2015-16 Randolph-Macon Academy Course List & Graduation Requirements

Mr. Jonathan Ezell, Academic Dean
academics@rma.edu

English, Department Chair: Mr. Robert Davies rdavies@rma.edu

- English 9 (1 section Composition and 1 section Literature)
- Honors English 9 (1 section Composition and 1 section Literature)
- English 10 (1 section Composition and 1 section Literature)
- Honors English 10 (1 section Composition and 1 section Literature)
- English 11(Reg & AP)
- AP English 11
- English 12 (British Literature)
- Utopia/Dystopia (Honors English 12)
- AP English 12 *
- English as a Second Language III (ESL 3) (Double Block)
- Mainstream English (MS) The course between ESL and Regular English (Double Block)

English Electives

- The Honors Arts in Society

Social Studies, Department Chair: Mr. Brian Barbour bbarbour@rma.edu

- World History II (Honors is available based on recommendation) (9th grade)
- Bible (10th grade)
- US History (11th grade)
- AP US History* (11th grade)
- US Government (12th grade)
- AP US Government (12th grade)

Social Studies Electives

- 20th Century Warfare ("2" one semester course)
- AP Psychology*
- Sociology/Criminology
- AP Art History

Mathematics, Department Chair: Mr. Eric Barr ebarr@rma.edu
(All students must have at least .50 credit in a computer class)

- Algebra I (Reg & Honors)
- Geometry (Reg & Honors)
- Algebra II/Trigonometry (Reg & Honors)
- Transition to College Mathematics and Statistics

- Pre-Calculus
- Honors Pre-Calculus*
- Statistics
- AP Calculus AB (Calculus I)*
- Calculus BC (Calculus II)*
- Computer Literature (Semester Course)
- Computer Programming (2nd semester only) The course is a standard level course that is designed to instruct students in the basic understanding of computer programming through investigating and solving a variety of computer oriented problems. This introduction to programming will include designing decision logic and user interfaces by organizing common program language structures and learning the language specific syntax for Microsoft Visual Basic. The general principles of project organization will also be introduced as a framework for examining problems and developing computer-based solutions. An additional goal is to teach advanced functions and uses for standard Microsoft Excel capabilities.

Science, Department Chair: Mrs. Kara Lewallen klewallen@rma.edu

- Environmental Ecology Investigative Laboratory Science (9th grade)
- Biology
- AP Biology* (Prerequisite courses are General Biology with an A or B and General Chemistry with an A or B)
- Chemistry (Prerequisite course is Algebra 1)
- AP Chemistry* (Prerequisite courses are General Chemistry with a grade of A or B and Algebra 2 with a grade of A or B)
- Physics (Prerequisite courses are Algebra 1 and Algebra 2)
- AP Physics (Prerequisite courses are General Physics with a grade of A or B, Algebra 2 with a grade of A or B, and AP Calculus with a grade of A, B, or C, or currently enrolled in AP Calculus)

Science Electives

- BioChemistry (full year)-Biochemistry is the study of the molecular basis of life. This class is designed to help students comprehend current biochemical information and make future contributions to our molecular understanding of life processes. Taking Biochemistry will provide students with a background in the fields of medicine, dentistry, or veterinary medicine. Students interested in an undergraduate degree in biochemistry, molecular biology, or another biological science discipline will benefit from taking this course. Areas of study will include: the history and evolution of biochemistry, applications of biochemistry in agricultural and life science disciplines, and topical research areas in biochemistry.
- Astronomy (1st Semester only) The course is a standard level course that is designed to instruct students in the basic understanding of astronomy concepts and principles. This introduction to astronomy will include the basics of star constellations, galaxy types and formation, the birth, life, and death of different stars, and the particular facts of our solar system. Much of the course will be knowledge-based, associating discovered information about our universe from both theoretical and observational analysis.

Foreign Language, Department Chair: Mr. Stephen Latham slatham@rma.edu

- French 1, 2, 3 (Honors), 4 (Honors)
- German 1, 2, 3 (Honors), 4 (AP), 5 (AP)
- Spanish 1, 2, 3 (Honors), 4 (AP), 5 (AP)

Fine Arts Electives (1 Total)

- Advanced Art (This is for students who have already had a regular art class)
- Band
- Chorus
- Digital Piano
- Drama
- Handbell Choir
- Studio Art
- Yearbook

Physical Education

- Personal Fitness (Semester Course)
- Health/Wellness (A student will receive .50 PE credit if successfully complete the E2C program through ROTC classes)
- Sports Credit (A student will receive a .50 PE credit if the letter in a sport)

Additional Elective

- Ground School

ROTC Aerospace Classes, Department Chair, LtCol RG McManus rmcmanus@rma.edu

- Aerospace I (9^{th})
- Aerospace II (10^{th})
- Aerospace III (11^{th})
- Aerospace IV (12^{th})

*** Dual-Enrolled Courses**

- **AP and Honors Courses must be approved by the Department Chair. If a student is not already approved they may email their last year teacher to seek approval.**
- **Students have 7 classes a day and must meet the graduation and credit requirements below.**
- **Please note when a course has a pre-requisite or co-requisite and be sure you have met those requirements before selecting.**
- **All students must have at least 1 Fine Art elective credit to graduate**

DIPLOMA TYPES AND GRADUATION CREDIT REQUIREMENTS

Advanced Diploma	College Preparatory
4 Language Arts Courses (English/ESL)	4 Language Arts Courses (English/ESL)
4 Required Social Studies Courses: World History II, Bible, United States History, & United States Government	4 Required Social Studies Courses: World History II, Bible, United States History, & United States Government
4.5 Mathematics Courses* *(.5 Credit for a Computer Course)	3.5 Mathematics Courses* *(.5 Credit for a Computer Course)
4 Science Courses	3 Science Courses
3 Years of One Foreign Language	2 Years of One Foreign Language
2 Credits of Physical Education	2 Credits of Physical Education
4.5 Electives * (1 Elective Credit must be a Fine Art Elective)	4.5 Electives * (1 Elective Credit must be a Fine Art Elective)
Aerospace each year in attendance	Aerospace each year in attendance
27 Credits minimum	24 Credits minimum