 3D modeling software to represent and communicate results. The course examines the design process, technical sketching and drawing, measurement and statistics, modeling skills, geometry of design, reverse engineering, documentation, advanced computer modeling, and design challenges. **Note:** Introduction to Engineering Design can be used to fulfill the computer credit requirement with counselor approval.

703
10-12 **Digital Design and Media (1/2 Credit)** offers students the opportunity to develop digital art, image, and document creation and editing skills. Students use online tools for drawing and editing to modify and enhance digital graphics as well as incorporating them into publications. Along with artistic and creative development, technology skills useful in educational, commercial and personal endeavors are acquired through attention to detail. **Note:** One-half (1/2) credit can be used to fulfill a Fine Arts requirement with Counselor approval. **Prerequisite:** Computer Applications or Introduction to Engineering Design.

Business Technology

738
11-12 **Independent Living (1/2 Credit)** offers information and self-directing skills for the young adult entering college and/or living independently. Topics include career skills (self-assessment; investigating, researching and choosing a career; career pathing; job searches; job applications; cover letters; resume writing; and interview skills), personal banking, credit, loans, budgeting, taxes, stress management, and housing and transportation options.

722
11-12 **Marketing and Management (1/2 Credit)** introduces the key concepts, principles, and functions of marketing. The course covers aspects of marketing, advertising, production, inventory management, sales, and the costs of introducing a new/updated product into the marketplace. This blended course includes online and direct instruction.

741
11-12 **Accounting (1/2 Credit)** provides students with a strong foundation in double entry accounting procedures. Principles covered include accounting style, financial statements, journal and ledger entries, and accounts payable and receivable.

THEOLOGY DEPARTMENT

The scope and sequence of the faith development program and all Theology courses at Regina High School are in compliance with the U.S. Catholic Bishops' document, *Doctrinal Elements of a Curriculum Framework for the Development of Catechetical Materials for Young People of High School Age.*

801
9 **Sacred Scripture (1/2 Credit)** focuses on general knowledge of and appreciation for the Sacred Scriptures. The major sections and books of the Old and New Testaments are studied and interpreted in light of the teaching of the Magisterium of the Church. Particular attention is given to the Gospels as a foundation for developing a more personal relationship with the Living Word of God, Jesus Christ.

- 811**
9 **Christology (1/2 Credit)** introduces the Mystery of Jesus Christ who is the Living Word of God and Second Person of the Blessed Trinity. Through a study of Jesus Christ as the ultimate revelation from God, students learn who He is and who He calls them to be.
- 821**
10 **Paschal Mystery (1/2 Credit)** focuses on the Paschal Mystery of Christ. After an examination of why salvation is necessary, emphasis is placed on the Gospels, early events of Jesus' life, and the teaching and healing ministries of Christ. Through a study of the suffering, death, resurrection, and ascension of Jesus, students learn about the effects of the Paschal Mystery on their lives and how to live as a disciple of Christ through virtue, self-sacrifice, and prayer.
- 831**
10 **The Church: Our Story (1/2 Credit)** teaches that the Church, with both divine and human elements, is the Living Body of Christ in the world. Within an historical context, students study the marks of the Church, its enduring and developing nature, and the people of God. Further models of the Church as Teacher, Sacrament, Servant, and a Communion of Saints are examined.
- 841**
11 **Sacraments (1/2 Credit)** helps students understand that they can encounter Christ today in a full and real way in and through the sacraments, especially through the Eucharist. Students examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.
- 851**
11 **Moral Theology (1/2 Credit)** helps students understand that it is only through Christ that they can fully live out God's plans for their lives. Students learn the moral concepts and precepts that govern the lives of Christ's disciples.
- 871**
12 **Catholic Social Teaching (1/2 Credit)** introduces students to the Church's social teaching. Students learn how Christ's concern for others, especially the poor and needy, is present today in the Church's social teaching and mission. Themes include the dignity of human life, call to family, community and participation, rights and responsibilities, preferential option for the poor, dignity of work and the rights of workers, solidarity, and care for God's creation.
- 861**
12 **Christian Lifestyles (1/2 Credit)** presents modes of living available to the contemporary Christian woman. Marriage and family life, and the single and consecrated lifestyles are examined. Lifestyle issues and choices are studied in light of the Gospel and the teaching of the Catholic Church. Offered as an elective.
- 881**
12 **Christian Spirituality (1/2 Credit)** explores the meaning of spirituality, its purpose, and the forms it can take. Students learn what the Church teaches about the importance of a life of prayer, how Jesus and Mary model these principles in the Gospels, and how saints have developed their own spiritualities as they journeyed in faith. Special emphasis on Franciscan spirituality is integrated throughout the course. Students are encouraged to develop a daily habit of prayer that suits their personalities and needs and leads them to encounter God. Offered as an elective.

GENERAL ELECTIVES

- 711**
9 **Freshman Seminar (1/2 Credit)** improves proficiency in reading comprehension, writing competency, and study skills in all content areas. Reading instruction emphasizes strategies including determining main ideas, identifying supporting details, constructing meaning, analyzing cause and effect, drawing conclusions, and vocabulary development. Writing practice reinforces grammar and punctuation in developing good sentence structure. Topics that build effective study habits include goal setting, time management, appropriate study environment, note taking, outlining, and test taking. **Prerequisite:** Counselor recommendation.
- 751**
11-12 **Yearbook Production (1/2 Credit)** develops the skills needed to produce our school yearbook, the *Crown*. The course teaches students to understand the function of a yearbook; conceptualize a theme that includes copy and graphics; understand and apply the journalism concepts of graphic design, photography, interviewing, writing copy and captions, publishing, and marketing; learn and utilize online software to create the yearbook; successfully participate and work in groups; and utilize time management and project planning techniques to set goals and meet deadlines. Students are required to sell a set number of business ads as part of the course grade. **Note:** One-half (1/2) credit can be used to fulfill a Fine Arts requirement with Counselor approval. **Prerequisite:** Application, counselor and two teacher recommendations, including one English teacher, and Yearbook Advisor recommendation.
- 753**
12 **Yearbook Management (1 Credit)** is an editorial position earned through competency, commitment, and leadership. An editor's responsibilities involve overseeing all aspects of yearbook production. This includes planning the coverage of the yearbook; designing page layouts; setting and monitoring deadlines; providing training, aid, and direction to section teams; editing pages, managing ad sales; checking proofs; managing file maintenance; and publishing the *Senior Scepter*. **Prerequisite:** Yearbook and Yearbook Advisor recommendation.