Maggie L. Walker Governor's School
for
Government and International Studies

Course Catalog
2018-2019

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MISSION STATEMENT

Our mission is to provide comprehensive educational opportunities that advance gifted students' understanding of world cultures and languages. Our diverse and supportive community develops students' character and ability to contribute, collaborate, and lead.

VISION STATEMENT

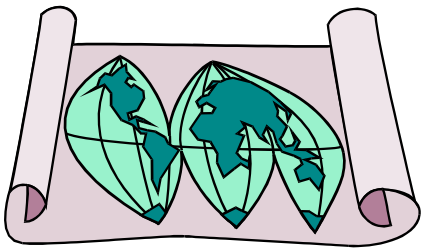
Maggie L. Walker Governor's School for Government and International Studies (MLWGS) will develop life-long learners who embrace the responsibility of citizenship, the value of ethical leadership, and the richness of diverse cultures.

Course of Study:

Maggie L. Walker Governor's School offers courses in all disciplines. While government and international studies is its theme, the comprehensive program at MLWGS allows a flexible approach for students to understand the growing interconnectedness of the international community. In addition to government and international studies, students' interests in science, mathematics, the arts, international languages, computer technology, or other academic areas may serve as focal points for their understanding of the world.

Curricula are developed and delivered reflecting best practices in gifted education. The following is a sampling of components utilized to serve this purpose:

Core Courses	Student Generated Curricula	Interdisciplinary Connections
Advanced Placement Courses	Cooperative Learning Experiences	Service Learning
Dual Enrollment University Courses	Experiential Learning Experiences	Mentorships & Seminars
Individual Research Projects	International Travel Opportunities	



**DIPLOMA REQUIREMENTS

English: (Four units of credit must include World Lit. and Comp. I & II, American Lit. 11 or AP Lang. and Comp. 11, and British Lit. or AP Lit. and Comp. 12)	4 units
Mathematics: (Four units of credit through a minimum of Pre-calculus)	4 units
Science: (Four units of credit that must include Biology, Chemistry, Physics, and an additional approved laboratory science)	4 units
Social Studies: (Five units of credit that must include Global Studies I & II, U.S. and VA. History, U.S. and VA Government, and one elective)	5 units
International Languages: (Six units of credit with a minimum of four units of credit in one language and two units of credit in a second language)	6 units
Health and PE: (Grades 9 and 10)	2 units
Fine Arts: (Art, Drama, Music)	1 unit
Economics and Personal Finance:	1 unit
Senior Seminar or Mentorship: (Must be completed during the senior year)	1 unit
Community Service: (Minimum of 140 hours in 4 years)	1 unit
Foundations of Interdisciplinary Research and Communication (FIRC):	1 unit
Elective(s):	1 unit

One online course is required.
Training in CPR, AED, and emergency first aid required.

****Minimum Total Units of credit**	**31 units**

** MLWGS graduation requirements exceed requirements for graduation with a Virginia Advanced Studies Diploma. All students electing to attend MLWGS are required to maintain a full day schedule of classes. When students successfully complete courses offered for credit in grades nine through twelve *by the end of the eighth grade year*, standard and/or verified credit shall be counted toward meeting the units required for graduation in accordance with 8 VAC 20-131.50 of the State Board of Education's regulations. Verified credits are required in accordance with standards of accrediting schools in Virginia as prescribed in 8 VAC 20-131-110.B. A student who does not satisfy the above requirements but meets those for the Advanced Diploma as set forth by the State Board of Education will be awarded an Advanced Diploma at MLWGS.

DIPLOMA SEALS

MLWGS students may be awarded up to three diploma seals upon graduation.

Governor's Seal: Awarded to all students who complete the requirements for an Advanced Studies Diploma with a final GPA of 3.0 or better, and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement and/or Dual Enrollment courses. Advanced Placement courses count as 3 college credits and Dual Enrollment courses count as the number specified for VCU credit within each course's description.

Virginia Governor's Schools Seal: Awarded to all students who complete the requirements for the MLWGS Advanced Studies Diploma.

Virginia Bi-literacy Seal: Awarded to students who (1) fulfill the requirements for the MLWGS diploma, (2) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (3) provide

verification of proficiency at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction.

COMMUNITY SERVICE REQUIREMENTS

Amendments to the current Community Service Program are currently under review for the 2018-2019 school year. An addendum to the 2018-019 course catalog will be provided upon approval.

Community Service Program Purpose Statement:

Maggie L. Walker Governor's School develops citizens with a sense of social responsibility that they will demonstrate through lifelong service to their local, national and international communities.

This service program encourages students to reflect on their community involvement through participation, contribution, and leadership.

Participation
Students will participate in collaborative service projects to acquire knowledge and experience addressing community issues.

Contribution
Students will recognize their role in the community by identifying and making significant contributions to personally meaningful projects.

Leadership
Students will take the lead in building better communities and encouraging the habit of community service.

140 hours must be earned over a 4-year period while attending MLWGS. General guidelines are outlined, below.

- The community service website may be found at www.maggiewalkermatters.weebly.com
- Hours may be earned from a community agency or any approved organization that serves the general public. In general, any non-profit or 501(c)(3) organization is eligible. There are some organizations that do not fit this category that would still be eligible (check with the Community Service Coordinator to be sure). Religious activities are not eligible, but community outreach through a church, mosque, or synagogue are eligible (e.g., CARITAS).
- Only ***70*** hours may be granted from one organization **toward a student's 140 required hours**, although all hours will be shown on the student's final transcript.
- Students may not receive compensation or dual benefit for services.
- Specific information concerning the eligibility of hours and the timetable for submission and processing recorded hours is listed in the MLWGS student handbook and on the MLWGS community service web site.
- Community service hours logged in the summer prior to the freshman year will be accepted if the hours meet accepted criteria.
- All summer hours must be submitted to the Community Service Coordinator no later than two weeks after the first day of school. See community service website for specific due date.
- Students not completing a minimum of 35 hours per year will meet with the appropriate grade-level administrator to create a plan to remedy deficiencies. Students should have earned a minimum of the following number of hours at the end of the grade level indicated: (1) freshmen - 35 hours, (2) sophomores - 70 hours, and (3) juniors - 105 hours.
- Students are encouraged to check with various honor societies for the minimum number of community service hours that must be completed as a part of the requirements for membership. Students may not use the same community service hours to fulfill requirements for both MWGS Community Service and an honor society.
- Each student is to maintain a community service portfolio that contains both documentation of service *and* a personal reflection on his or her community service experiences. As forms sometimes get lost, having a back-up copy of all community service hours is good practice.

ACADEMIC POLICIES AND PROCEDURES

Course selection limitations:
The courses listed in the Course Catalog are those that have been approved by the Regional Board for MLWGS students**. The courses listed in the master schedule are *selected* from the Course Catalog. Final course offerings are dependent upon sufficient student interest, classroom space, materials and equipment availability, staffing, and sufficient funding.**

Schedule change parameters and procedures:
Students wishing to add or drop a course must contact their school counselor for the appropriate paperwork and obtain the required signatures. **Any schedule changes must take place by the last day of school.** *In exceptional circumstances*, students are permitted to add or drop courses for the next school year only if space permits and the Assistant Director, Curriculum and Instruction grants permission based on an assessment of *exceptional circumstances.* . Changes in AP or Dual Enrollment courses may require a parent/teacher conference. Changes in Dual Enrollment Courses also require students to **complete a "VCU/MLWGS Dual Enrollment Add/Drop/Withdrawal Form"** and submit it to the Assistant Director, Curriculum and Instruction. Changes made for any course that will result in the student receiving a "WF" or "F" for the course must have the Director's approval. Below are policies, procedures and timelines for dropping/withdrawing from Honors, Plus, AP, and Dual Enrollment courses.

- **MLWGS Courses**:

Full Year Courses:

1st six weeks	No grade recorded and class dropped from academic record
7th week to the end of 1st semester	Withdrew Passing (WP) OR Withdrew Failing (WF)
3rd nine weeks	Withdrew Failing (WF)
4th nine weeks	Failure (F)

Semester Courses:

1st six weeks	No grade recorded
7th week to end of 1st grading period	Withdrew Passing (WP) OR Withdrew Failing (WF)
After 1st grading period	Failure (F)

*WP and WF do not become part of the grade point average but will appear on the transcript. The management of grades for a student who transfers into a related course will be determined by the Director and the involved teachers.

*Additional non-dual enrollment parameters for changing from one course to another after the school year begins, *assuming exceptional circumstances exist:*

-Changes from one course to another course close the first interim date (e.g., change from an elective language course to an art course)

-Changes from a course to a study hall close the end of the first quarter

-Level changes within the same domain close the end of the first quarter (e.g. Trig Plus to Trig Honors)

- **VCU/MLWGS Dual Enrollment Courses:**
  Participation in a dual enrollment course requires that a student be enrolled in both a MLWGS high school course and its corresponding VCU course(s). Some yearlong MLWGS courses are paired with two VCU semester courses, for which students receive one MLWGS credit and 6-8 VCU credits; some yearlong MLWGS courses are paired with one VCU course, for which students earn one MLWGS credit and 3-4 VCU credits and take place over a full MLWGS school year. Changes in the MLWGS enrollment status are governed by the timeline above and changes in the VCU enrollment status are governed by the timeline below. Students adding, dropping, or withdrawing from a Dual Enrollment course must complete BOTH schedule change forms noted above.

1st **TWO** weeks of the school year	Add a VCU course or drop a VCU course with no grade recorded and class dropped from academic record
3rd Week to end of 10th week	Withdraw with a grade of "W"
After 10th week	Fail

NO DUAL ENROLLMENT COURSE MAY BE ADDED AFTER THE FIRST TWO WEEKS OF THE SCHOOL YEAR.

Calculation of grade point average:

The grade point average is calculated by using the final course grade for all courses taken in grades 9 – 12. Courses taken on a Pass/Fail basis will count for credit but will not be averaged into the grade point average.

$$\text{GPA} = \frac{\text{Total number of quality points}}{\text{Total number of credits}}$$

Class rank:

Because of the competitive nature of selection requirements, MLWGS does not rank students. Valedictorian and Salutatorian will not be recognized. These policies are clearly stated to all college admissions/scholarship committees.

Weighting of classes:

All courses are based on a 4.0 scale and are considered to be on the honors level unless otherwise noted. Advanced Placement and VCU Dual Enrollment courses will have additional weighting of 1.0.

Academic Probation Policy:

Students are expected to remain in good academic standing at MLWGS. Failure to remain in good standing will result in being placed on academic probation, which will be reported to the gifted program administrator of home school district. To be in good academic standing the student must meet ALL the following criteria:

1) achieve a grade point average of 2.0 or greater at the end of each schoolyear;
2) fail no more than one course per year based upon final course grade;
3) exercise ethical academic behaviors in line with high standards of character;
4) have completed, or have an approved plan in place to complete, at least the minimum number of eligible community service hours recommended in the guidelines for their grade level; and
5) have an approved plan in place to complete the graduation requirements for the MLWGS Advanced Studies Diploma in four years at MLWGS.

If a student has not met all of the above criteria, a recommendation will be made that he or she return to his or her home school.

Note: Additional requirements may be set by the participating school divisions including but not limited to the availability of funding and continuous review of progress, e.g., grades, attendance, and behavior.

ADVANCED PLACEMENT AND DUAL ENROLLMENT OPTIONS

There are numerous options for advanced study at Maggie Walker Governor's School, including plus-level courses and academic electives (Honors, Dual Enrollment or Advanced Placement) in students' areas of interest. Guidelines for Advanced Placement and Dual Enrollment courses are provided below; see the department sections for extensive lists of course offerings for academic enrichment.

Advanced Placement Course Guidelines:
An Advanced Placement course allows high school students to learn college material and to earn college credit, depending upon the score earned on the Advanced Placement examination and on the college or university the student attends. While such classes present a tremendous academic opportunity and challenge for students***, it is also important for each student to carefully assess his or her academic load***, extracurricular activities, and other school and community commitments when deciding how many AP courses to take.

Year	Suggested Range
Freshman	0 classes
Sophomore	0-2 classes
Junior	1-3 classes
Senior	2-4 classes

To exceed the above-recommended guidelines, students and parents will be required to sign a statement on the Course Registration Form acknowledging that the student schedule exceeds the recommended number of AP courses. It is recommended that parents and students schedule a conference with the school counselor to discuss extra rigor of the overall schedule during the registration process.

VCU/MLWGS Dual Enrollment Courses:

The VCU/MLWGS Partnership for Advanced Education provides MLWGS students university courses taught on the MLWGS campus. Students successfully completing these courses receive both high school and university credit. The courses are offered in the areas of social studies, mathematics, science, international languages, visual arts, technology, music, and research. For a student to enroll in a dual enrollment course, he or she must complete prerequisite requirements and have parental and counselor permission. Students are expected to follow VCU add-drop guidelines, adhere to the VCU honor codes, and exhibit mature behavior conducive to a college-level learning environment. Students are responsible for any fines or penalties assessed by VCU due to failure to adhere to university library policies. Dual enrollment students may request a VCU ID Card from the VCU Card Office. VCU grades will be entered as "A, B, C…" and MLWGS grades will be entered as "A+, A, B+, B…"

MLWGS does not provide VCU transcripts to students. Students may request official VCU transcripts from the VCU Records Office or online to apply for the transfer credits. VCU Transcript Request Forms are available in the MLWGS school counseling office; alternatively, forms can be downloaded from:
http://rar.vcu.edu/media/sem/randr/docs/pdf/0910_transcript_request.pdf

SCHOOL CREDIT PURSUED OUTSIDE OF MLWGS

Transfer Credits (Carnegie Units)
All MLWGS students must maintain a full day schedule of classes (minimum of seven classes each semester year), take the ninth and tenth grade interdisciplinary Global Studies and English courses, and meet all content area requirements in each discipline. While MLWGS does accept Carnegie Units earned in middle school, t*ranscripts will be evaluated for meeting MLWGS graduation requirements on an individual basis.* **For middle school credits accepted by MLWGS, courses will appear on the transcript but do not count toward GPA.**

Opportunities for School Credit Pursued Outside of MLWGS
The Governor's School recognizes the opportunities and necessity for students to pursue academic courses outside of our regular course offerings. Students who are interested in receiving MLWGS **elective credit** for academic classes **must receive *prior* approval of the Assistant Director, Curriculum and Instruction using the following guidelines**:

Classes taken during summer school for acceleration purposes: After the ninth grade year, students may take summer school courses to accelerate *only with prior approval of the subject area Department Chairperson, the Assistant Director, Curriculum and Instruction, and the Director*. **Prior to registration** students must submit a written request and an "**Out of School Credit Request Form**" (obtained from school counselor) detailing course description, requirements, and institution to the subject area Department Chairperson, Assistant Director, Curriculum and Instruction, and the Director for approval of credit(s). Any tuition, fees, and/or materials associated with such a course are the responsibility of the student. The final weighting (regular, university, or dual) of the course is dependent upon a review of course work and materials, including course descriptions, notebooks, labs, journals, tests, and exams. It is the responsibility of the student to submit a final transcript and any requested course work and materials to the department chairperson, the school counselor, and the Assistant Director, Curriculum and Instruction. *Students will be required to demonstrate proficiency by passing MLWGS examinations in the accelerated subject. Students who successfully complete the summer school course and MLWGS examinations earn credit towards their graduation requirements.* **This course appears on the transcript but does not count toward the GPA.** Students who do not succeed on MLWGS examinations will be required to repeat the course taken in summer school.

Ninth and tenth grade summer school Health/P.E., online ninth and tenth grade summer Health/PE, and ninth grade online Health/PE during the school year: These classes will count for credit and the grade will be listed on the student transcript. The grade will not be included in the grade point average calculation. Students and parents need to contact their participating school division for information about specific summer school/online options. It is the student's responsibility to register with his or her home school division for these classes and follow all division guidelines and policies. Any course tuition, fees, and/or materials are the responsibility of the student. In addition, it is the student's responsibility to confirm that the school counseling department at MLWGS receives the grade and credit once the course is completed. **Verification *must be provided* that any 9th grade HEALTH/PE course taken off-campus for MLWGS includes training in AED, CPR, and emergency first aid; *SUCH VERIFICATION MUST BE PROVIDED BEFORE THE STUDENT REGISTERS FOR THE COURSE.***

Classes repeated due to failure: Students may repeat *only one core course per content area* to meet graduation requirements. These courses must be taken at MLWGS or in an accredited summer school program. *Prior approval* is needed from the subject Department Chairperson, the Assistant Director, Curriculum and Instruction, and the Director. Both classes are shown on the transcript and count towards grade point average.

Classes repeated for subject mastery: Students may also choose to repeat a passed MLWGS course or credit-bearing middle school course for subject mastery *with prior approval of the Director*. The repeated course must be taken at MLWGS. The higher of the two final grades will count towards the student grade point average (GPA) if it is earned at MLWGS. The lower of the two grades will not count towards the GPA, provided it is a passing grade. If the lower grade was earned in middle school, the grade will remain on the transcript but will not count for credit or for GPA purposes. If the lower grade was earned at MLWGS, it will be changed to an audit for transcript purposes and will not count towards the GPA or for credit purposes.

Student Generated Curriculum for elective credit *only*: The MLWGS "Student Generated Curriculum" (SGC) is the MLWGS independent study process that is designed for rising seniors who have completed all of the course work offered at MLWGS in a discipline in which they have a special interest or talent. To be considered for a SGC, the student must have the recommendation of his or her counselor and the Department Chairperson and/or a teacher that the SGC is the appropriate learning opportunity for the student in the particular discipline. At the current time,

teachers serve as advisors on a voluntary basis in addition to their scheduled teaching and sponsorship activities. Consequently, the number of students who may participate in a SGC in a given year is very limited.

It is the student's responsibility to create the SGC proposal with guidance from the Associate Director and the teacher advisor. Some SGC proposals may also include the involvement of a mentor within the professional community. Once a draft of the SGC proposal is approved by the teacher advisor, the Associate Director, and the mentor, if applicable, the proposal must be approved by the parent/guardian, Department Chairperson, counselor, and Director. The proposal must specify the time span over which the SCG will implemented (fall semester, spring semester, or year) and the amount of credit being requested (1/2 credit or 1 credit). **All initial inquiries regarding the SGC should be directed to the Associate Director.**

VCU Advanced Scholars and Visiting Students Programs and Procedures: MLWGS has a cooperative agreement with Virginia Commonwealth University which allows MLWGS students to participate in college courses on the VCU campus for high school and/or university credit. Students who have completed all of the course work offered at MLWGS in a discipline may take advantage of VCU courses that are *not* offered at MLWGS. Through the Advanced Scholars Program, both VCU credit and MLWGS elective credit is awarded; all course tuition, fees, and materials are the responsibility of the student. Through the Visiting Students Program, MLWGS elective credit *only* is awarded; no student tuition or fees are involved, although students are responsible for purchasing any needed materials. Eligibility is determined by completion of application by a deadline, strength of academic record, test scores, faculty recommendations, Assistant Director, Curriculum and Instruction's approval, Director's approval, and VCU approval. Enrollment is dependent upon space available in each course. Applications, course offerings, and guidelines are available through the Office of Curriculum and Instruction. Students are encouraged to carefully consider the additional coursework and requirements of a university class prior to registering for such courses, and should maintain a balance between academics, extra-curricular activities, and personal and social commitments. Advanced Scholars and Visiting Students Programs are available in the Fall, Spring, and Summer sessions. In order to receive high school credit, it is the responsibility of the student to submit the "**Out of School Credit Request Form**" and other requested documentation. **All initial inquiries regarding the VCU Advanced Scholars or Visiting Students Program should be directed to the Assistant Director, Curriculum and Instruction.**

Other University Courses for MLWGS Elective Credit: MLWGS students who have completed all of the course work offered at MLWGS in a discipline may request to take university courses **outside the MLWGS school day** that are *not* offered at MLWGS. Any associated tuition, fees, and/or materials for such courses are the responsibility of the student. In order to receive high school credit, it is the responsibility of the student to submit the "**Out of School Credit Request Form**" and other requested documentation **to the Associate Director *PRIOR TO REGISTERING FOR THE COURSE***. Students are encouraged to carefully consider the additional coursework and requirements of a university class prior to registering for such courses, and should maintain a balance between academics, extra-curricular activities, and personal and social commitments.

The MLWGS Field Experience (for elective credit – pass/fail only): This course provides students with the opportunity to gain a realistic perspective of a career field of personal interest, while giving mentors the chance to assist students with career explorations and possibly gain assistance with a special project of mutual interest. SPECIFIC COURSE INFORMATION FOUND ON PAGE 16.

ACADEMIC STANDARDS & COMMUNITY SERVICE POLICY

Approved by the Regional Board June 24, 2010; Amended October 15, 2015

Amendments to the current Community Service Program are currently under review for the 2018-2019 school year. An addendum to the 2018-019 course catalog will be provided upon approval.

The purpose of the academic standards and community service policies and requirements is to ensure the success of all students at Maggie L. Walker Governor's School (MLWGS), and to provide support for those students experiencing difficulty. To be in "good standing" the student must meet ALL of the following criteria:

1) achieve a grade point average of 2.0 or greater at the end of each schoolyear;
2) fail no more than one course per year based upon final course grade;
3) exercise ethical academic behaviors in line with high standards of character;
4) have completed, or have an approved plan in place to complete, at least the minimum number of eligible community service hours recommended in the guidelines for their grade level; and
5) have an approved plan in place to complete the graduation requirements for the MLWGS Advanced Studies Diploma in four years at MLWGS.

Note: Additional requirements may be set by the participating school divisions including but not limited to the availability of funding and continuous review of progress, e.g., grades, attendance, and behavior.

Graduation Requirements for the MLWGS Advanced Studies Diploma include 1 unit of Community Service. Students must complete and document a minimum of 140 hours in 4 years. Only 70 hours of credit from one organization will count toward the minimum requirements (i.e. "eligible hours"), although all hours (i.e. "total hours") will be shown on the final transcript. The community service guidelines state that students must have completed, submitted, and verified at least the following number of hours at the end of each grade level: (1) freshmen - 35 hours, (2) sophomores - 70 hours, (3) juniors - 105 hours, and (4) seniors — 140 hours by the third Monday in May of their graduation year. Seniors not completing their community service requirement will not participate in the graduation ceremony.

A review of each student's overall progress is made at the end of each semester. A student who does not meet ALL of the criteria above are placed in the Academic and/or Community Service Intervention Process. If the student still does not meet all of the above criteria within the next semester, a recommendation will be made to the home school division superintendent that the student returns to his/her home school division.

ACADEMIC STANDARDS & COMMUNITY SERVICE PROCEDURES

Communication with Parents/Guardians and Home School Divisions

Maggie L. Walker Governor's School (MLWGS) has on-going communication regarding student progress with both parents/guardians and home school divisions. Regular communication regarding ALL student progress includes:

- Parents/Guardians
  1) Quarterly interims and report cards include current grades, grade point average, number of eligible community service hours documented, community service guidelines, and attendance records.
  2) Access to PowerSchool, the parent and student portal for student progress, provides a comprehensive view of the student's academic and community service progress, including current grades and assignments, historic grades for the current year, and attendance record.
  3) Teacher websites provide parents access to weekly schedules including classroom activities, homework, and assessments for each class.
- Home School Division - Gifted Program Administrators
  1) Quarterly packets are mailed which include report cards for each student, a "D/F Report" (summary listing students with D's and/or F's in one or more subjects), and a "Community Service Report" (students listed by grade level).
  2) Copies of any letter regarding academic and/or community service progress sent to parents/guardians of students from their school division.
  3) It is requested that the gifted program administrator from each division review the "D/F Report" and the "Community Service Report" and attend meetings as indicated in the Academic or Community Service Intervention Process.

On-going support is provided for all students as they transition to MLWGS and engage in the rigorous instructional program. Teachers, counselors, and administrators intervene as needed to assist students with their progress. **When a student experiences difficulty remaining in "good standing," he/she enters into the Academic and/or Community Service Intervention Process.**

Academic Intervention Process

STEP 1 - Faculty members alert the appropriate school counselor in writing of concerns for any student who is experiencing academic difficulty (grades of F or incomplete at the end of a nine week grading period). That faculty member will also contact the student's parent/guardian. The school counselor will hold a conference with the student needing academic assistance to offer recommendations for improvements. Schedule adjustments may be recommended at this time.

STEP 2 - If the student continues to have academic difficulty at the end of the nine weeks following referral, a conference will be held with the student, the parent/guardian, school counselor, and the appropriate teachers to discuss strategies for improvement.

STEP 3 - If the student still has not made sufficient improvement at the end of the next grading period, the school counselor, parent/guardian, appropriate teachers, and grade level administrator will meet to develop an academic intervention plan for the student. The plan may include tutoring, counseling, behavior management, a contract, or other appropriate measures. The home school division gifted program administrator will be notified when the meeting is scheduled to be held and given an opportunity to attend. A **"Plan for Improvement Form"** will be developed and signed by all in attendance.

STEP 4 - If the student continues to experience academic difficulty, a conference will be held with the student, parent/guardian, school counselor, grade level administrator, and the gifted program administrator from the student's home school division to discuss options for future placement for the student if student progress continues below the criteria for **"good standing."**

STEP 5 - The grade level administrator and gifted program administrator for the student's home school division will meet with the Director to review the actions taken during the intervention process, current status of student progress, and options for future placement discussed at the meeting with the student, parent/guardian, and school counselor for his/her consideration.

Community Service Intervention Process

STEP 1 - End of First Semester - Each grade level administrator will review the community service report for their grade level(s) each semester. Students should complete at least half of the eligible hours for their current school year by the end of the first semester: freshmen - 17 hours, sophomores - 52 hours, juniors - 87 hours and **seniors-125 hours**. The grade level administrator will send written notification to students who are not meeting the guidelines for their grade level to remind them of the requirements and offer assistance if needed. In addition, parents will also be sent a copy of the written notification.

STEP 2 - End of Third Nine Weeks - Parents/guardians of students who have not completed at least 75% of the number of eligible community service hours for their grade level will be notified by mail: freshmen - 26 hours, sophomores - 52 hours, and juniors - 78 hours. **For seniors to meet their May deadline, they should have 130 hours completed, submitted, and verified at the end of the third nine-week grading period.** A list of all students who have not completed the recommended number of hours will be sent to the home school division gifted program administrator. The grade level administrator will meet with the students needing community service, to offer recommendations and give them the **"Community Service Plan of Action"** form (plan for completing the recommended number of hours). The Director will send written notification to the parents/guardians of sophomores, juniors, and seniors. These students must complete the plan and submit it for approval to the Director by the first Monday of May. If the plan is not approved, a conference will be scheduled with the parents/guardians and student to make adjustments to the plan.

STEP 3 - End of Fourth Nine Weeks - If the student continues to have difficulty completing the number of eligible community service hours by the end of the **fourth nine weeks**, a conference will be held with the student, the parent/guardian, school counselor, and Director or grade level administrator to discuss strategies for improvement. The home school division gifted program administrator will be notified when the meeting is scheduled and given an opportunity to attend. **Seniors not completing their community service requirement will not participate in the graduation ceremony. Students who are returning and completing hours over the summer must submit the verified hours to the Coordinator of Administration NO LATER than the first Monday in August.**

STEP 4 - August - If the student continues to lack the number of eligible community service hours as outlined in the guidelines by the first Monday in August, a conference will be held with the student, parent/guardian, school counselor, grade level administrator, and the home school division gifted program administrator to discuss options for future placement for the student.

Students Not in "Good Standing" after Completing the Intervention Process

STEP 1 – The MLWGS Director will send written notification to the student, parent/guardian, gifted program administrator, and Superintendent for the student's home school division with his/her decision regarding the student's future placement at MLWGS and attach a summary of the actions taken by the Academic/Community Service Intervention Committee.

STEP 2 – The student and parent/guardian will receive written notification from the home school division regarding the status of the student's placement at MLWGS.

STEP 3 - The Appeal Process: The student or his/her parent/guardian may appeal this decision to the committee composed of the appropriate school counselor, grade level administrator, the home school division gifted program administrator, and the MLWGS Director or his/her designee. The MLWGS Director or his/her designee will chair the appeals committee. The Director or his/her designee will notify the student, parent/guardian, and the home school division Superintendent regarding the future placement for the student. The student or his/her parent/guardian may appeal this decision to the MLWGS Regional Board.

Transition and Academic Support Provided for All Students

I. The Transition Process - Freshmen Orientation and Preparation for Success

- An orientation program is provided in August for incoming freshmen prior to the opening of the school year. The purpose of this orientation is to acquaint incoming students and their parents/guardians with MLWGS expectations, success strategies, community service opportunities, school technology, and support services available to all students.
- During pre-school workdays, departments collaborate to design differentiated instruction to meet the needs of incoming freshmen as well as current students.
- Foundations for Independent Research and Communications, a freshmen required course for graduation, prepares students to succeed in the rigorous MLWGS academic program, be independent learners, use effective research skills, think critically, solve problems creatively, use technology in a rapidly changing technological environment, work effectively with others, and communicate effectively in written, oral, and visual format.
- School counselors provide sessions for freshmen with training in study skills, time management, organizational strategies, as well as the administration of a learning styles inventory.
- The school librarian provides whole-class instruction in research skills through collaboration with teachers of freshmen courses, individual research coaching sessions, tips and tutorials via the library's blog and wiki, mini-workshops during lunch, and annotated lists of online resources (project guides) to support specific projects when a teacher requests.

II. On-going Support Available to All Students

- After school tutoring in English and mathematics
- After school testing lab for make-up or re-tests
- Honor Society tutors in all subject areas
- Tutoring with teachers before school, after school, or during lunch
- Independent study periods structured by MLWGS staff during the instructional day
- Peer mentors/helpers offer assistance with research projects and study skill sessions
- Meetings with school counselor to assess academic progress and needs
- The school librarian continues to collaborate with teachers and students in upper grade levels to provide whole-class instruction and individual coaching sessions, tips and tutorials via the library's blog and wiki, lunchtime mini-workshops, and project guides to support specific assignments

Four Year Course Planner

The table below is intended to help students plan for their four year course of study at MLWGS. ***The courses listed below represent one typical sequence of study at Maggie L. Walker Governor's School. Students may follow a different sequence depending on middle school credits, academic progress, and other factors.***

Content Area	Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Social Studies	Global Studies 9	Global Studies 10	U.S. History OR AP U.S. History	U.S. Government OR AP U.S. Government & Politics
				SS Elective
English	World Literature 9 OR World Literature 9 PLUS	World Literature 10	American Literature OR AP English Language and Composition	British Literature OR AP English Literature and Composition
Mathematics	Geometry OR Geometry PLUS	Algebra II OR Algebra II PLUS	Trigonometry & Math Analysis OR Trigonometry & Math Analysis PLUS	AP Calculus AB OR AP Calculus BC
Science	Molecular Biology	Chemistry OR Chemistry PLUS	Physics OR Physics PLUS	AP Biology, AP Chemistry, AP Physics, OR AP Environmental Science
Int'l Languages	Language 1, Level II OR Language 1, Dual Enrollment Level I	Language 1, Level III OR Language 1, Dual Enrollment Level II	Language 1, Pre-AP OR Language 1, Dual Enrollment Level III	Language 1, AP OR Language 1, Dual Enrollment Level IV
		Language 2, Level I	Language 2, Level II	
General & Fine Arts Requirements	Health & PE 9	Health & PE 10		Senior Seminar/Mentorship
	FIRC	Online Economics & Personal Finance		
	Fine Art			
Electives/Study Hall			Study Hall	Study Hall
			Elective	
Total Periods Scheduled (must=8)	8	8	8	8
Community Service	35 hours	35 hours	35 hours	35 hours

GENERAL COURSE OFFERINGS

FOUNDATIONS OF INDEPENDENT RESEARCH AND COMMUNICATIONS (FIRC)
Course Number: 0001 Credit: 1
Required of all ninth grade students

FIRC is the first step in a research and writing progression that culminates with the senior seminar/mentorship capstone project and presentation. Research and writing are emphasized and demonstrated in all courses, including culminating projects in Chemistry, Global Studies 10, and American Literature/AP English Language and Composition. This course provides students with the skills to conduct independent research. The four core components of the course are taught by an interdisciplinary team of instructors from mathematics, science, language arts, and global studies. The course is designed to prepare students to succeed in a rigorous academic program, be independent learners, use effective research skills, think critically and solve problems creatively, use technology in a rapidly changing technological environment, work effectively in teams, and communicate effectively in written, oral, and visual formats.

ECONOMICS AND PERSONAL FINANCE
Course Numbers: Personal Finance 0181, 0184; Economics 0180, 0183 Credit: 1
Required of all students
Offered online during the academic year and online during the summer

This course prepares students to function effectively as consumers, savers, investors, entrepreneurs, and active citizens. Students learn how economies and markets operate and how the United States' economy and the global economy are interconnected. On a personal level, students learn that their own human capital is their most valuable resource. In addition, this course helps students develop thinking skills that include the analysis of real-world situations, economic reasoning, decision making, and problem solving.

MENTORSHIP/SENIOR SEMINAR (VCU HUMS 291: Research Techniques I & II)
Mentorship Course Number: 0271 Dual Enrollment
Seminar Course Number: TBD VCU credit: 2
Required of all seniors MLWGS Credit:1
Co requisite: **Senior** level class standing

This course provides students with the opportunity to explore an area of personal interest that promotes the mission of the school. The senior seminar credit can be fulfilled through participation in **(1) a seminar at MLWGS, or (2) a mentorship off campus. Mentorships are granted through an application process, and there is no guarantee that every student interested in a mentorship will be accepted. Consideration is given to GPA, disciplinary record, community service hours, among other factors.** Students actively participate during the first semester of their junior year in planning their Senior Seminar experience.

Whether participating in a seminar or a mentorship, students engage in field-based research, create a product, write a research paper, and present at Senior Showcase. Throughout the process, students take an active part in formulating the problems and methods by which the problems are investigated. Appropriate investigative techniques are utilized to produce or analyze raw data and/or produce original interpretations rather than rely exclusively on the conclusions of others. When completing projects students select from a wide range of alternative products and communicate their results to a real, rather than a contrived, audience in a professionally appropriate manner on Senior Showcase Day. The presentations are graded in accordance with rubrics developed to ensure a level of consistency. Upon successful completion of all requirements of the Senior Seminar/Mentorship Program, students will earn a total of two VCU credits (pass/fail) in Research Methods HUMS291: one credit for fall semester and one credit for spring semester. In both the mentorship and seminar experiences, an exam grade will be a part of each student's course grade for the first and for the second semester.

(1) Seminar. School-based research seminars are guided by a MLWGS faculty facilitator or a professional community facilitator. Seminar groups meet during a designated block period on the MLWGS campus, and are structured around a broad organizing theme of mutual interest to all involved. Seminar students undertake a field-based research project and write a paper on a topic of interest related to the seminar theme and that is approved by the seminar instructor. Each seminar group also works together as a class to create a professional presentation for the Senior Showcase.

(2) Mentorship. Students desiring a more individual study of a field of interest may apply for a mentorship off of the MLWGS campus, meeting each Friday with the MLWGS Mentorship Coordinator to discuss their progress. Factors taken

into consideration when applying for a mentorship include community service hours, attendance/tardies, discipline (including Honor violations), grades/GPA (must maintain a C+ or better in each class), student's ability to provide transportation, and the ability of the Coordinator to find a viable mentorship. If accepted into the program, must complete a *minimum* of 115 hours of field experience with all documentation and assessments required for a passing mark in the Mentorship Program, complete a *minimum* of 25 hours meeting with the Mentorship Coordinator on Fridays to ensure all activities and assessments are completed, and complete a research project reflecting the research process, a product, a research paper, and professional presentation at Showcase. **Students may complete up to 45 hours of a mentorship during the summer before their senior year; exceptions to this hour restriction *may* be considered for mentorships out-of-the state or country.** Students complete the remaining hours throughout the school year by leaving during their 7th or 8th block mentorship class at 1:50 p.m. Students also have the option of combining a study hall with their mentorship block, leaving at 11:45; e.g. 5/7 (Mondays/Wednesdays) or 6/8 (Tuesday/Thursdays). If a student participates in any activities that require him/her to return to school by 3:30 or 4:00, then a study hall with the mentorship block is required. ***A 3-hour training session, offered at the end of a student's junior year, is required before starting the mentorship.***

ELECTIVE FIELD EXPERIENCE (for <u>elective</u> credit – pass/fail only)
Course Number: 0081 (Full Year) Credit: 1 (140 hours)
Course Number: 0086 (One Semester) Credit:1/2 (70 hours)
Prerequisite: Successful completion of **sophomore** year requirements

This course provides students with the opportunity to gain a realistic perspective of a career field of personal interest, while giving mentors the chance to assist students with career explorations and possibly gain assistance with a special project of mutual interest. This application experience requires a *minimum* of 140 hours engaged in activities at the field site and/or related mentorship activities at approved alternate sites to earn one credit. For one-half credit, the student must complete a *minimum* of 70 hours. The credit is on a "Pass/Fail" basis, assessed according to established rubrics, and must be used for elective credit. Students must submit an application, which may be obtained from the Senior Seminar/Mentorship Program Coordinator.

The student's role may vary from one of active involvement at times, to one of observing and asking questions. Generally, initial activities include observing the mentor in a professional on-site setting and observing the relationship and interaction between the mentor and other professionals. During this time, the student may either rotate among departments at the field site as arranged by the mentor to gain an overview of the organization or spend the first two weeks with their mentor to obtain a more in-depth perspective of their role. As the Field Experience progresses, the mentor is encouraged to suggest areas of focus for student observation during specific activities. Examples of focused observations include such topics as the "methods to document professional conversations and decisions" or "procedures for opening a professional meeting or training session." Additionally, the students assist as they are able and as they are needed in the following ways: on previously established projects or short-term activities, with routine daily activities, and with research activities. They may undertake a creative project of interest to the mentor that utilizes their special talents as a singular project or in addition to the aforementioned activities.

Types of specific activities with which MLWGS students assist their mentors include either preparing reports and spreadsheets or contributing to an ongoing research project by conducting labs, data entry analysis, and editing or proofreading of documents. Additionally, they can attend meetings, training sessions, and other functions either with their mentor or as arranged by their mentor, co-present with their mentor for professional groups, review recent professional literature related to a topic of mentor interest, create an annotated bibliography of articles provided on a specific subject, or explore a new computer software application important within the professional setting.

Students are expected to acquire and apply knowledge during their field experience and must therefore engage in observations in professional settings that lead to new activities. During a Field Experience, students are encouraged to seek activities that expand areas of personal talent and/or interest and that can be of benefit to their mentor and to the field site in general. Once approved by their mentor, students may complete **up to 30 hours** of their activities independently, record these hours in their journal, present the product to their mentor for periodic review, and include the final product in the Field Experience Portfolio.

To receive a "Pass" and the MLWGS Field Experience credit, the student must submit the following products:

1. **A journal of personal reflections** with daily entries that include (a) the date of the field site visit, (b) time of arrival and time of departure, (c) brief description of activities or observations, (d) questions to ask their mentor at the next meeting, and (e) subtle learning from the activities and/or observations. Students must obtain mentor signatures upon completion of each interval of 17 – 18 hours verifying that they concur with the entries.

2. **A Field Experience portfolio** containing (a) a written report for each nine weeks or *approximately* 35 hours of Field Experience, (b) a written final report summarizing the activities and personal reflections on the knowledge acquired from the total experience, and (c) specific samples of work completed for the mentor.
3. **Mentor "Student Evaluation" forms** (each nine weeks and final) indicating an overall "satisfactory" level of performance in each category, and
4. **A letter from the mentor** verifying that the student engaged in field activities for a *minimum* of either 70 hours for one-half credit or 140 hours for one credit and successfully completed the project or activities upon which the Field Experience was proposed.

For students interested in submitting research to science competitions, additional requirements for completion of research field experience **may** include the following modifications:

1. **The nine-week (quarterly) papers** will summarize the progress of the research along with personal reflections on knowledge gained related to the "research process."
2. **The Final paper** will be a research report in the proper format to submit for competitive consideration.

The pass/fail field experience opportunity for **elective credit** is dependent upon sufficient availability of staff to guide and supervise the process. Field Experience applications and proposals must be completed and approved by the MLWGS Director the semester prior to implementation. The needed materials and required forms can be obtained from the Mentorship Coordinator.

STUDENT AMBASSADOR
Course Number: 01 (Full Year) Credit: Community Service Hours
Course Number: 06 (Semester)
Prerequisite: Completion of the application process

Students participating in this experience will utilize and expand their leadership and organizational skills through working with the office of Curriculum and Instruction to assist the administration on projects related to such activities as daily operation of the school, school outreach activities, recruitment of new students, hosting visitors to the school, and new curriculum projects. Possible activities for students during this experience may include, but are not limited to: (1) editing or proofreading documents, (2) assisting with ongoing research projects, (3) preparing materials, reports, and/or spreadsheets, (4) assisting with meetings, training sessions, and/or conferences, (5) presenting on various aspects of the MLWGS program, (6) giving tours to visitors, and (7) assisting with the Friends of Virginia's Governor's Schools, the GSGIS Foundation, and other organizations. Through this experience, students will learn to work within a collaborative administrative structure, to speak in public about MLWGS programs and gifted students, to prioritize, participate, cultivate talent in others, and delegate in order to complete projects, and to provide a student's viewpoint on curriculum initiatives. As student ambassadors serve as liaisons to the general community, they gain a deeper understanding of the MLWGS program and share in the continuous improvement of their school. There is a maximum of eight ambassador positions available per period each semester. Students that are in these positions are required to reserve that period for student ambassador work only. They are also required to commit to a certain number of annually scheduled events that take place outside of school time. These events include but are not limited to freshman orientation, Back to School Night, Open Houses, middle school visits, and eighth grade testing days. It is also important that these students attend the tour and leadership training session(s) for the program. Applications for student ambassador positions are available in the school counseling department and must be submitted for consideration to the Coordinator of Curriculum and Instruction three weeks prior to registration.

STUDENT STUDY PERIOD (STUDY HALL)
Course Number: 0101 (Full Year) Credit: None
0106 (Semester)

HEALTH AND PHYSICAL EDUCATION COURSES

HEALTH AND PHYSICAL EDUCATION 9

Course Number: 8001 Credit: 1
Grade: 9

This course is the first year of Health and Physical Education, and focuses on the study of health, wellness, personal fitness, human diseases, social health, and nutrition. This course also includes training in CPR, AED use, and emergency first aid. Physical Education focuses on a variety of team and individual sports that are taught within a sportsmanship atmosphere. The class includes nautilus and free weight knowledge to educate the students on the proper forms of weight training to prevent injuries and for long term use.

HEALTH/DRIVER'S EDUCATION/PHYSICAL EDUCATION 10

Course Number: 8071 Credit: 1
Grade: 10-12
Prerequisite: 9th grade Health and Physical Education. It is recommended that the student have their learner's permit by January 1 of that school year.

Health/Driver's Education and Physical Education is the second credit for high school graduation. The Health portion covers preparing for courtship, planning for a family, lifetime goal planning for a future, pathologies for disease, participation in drug free recreational activities, and understanding the physical, mental, and psychological effects of alcohol and drugs in society. Also covered are maturation, interpersonal relationships, problem solving, budgeting, debts, investing, personal fitness, development of a fitness program, resting heart rate, target heart rate, maximum heart rate, and logging of a personal fitness plan and maintaining it throughout the semester. Driver's Education will be offered to all students in the first semester of the course and provides the student the 36 hour theory portion, the simulation and the behind the wheel segment for the state requirement to receive a driver's license. Physical Education will offer a variety of individual sports and lifetime activities such as ultimate Frisbee, volleyball, golf, lacrosse, field hockey, soccer, tennis, and basketball.

SOCIAL STUDIES

Philosophy

The Maggie L. Walker Governor's School for Government and International Studies (MLWGS) Social Studies college prep curriculum exceeds both state and national standards. It is based on a systematic, critical study of social science. The department seeks to provide students with an international perspective so they can fulfill the mission of creating individuals who will "lead, participate, and contribute in a rapidly changing global society." Opportunities to develop and expand student knowledge are present both in the classroom and through various department-sponsored programs and extracurricular activities. The department respects and nurtures all Governor's School students to provide them with a strong foundation in the social sciences in keeping with the unique mission of this program and the strengths of its students.

Goals

The MLWGS Social Studies Curriculum integrates a global perspective and awareness across many disciplines that stress the commonalties, connections, and uniqueness of all human beings. This approach enables our students to become responsible global citizens. The students will:

- understand the different methods of causation and analysis used in the social studies subject areas
- view themselves as a part of an interdependent world system
- broaden their understanding of historical influences on the formation of national identities
- value group collaboration in decision making processes
- critically evaluate major theories concerning man and society
- consider the ethical and moral implications of historical, political, and economic problems
- analyze and assess data applications to world issues and problems
- appreciate how people experience common life themes across region and culture
- examine the origins of diversity in our world community
- practice research techniques and question interpretations of content
- present oral discourse and written arguments in the study of social science

Program Description

The objectives listed are the foundation for courses offered in the Social Studies curriculum. The typical course offerings include some of the following:

Global Studies: Cycle I: Middle East, Europe and Russia, The Indian Subcontinent
Cycle II: East and South East Asia, Sub-Saharan Africa, Latin America
(Note: The above listings are CORE COURSES FOR 9th/10th grades.)

United States History
Advanced Placement United States History
United States and Virginia Government
Advanced Placement American Government and Politics
Advanced Placement Comparative Government and Politics
Advanced Placement Economics
Advanced Placement European History
Advanced Placement Human Geography
Advanced Placement Psychology
"We The People" – The Citizen and the Constitution
Topics in 20th Century American History
Topics in Global Studies
International Studies
Introduction to Modern Political Theory
International Relations/VCU Dual Enrollment
Eastern and Western World Religions/VCU Dual Enrollment

Individual course descriptions and objectives are planned for each course listed in our MLWGS manual. Each student is provided with a detailed syllabus for each class in which he/she is enrolled for optimum organization and success. Specific national contests and organizations are encouraged for student participation.

Course offerings are continually updated, expanded, and adjusted to reflect the needs of our incoming student population. Since we serve a learning community from across the Metropolitan Richmond region, every effort is made to accommodate student need and individual growth.

SOCIAL STUDIES COURSES

GLOBAL STUDIES I & II

Course Number: 9-1001; 10-1031 Credit: 1
Guidelines: All Freshmen and Sophomores

This course is a two-year survey of world regions. The major civilizations of the Middle East, Europe, Russia and the Indian subcontinent will be studied in Cycle I. The major civilizations of East Asia and Southeast Asia, Sub-Saharan Africa and Latin America will be studied in Cycle II. In each regional unit, an intensive study of history is undertaken, with a particular focus on events since 1500. Geography, religion, economics, politics, art, culture, ethnicity, and current events are incorporated into the study of each region. The sophomore year course is taught at a higher level in keeping with student developmental needs. In addition, sophomores are required to engage in a substantial research and writing project as defined by the instructor and using the Chicago Manuscript style. Students will complete the Standards of Learning testing program at the end of their sophomore year.

UNITED STATES AND VIRGINIA HISTORY

Course Number: 1051 Credit: 1
Prerequisite: Global Studies I

The Honors United States History course requires students to analyze the political, economic, social, and cultural history of the American nation and its peoples. Students will receive a thorough and differentiated knowledge of American culture through a chronological and/or thematic survey and assessment of the major issues, movements, peoples, and events in both United States and Virginia history. Students will practice and understand the skills necessary for responsible citizenship and participation in our multicultural American society. Classroom instruction is conducted through lectures, presentations, student-led discussions, presentations, and cooperative activities. Opportunities are also provided for students to explore historical topics of personal interest beyond the Standards of Learning. Highly-qualified students may choose to take the College Board Advanced Placement Exam in American History.

AP U.S. HISTORY

Course Number: 1053 Credit: 1
Prerequisite: Global Studies I
Guidelines: A in prerequisite course and teacher recommendation

AP United States History requires student involvement in an in-depth study of the political, diplomatic, intellectual, cultural, social, and economic history of the United States from the pre-Columbian period (ca.1491) to the present. At the highest level, the course is organized around seven course themes. These themes structure the course around significant long-term trends and processes in what has become the United States. The themes provide an overarching framework for inquiry that can be used to guide students throughout the course. The themes are: Work, Exchange, and Technology; Peopling; Ideas, Beliefs, and Culture; America in the World; Environment and Geography—both Physical and Human; Politics and Power; and Identity.

The curriculum framework defines historical thinking skills that are central to the study and practice of history and implements tools used by historians when they construct and test historical arguments about the past. The rigor of the course is comparable to a freshman survey of U.S. history at most colleges and universities. Classroom instruction is conducted through lectures, student-led discussions, presentations, and cooperative work. In keeping with this advanced level, reading and writing requirements are extensive. A significant component of the course concerns the development of academic skills including; historical research, information analysis, formal research writing, appropriate source documentation, persuasive essay construction, oral presentation, and debate. It is expected that student taking the AP course will take the College Board's AP exam in this subject area. Accordingly, emphasis is given throughout the year to the techniques and skills required to do well on the exam. A variety of instructional approaches are employed.

UNITED STATES AND VIRGINIA GOVERNMENT
Course Number: 1071 Credit: 1
Prerequisites: Global Studies I & II and US History

The primary objective of Honors U.S. Government is to advance civic competence among Governor's School students. The course implements student involvement and critical analysis of American and Virginia government by examining its conflicts, complexity, and controversies. Students are encouraged to question, analyze assigned readings, participate in seminar discussions, and demonstrate application in simulated exercises based on examples from the development of national and state government. The readings embrace continuing and conflicting interpretations of important past and contemporary issues. Family values, gun control, and foreign policy choices are some topics discussed and debated. Projects are completed each marking period. Projects may involve the examination of state and national election campaigns, Federalist and Anti-Federalist perspectives, the legislative process within Virginia, and the implementation of federalism. Opportunities are also provided for students to explore topics of personal interest beyond the core curriculum and Standards of Learning. Highly-qualified students may choose to take the College Board Advanced Placement Exam in American Government.

AP AMERICAN GOVERNMENTAND POLITICS
Course Number: 1073 Credit: 1
Prerequisite: U.S. History
Guidelines: A in prerequisite course and teacher recommendation

In the Advanced Placement course in American Government, students interpret national, state, and local government and politics through basic concepts and specific cases. They will gain familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Students will also explore concepts and ideas that are fundamental to the government of Virginia. It is expected that the student will take the AP exam for this course. This course fulfills the government requirement for the Virginia Standards of Learning.

AP COMPARATIVE GOVERNMENT AND POLITICS
Course Number: 1093 Credit: 1
Prerequisites: Global Studies I and II
Guidelines: A in prerequisite courses and teacher recommendation

This elective course includes a study of comparative government and politics. It provides students with an analysis of the world's diverse political structures and practices. Through the study of political frameworks, social systems, citizenship, and the ideologies of the countries of Great Britain, China, Mexico, Nigeria, Iran, and Russia, students gain an understanding of the way people organize societies in the contemporary world. The former Soviet Union will be analyzed to examine how some of the concepts introduced apply in a unique way to the disintegration of a nation state. It is expected that the student will take the AP exam for this course.

AP EUROPEAN HISTORY
Course Number: 1104 Credit: 1
Prerequisite: Global Studies I
Guidelines: B+ in prerequisite course and teacher recommendation

European History is a college level course that prepares MLWGS students for the national College Board examination in May of the school year. Its content consists of the development and interpretation of European History since 1450. Students are expected to have a basic factual knowledge and understanding of modern European history or contemporary civilization as presented in the Global Studies course curriculum. Themes in political, diplomatic, economic, intellectual, social, and cultural history are covered. Students master the broad chronological contours of modern European History for in-depth knowledge of specialized topics. The analysis and synthesis of critical primary texts is an essential element of the course and students should arrive with a basic familiarity with this process. It is expected that the student will take the AP exam for this course.

AP HUMAN GEOGRAPHY
Course Number: 1153 Credit: 1
Prerequisite: Global Studies I
Guidelines: B in prerequisite course and teacher recommendation

This course entails the "systematic study of patterns and processes that shape human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice" (College Board, 2013). Students work to quantify the human experience through relationships with the environment and each other. Topics include: perspectives on geography, population, language, ethnicity, religion, agriculture, political organization, and more. The themes explored constitute the foundation of many other social sciences and help give context to current events. Sample assessments include analysis of primary and secondary sources, student presentations, preparation of charts and graphs, papers, and simulations. Students are expected to take the AP exam.

ENVIRONMENT & SOCIETY: SCIENCE, POLICY, AND HUMAN BEHAVIOR
(AP Human Geography + AP Environmental Science) Credit 2
Course Number: TBA (1 lab science + 1 social studies elective)
Prerequisites: Analytical Chemistry, Molecular Biology, Global Studies I, Global Studies II
Co-requisite: Junior or senior standing

This course is a combination of AP Environmental Science and AP Human Geography. This unique merged course will allow for deeper exploration of the intersection of man and the environment. The course will examine the influence of the human population from a variety of perspectives and will analyze the effects of human resource use and technology development on history, society, and the environment. Additionally, the course will ask for creative problem solving such as planning sustainable communities and developing best policy and practices. Taught as a two block unit, the class will have more opportunities for out-of-classroom experiences, such as extended field activities for thorough environmental assessment, electronic data mapping, and analysis. Project-based learning will be emphasized through use of technologies such as GPS and ArcGIS. All content required for completion of both AP Environmental Science and AP Human Geography will be included. The expectation is that students will take both AP exams.

AP PSYCHOLOGY
Course Number: 1606 Credit: 1
Prerequisite: Global Studies I
Guidelines: B+ in prerequisite course and teacher recommendation

The Advanced Placement course in Psychology introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They will also learn about the methods psychologists employ in their science and practice. Emphasis is placed on ideas and contributions which psychology has made to understanding human behavior. Extensive reading explores the work of Pavlov, Jung, Maslow, Rogers, Freud, and others. Experimental techniques and implications are examined. It is expected that all students will take the AP exam for this course.

AP ECONOMICS
Course Number: 1303
Prerequisite: Global Studies I and II, Algebra II, and teacher recommendation Credit: 1
Guidelines: B+ in prerequisite courses

The Advanced Placement economics course is a two semester course that prepares students for the AP Microeconomics and AP Macroeconomics exams and helps them understand domestic and global economic challenges. The course helps students understand the intricacies and interrelationships in the economy and how domestic and global policies influence our economy and economic thinking. Successful completion of the course will enable the students to better understand key economic issues and concepts, become familiar with the economic thought process, and to be able to evaluate political decisions from an economic perspective.

THE CITIZEN AND THE CONSTITUTION: "WE, THE PEOPLE"
Course Number: 1083 Credit: 1
Prerequisites: U.S. History, U.S. Government (may be taken concurrently), application process, and teacher committee review

The United States of America has one of the world's most successful governments. This government was greatly influenced by the American people's powerful convictions involving fundamental political concepts. These convictions were based upon the values of freedom, order, and equality. Their successful interaction and execution in a democratic environment has been a constant challenge for the American political system.

The primary goal of "We the People: The Citizen and the Constitution" is to promote civic competence and responsibility among the nation's secondary students. What makes the program so successful is the design of its instructional material, including its innovative culminating activity. The instructional program enhances students' understanding of the institutions of American Constitutional Democracy. At the same time, students discover the contemporary relevance of the Constitution and the Bill of Rights. The culminating activity is a simulated congressional hearing in which the students testify before a panel of judges. Students demonstrate their knowledge and understanding of constitutional principles and have opportunities to evaluate, take, and defend positions on relevant historical and contemporary issues.

TOPICS IN 20th CENTURY UNITED STATES HISTORY
Course Number: 6999 Credit: 1
Prerequisites: Global Studies I, II
Co-requisite: US History
Guidelines: Teacher recommendation

Topics in 20th Century United States History is an upper level seminar that supplements the curriculum in Honors and Advanced Placement United States History by providing students with the opportunity to explore specialized topics in greater depth. The subject will rotate within the department and will be driven by faculty expertise and areas of interest. In each course there will be an emphasis on the application of skills and concepts learned in the U.S. History survey courses. Students will work extensively with primary and secondary source material, participate in seminar discussions, engage in experiential learning activities, and work independently and in groups to conduct research and present their findings. This is an honors level course with reading, writing, and class discussion expectations that require a mature and committed history student. Past courses have focused on Civil Rights and the Johnson Years, the Korean and Vietnam Conflicts, 20th Century American Popular Culture, and American Historiography.

TOPICS IN GLOBAL STUDIES
Course Number: 1701 Credit: 1
Prerequisite: Global Studies I and II

Topics in Global Studies is an honors level course that supplements the Social Studies curriculum by providing students with the opportunity to explore specialized topics in greater depth. The emphasis will be on topics with strong connections to modern world problems and events. The course will prepare students to make informed decisions regarding international controversies and concerns, and will draw upon history to examine these topics. The subject will rotate within the department and will be driven by faculty expertise and areas of interest. In each course students will apply the skills and concepts learned in Global Studies. Students will work extensively with primary and secondary source material, participate in teacher and student led discussions, engage in experiential learning activities, and work independently and in groups to conduct research and present their findings. Past courses have focused on Genocide and 20th Century Dictators and Despots.

INTERNATIONAL RELATIONS
Course Number: 1406 MLWGS Credit: 1/2
Prerequisite: Global Studies I Fall Semester
Guideline: B+ in prerequisite course

This is an introductory level, one semester course in which students will discuss the evolution of the world political system from the nation state to the contemporary cooperative examples of the United Nations and the European Economic Community. The diplomatic instruments of international politics are stressed. Questions such as the use and abuse of power, arms, and international law solutions are covered. Contemporary world problems and their solutions are considered in light of national interest and power relationships. Emphasis on the economic role in international relations is also approached from a regional perspective.

INTERNATIONAL STUDIES (VCU INTL 361: Issues in World Politics)
Course Number: 1439 Dual Enrollment
Prerequisites: Global Studies I, International Relations VCU Credit: 3 semester hours
Guidelines: B+ in prerequisite courses, teacher recommendation MLWGS Credit: 1/2
Spring Semester

This one semester course is the "next sequential" course following Introduction to International Relations. Through debate, role playing, student-led presentations, guest speakers, and simulations, students will have the opportunity to further explore the theory and principles introduced in the Introduction to International Relations class. Using case studies, students will also examine the implications and historical and diplomatic consequences presented when these theories are put into practice in real world conflicts and crises. Specific topics to be examined include: power and diplomacy, the role of multinational organizations such as the United Nations, international law and morality, issues in national and international security, arms control and international peacekeeping, human rights, and international economic collaboration and competition in the developed and developing world.

EAST ASIAN STUDIES
Course Number: 1851
Prerequisite: Global Studies I Credit: 1

This course covers East Asian history from approximately 1600 to the present day. While China and Japan are the major focus of study, discussions of Korea, Vietnam and the Asia-Pacific region are included and referenced in readings and analysis. The course will begin by looking at East Asian society, culture and philosophy prior to Western imperialism. It will then look at economic and political impact of the West in Asia in the Nineteenth Century. The study of the early Twentieth Century will focus not only on the conflict between Westernization and tradition that each nation struggled to balance, but also on the international crisis of World War II and how each nation emerged to create a new political system in its aftermath. The next part of the course will focus on topics such as the Cold War, the evolution of Communism in China, democracy in Japan and division on the Korean peninsula. Lastly, themes including political protest, religious and regional identities, ethnic rivalries, social reform, nationalism, trade and globalization will be addressed.

20th CENTURY RUSSIAN HISTORY
Course Number: 6656 Credit: 1
Prerequisite: Global Studies I

A one year survey of Soviet and Russian History in the 20th Century. The major eras will be organized by political leaders. These include the Czars of the 19th Century, Nicholas II, Lenin, Stalin, Khrushchev, Brezhnev, Andropov, Chernenko, Gorbachev, Yeltsin, and Putin. The themes will be political, social, and military histories. In each era, an intensive study of political history is undertaken, with a particular focus on events since 1894 up to the present. Studying Russia's history provides important clues for understanding the challenges Russia faces today in a new geopolitical scenario. Geography, religion, economics, politics, art, culture, ethnicity, and current events are incorporated into the study of each era. Classroom instruction is conducted through lectures, student-led discussions, presentations, simulations, Socratic seminars, and individual or cooperative work.

INTRODUCTION TO MODERN POLITICAL THEORY
Course Number: 1206 Credit: 1
Prerequisite: Global Studies I
Guidelines: Teacher recommendation

This course is a study of the foundations of modern political theory. The works of Machiavelli, Hobbes, Locke, Rousseau, Hegel and Marx are examined in depth. In addition, instruction includes the ideas and contributions of a number of modern political thinkers. Students are encouraged to challenge the "accepted" concepts/ideas of freedom, sovereignty, the state of nature, general will, natural rights, and liberalism. Emphasis is placed on discussion, debate, and application of these theories to contemporary issues.

EASTERN WORLD RELIGIONS – (VCU RELS 311: Religions of the World)
Course Number: 1819 Dual Enrollment
Prerequisite: Global Studies I VCU Credit: 3 semester hours
Guidelines: B+ in prerequisite course, teacher recommendation MLWGS: Credit: 1/2
Fall or Spring Semester

This course constitutes one semester of a year-long academic study investigating the historical, cultural and theological foundations and development of major world religions. RELS 311 (Eastern World Religions) considers several key traditions that represent the Oriental or Asian approach to religion, thought, and spirituality: Hinduism, Buddhism, Confucianism, Taoism and Shinto. RELS 312 (Western World Religions) will do the same for those traditions considered indicative of a Western approach to religion, thought, and spirituality: Zoroastrianism, Judaism, Christianity and Islam.

WESTERN WORLD RELIGIONS – (VCU RELS 312: Religions of the World)
Course Number: 1829 Dual Enrollment
Prerequisite: Global Studies I VCU Credit: 3 semester hours
Guidelines: B+ in prerequisite courses, teacher recommendation MLWGS Credit: 1/2
Fall or Spring Semester

This course constitutes one semester of a year-long academic study investigating the historical, cultural and theological foundations and development of major world religions. RELS 312 (Western World Religions) considers several key traditions indicative of a Western approach to religion, thought, and spirituality: Zoroastrianism, Judaism, Christianity and Islam. RELS 311 (Eastern World Religions) will do the same for several key traditions that represent the Oriental or Asian approach to religion, thought, and spirituality: Hinduism, Buddhism, Confucianism, Taoism and Shinto.

GENDER, POLITICS, AND CONSUMERISM IN A GLOBAL CONTEXT (VCU INTL 368: Women & Global Politics/INTL 203: Cultural Texts & Contexts: Gender & Consumer Culture
Course Number: 1861 Dual Enrollment
Prerequisites: Global I & II; junior or senior status VCU Credit: 6 semester hours
Guidelines: B+ in prerequisite courses; teacher recommendation MLWGS Credit: 1

The first semester of this course is a study of women and global politics, providing both a feminist re-examination of traditional international-relations theories and a comparative analysis of the political, legal and economic status of the world's women. The impact of women on global political institutions such as the United Nations will be addressed as well as other feminist and grass roots means of taking political action.

The second semester of the course examines the relationships between consumption and gender, focusing on several important themes, including: 1) histories of the gendered divisions of labor in society where "men work and women shop," 2) women's responsibility for family consumption in the heterosexual domestic sphere, 3) representations of men and women in advertising, 4) the role of commodities (e. g., clothing, cosmetics, etc.) in the embodiment of gender, 5) sexuality and consumption, and 6) feminism and consumption. This course takes an intersectional approach to gender; i.e., it is considered in relation to other structures of inequality and difference such as race, class, and sexuality. Through the analysis and interpretation of literary, cinematic and other cultural texts, this portion of the course explores the ways cultural and national identities have been shaped, imagined and contested in various regions of the world. While responding to the readings and films as artistic manifestations or social documents, students will also become familiar with the aesthetic, political and social contexts in which the works were and are produce

ENGLISH

Philosophy

In the English program at MLWGS, students read great works of literature and then learn how to examine, discuss, and write about these works. English teachers model the analysis of literature in order to teach students how to recognize and appreciate not only the literary techniques that authors use but also the ideas that authors explore. Students learn about the English language, from the grammatical construction of sentences, through the organization of a paragraph, to the assemblage of ideas into a logical essay. Students also apply these skills to the way they speak in public and share their ideas in discussion. Through the literature studied, the English program encourages students to understand and appreciate interdisciplinary connections, especially those that naturally arise between the Global Studies and English programs.

Goals

The English program strives to help each student:

- gain an appreciation of a broad scope of literature, literary movements, and recurrent themes,
- develop an understanding of literature's interdisciplinary connections,
- analyze and/or explicate a text according to its literary elements,
- improve written and oral communication,
- develop analytical and critical thinking and reading skills,
- understand writing as a process that is integral to all disciplines,
- develop an awareness of audience and adapt writing skills accordingly,
- evaluate both his/her own and peers' writing,
- participate actively and effectively in classroom discussions and collaborative activities,
- use technology to facilitate writing and/or presentations,
- develop critical questioning skills,
- expand his/her vocabulary,
- master and apply the rules of English grammar, and
- understand and develop research skills.

Program Description

The English program requires each student to complete four year-long courses. These are World Literature and Composition I at ninth grade, World Literature and Composition II at tenth grade. At the eleventh grade level, student may take either American Literature and Composition or AP English Language and Composition. At the twelfth grade level, students may take either British Literature and Composition or AP English Literature and Composition. Each core course translates to either an honors level or an AP level course in a traditional school curriculum. In addition, the department offers several elective courses each year, including Creative Writing and Yearbook

The core English courses are literature-based, with student activities, projects, and assignments stemming from a survey of the writers within each division of literature. The ninth and tenth grade World Literature and Composition courses include classic works as well as works that parallel the ninth and tenth grade Global Studies curriculum. The eleventh grade American Literature course chronologically mirrors the U.S. History course. Selections from British literature as well as complimentary contemporary works are taught in the senior year. To prepare students to assess and analyze literary works, the language of literature and the elements of literary criticism are studied. While core courses survey the literature of different regions, the level of difficulty of reading and writing remains progressive and closely connected among all four years.

To ensure writing success in all disciplines, the department uses a variety of approaches to the teaching and evaluation of writing, including the use of rubrics or specific sets of objectives for a particular assignment.

Teachers communicate expectations with students both through a syllabus and through weekly agendas. In core classes, students hone questioning and thinking skills through activities such as: formal seminars, debates, mock trials, class discussions, and cooperative learning activities. Assessment takes a variety of forms, from group projects to formal tests and reading quizzes. Individualized or differentiated instruction occurs when applicable, and activities vary within each class to meet the needs of all types of learners. Aligning with the school's global mission, the community is seen as a valuable component of the English program. Classes have produced projects that they have shared with area elementary and middle schools, and individual students have taught at neighboring elementary schools. Many students submit both prose and poetry to a variety of statewide and national contests and publications.

Although the department offers several electives, some are specifically offered on a two-year cycle or in accordance with yearly student interests.

CORE COURSES

WORLD LITERATURE AND COMPOSITION I (9th grade)

Course Number: 9-2001 Credit: 1

In this ninth grade core English course, students read classics of literature and poetry as well as works that complement the areas studied in their ninth grade Global Studies classes. To enhance their understanding of different cultures, students will study how literature, history, geography, art, and language are interrelated. Students practice writing about what they have read in addition to creating compositions on other topics, including creative and research projects. Students respond to what they have read through public speaking and discussion, while at the same time focus more specifically on grammar, sentence structure, and introductory literary analysis through exercises and isolated study.

WORLD LITERATURE AND COMPOSITION I PLUS (9th grade)

Pending Board Approval

Course Number: 9-2002 Credit: 1

In this ninth grade core English course, students read classics of literature and poetry as well as works that complement the areas studied in their ninth grade Global Studies classes. To enhance their understanding of different cultures, students will study how literature, history, geography, art, and language are interrelated. Students practice writing about what they have read in addition to creating compositions on other topics, including creative and research projects. Students respond to what they have read through public speaking and discussion, while at the same time study the English language though exercises in grammar, vocabulary, and in-depth literary analysis.

WORLD LITERATURE AND COMPOSITION II (10th grade)

Course Number: 10–2031 Credit: 1

Prerequisite: World Literature and Composition I

The tenth grade core English course continues the study of classics of literature and global literature started in ninth grade. The cycle follows the tenth grade Global Studies course and builds upon the cultural knowledge gained the previous year. Students write literary analyses as well as other types of compositions, and students gain practice both in presenting in front of the class and in participating in formal discussion. As in ninth grade, vocabulary and grammar are both studied as components of the craft of writing.

AMERICAN LITERATURE AND COMPOSITION (11th grade)

Course Number: 2051 Credit: 1

Prerequisites: World Literature and Composition I and II

The eleventh grade American literature course examines the nature of American fiction, non-fiction, and poetry. The course traces our national literature's development, paying special attention not only to literary movements but also to the relationship between our literature and our history in the development of a true American voice. Students write both formal literary analyses and in-class essays, and students apply advanced composition techniques and grammar rules to their writing. Students study vocabulary, present to their peers, develop skills in the personal narrative in preparation for college essays, and participate in formal seminar discussions.

AP ENGLISH LANGUAGE AND COMPOSITION (11th grade)

Course Number: 2073 Credit: 1

Prerequisite: World Literature and Composition I & II

Guidelines: B+ in prerequisite courses

Students in the Advanced Placement English Language and Composition course will pay special attention to the various elements and tools of composition available to a writer, comparable to those studied in a college freshman composition course. Students will practice both identifying and applying these techniques, especially in their preparation for the AP examination in English Language and Composition. Both formal papers and in-class essays are numerous. Students will read a number of major works by American authors, with a special focus on non-fiction.

BRITISH LITERATURE AND COMPOSITION (12th grade)
Course Number: 2071 Credit: 1
Prerequisite: American Literature and Composition or
AP Language and Composition

The twelfth grade British literature course surveys British literature in a historical context, beginning with *Beowulf* and continuing to the contemporary period. All major forms of writing are studied, including poetry, drama, the novel, the short story, and the essay. Students examine the development of the English language as well as the techniques used by the authors they study. In addition to formal literary analysis papers, students will present their ideas to their peers in both formal presentations as well as in seminar classroom models.

AP ENGLISH LITERATURE AND COMPOSITION (12th grade)
Course Number: 2078 Credit: 1
Prerequisite: American Literature and Composition or
AP Language and Composition
Guidelines: B+ in prerequisite course

Students in the Advanced Placement English Literature and Composition course will give special attention to the techniques of literary analysis, comparable to those studied in an introductory college literature course. Students will practice the skills required in close reading of both prose and poetry, especially in their preparation for the AP examination in English Literature and Composition. Both formal papers and in-class essays are assigned often, and students will read numerous major works of literature, with a special focus on British authors.

YEARLONG ELECTIVE COURSES

CREATIVE WRITING
Course Number: 2131 Credit: 1
Prerequisite: World Literature and Composition I

Students explore various forms of discourse and audiences, including creative non-fiction, poetry, fiction, and writing for publication. The objectives include working on writing and revision, giving and taking criticism, and taking genuine risks with writing. The students build a writing portfolio of works for publication in local, regional, national, and small press publications, as well as work during the fourth quarter on large scale individual projects. Students also plan, create, and publish an online literary magazine.

JOURNALISM
Course Number: 2101 Credit: 1
Prerequisite: None

Journalism is a laboratory course for teaching the skills necessary for communicating through print media. Emphasis is placed on news writing, which includes interviewing, observing, reporting, reacting, and synthesizing. Development of skills in interpretation, in-depth research techniques, creativity in writing, photography, and planning and design of publications is an essential part of the learning experience. The course is designed to sharpen students' analytical, expressive, and creative skills.

YEARBOOK
Course Number: 2103 Credit: 1
Prerequisite: None

Yearbook is not simply a laboratory course for teaching the skills necessary for communicating the visual history of the school year. Emphasis is placed on writing and graphic design. Students represent all grade levels. Working closely together throughout the school year, they learn desktop publishing and advanced computer technology application. Artists will reap the rewards of possibly seeing their artwork on the cover of the yearbook. Writers are needed to write copy and captions that express in concise and clear language the experiences of the school year. Yearbook is a multidimensional course that seeks students who are multifaceted and willing to work with others across all high-school grade levels.

SHAKESPEARE STUDIES
Course Number: 2241 Credit: 1
Prerequisite: World Literature and Composition I

This course focuses on the life, theater, plays, and historical context of William Shakespeare. The course requires the reading and interpretation of Shakespeare's history, comic, tragic, and problem plays. The course provides opportunity for individual research and play analysis, creative or dramatic play interpretation, and presentations relating to the historical traditions of Shakespeare. Students will read at least eight plays and ten sonnets during the course of this class.

THE POLITICS OF SHAKESPEARE
Course Number: 2242 Credit: 1
Prerequisite: World Literature and Composition I

Shakespeare's plays, especially those performed at court, reflect the royal politics, preoccupations, and even personal styles of Elizabeth I and James I. They also participate in what critics of the time recognized as the theater's subversive power to mock the existing power structure, envision alternative policies, and imagine subversive social orders. This course examines not merely the literary remains of these plays but also the dynamics of the theatrical world in which they were first produced: its censorship, rivalries, politics, rebellions, executions, and civic celebrations. It also considers the spectacular after-life of these plays by learning about how they were (sometimes) rewritten, edited for a genteel public, used to speak Britannia's power throughout her empire, and ultimately adopted by school systems throughout the English-speaking world as part of a necessary rite of passage into the "educated elite." Students will develop special interest topics for their research papers and will present their results individually or in small research teams on designated seminar days.

MEDIA ANALYSIS: RADIO, TELEVISION, NEWSPAPERS, AND SCRIPT WRITING
Course Number**:** 7701 Credit: 1
Prerequisite: None

In today's society, writing for media has emerged as a key profession. This course provides students the skills to evaluate the images, words, and sounds used in audio, visual, and print media to influence and define today's society. Students analyze how media messages are "constructed" using creative language with specific rules to produce a message that different people experience in different ways. As students review how audience, purpose, bias, economic factors, emotional loadings, and profit motives are controlled and presented, they develop methods to determine whether to accept or reject the messages as they negotiate their way through our mediated environment. Students review demographics, marketing research, artistic objectives, censorship, and methods of persuasion, while addressing the ethical implications of such projects.

FANTASTIC WORLDS
Course Number: 2243 Credit: 1
Prerequisite: World Literature and Composition I

This course will explore the realm of fantasy literature and the authors who use this medium. The first semester will focus on J.R.R. Tolkien and trace the development of his Middle Earth setting, from its beginning in "faerie stories" to its culmination in the destruction of the ring and the dawning of a New Age. In addition to reading (or re-reading) *The Hobbit* and parts of the *Lord of the Rings* trilogy, students will explore *The Silmarillion*, "Farmer Giles of Ham," and other lesser-known works of Tolkien. The second semester will focus on science fiction, from 19th century speculative writers such as H.G. Wells, to post WWII Sci-Fi writers such as Isaac Asimov, to modern day social commentators such as Ursula K. LeGuin. Students will classify the science fiction they read into distinct strands of speculative thought, and different authors and styles of science fiction writing will be compared.

PUBLIC SPEAKING
Course Number: 2306 Credit: 1
Prerequisite: None

This course in effective communication will provide opportunities for all aspects of oral communication. Students will practice and perfect broadcasting, campaigning, public addresses, poetry reading, storytelling, entertaining, forensics, interviewing, role-playing, and speech making. Essentially, this course is designed to help the student become more confident and comfortable in formal and informal speaking environments. Selected students may participate in the Virginia High School League Forensic program.

AUTHOR STUDY
Course Number**:** 2236 Credit: 1
Prerequisite: World Literature and Composition I

The Author Study course allows students to focus upon one individual writer, including the world he/she lived in and the worlds that author wrote about. This course studies multiple works of literature by one author and examines that author's background, philosophy, writing style, and place in literary history. Students ask and answer questions such as: Was this writer consistent with or divergent from the standards and traditions of his/her times? What political or social commentary is evident in the works? What were the major influences on this writer's work? What are the most significant contributions this individual made to literature? Discussion in this course is primarily seminar based. Students not only write essays, some involving research, but also present the results of their studies to their classmates in a student-centered classroom environment. In the past, an author study of J.R.R. Tolkien's works has been offered; additional offerings may include Fitzgerald, Hemingway, McCarthy, Faulkner, Steinbeck, Woolf, and others.

LITERARY TOPIC STUDY
Course Number**:** 2246 Credit: 1
Prerequisite: World Literature I

The Literary Topic Study course examines the literature produced by multiple authors. This course may survey a genre, such as humor writing or allegorical fiction; it may focus on a literary period, such as Medieval Literature or Postmodernism; or the course may explore a theme or conflict, such as the quest motif or the conflict between society and the individual. This course investigates both the different forms that ideas assume as they move from author to author and the typical or innovative use each writer makes of these ideas. Students write essays comparing authors and works of literature, and findings are shared in class in both a formal and an informal manner. Some essays are researched based. Discussions are conducted in both formal seminar and open forum formats. Past literary topics studied have included: "The Hero's Journey in Literature and Film," "Speculations into Science Fiction," and "Poetry and Rock 'n Roll." Additional offerings will include "Literature and Film," which will examine original works of literature as well as their cinematic counterparts, with the intention of increasing understanding of both forms of storytelling media.

SURVEY OF TWENTIETH CENTURY AFRICAN-AMERICAN WRITERS
Course Number: 2226 Credit: 1
Prerequisite: Recommendation of current English teacher

This course focuses on the literary contributions of African-Americans. The selected works span three prolific movements in African-American writing, and the course strives to augment this traditionally marginalized voice. Students will analyze plays, poems, short stories, and a novel through class discussion, projects, and essays.

CONTEMPORARY POETRY AND FICTION
Course number: 2266 Credit: 1
Prerequisite: None

The most innovative writers of our time may not yet have been included in current classes and anthologies. This course will consider emerging American poets and writers who rarely make it to school reading lists, but whose work is challenging, important, and beautiful. (Some readings may deal with controversial material and mature themes.) Students should be prepared to write multiple papers analyzing literature.

SCIENCE

Philosophy

The program of the Science Department is an integral part of the entire educational process at Maggie L. Walker Governor's School for Government and International Studies and exposes students to investigations that stimulate the processes of thought and reasoning. The study of all fields of human endeavor benefits from open-ended investigations which are hands-on and intellectually engaging. This process promotes students' development and use of high-order thinking skills. Students who actively participate in the science classroom develop skills that are life-long, that outlast the retention of pure content, and that prepare the individual to contribute to the assessments and solutions of global problems.

Goals

The Science Department at Maggie L. Walker Governor's School for Government and International Studies strives for excellence in science education through cooperative and collaborative efforts between students and staff, seeking assistance from the private sector and centers of higher education when appropriate. As part of a program that stresses national and international relationships in all disciplines, it is necessary for students to be scientifically literate on a global level. This goal is articulated in the National Science Education Standards and the performance expectations of the Next Generation Science Standards and informs the development of science curricula. The Science Department strives to provide an inquiry based educational experience that is appropriately challenging and contemporary in both topic and technology. Through their experiences within the Science Department, students will:

- gain critical knowledge in the areas of biology, chemistry, and physics;
- explore a broad spectrum of special interests in the sciences through elective course offerings and independent research;
- develop analytical and critical thinking skills required for success in scientific endeavors;
- develop an understanding of the scientific process and research skills through all science courses;
- relate and apply abstract concepts to concrete, real-world problems using technology and mathematics to improve investigations and communication;
- explore individual scientific interests within the classroom;
- foster individual accountability to maximize academic and social growth;
- effectively utilize technology (i.e. computers, electronic sensors, online databases, software, graphing calculators) for research, learning, direct investigation, experimental analysis, and presentations in order to enhance the gathering and manipulation of data;
- be encouraged to become involved in activities such as clubs, field trips, and enrichment classes that enhance the understanding of the physical and natural sciences and promote scientific inquiry;
- be recognized for excellence in the sciences by acceptance into the Science National Honor Society;
- become aware of the role and responsibility of the scientific community in addressing local as well as global problems;
- explore how scientific knowledge changes by evolving over time; almost always building on prior knowledge.

Program Description

Three core honors-level science classes are required of all students: molecular biology is generally taken in ninth grade; analytical chemistry, in tenth grade; and physics, in eleventh or twelfth grade. Both chemistry and physics offer advanced level "plus" sections that provide a more rigorous approach. A fourth year of laboratory science is required in addition to the three core science classes.

As well as the required courses, a wide variety of advanced and special-interest courses are offered. Advanced Placement courses in biology, chemistry, environmental science, and physics introduce the student to college-level material. Introduction to Engineering and Biopsychology are dual enrollment courses with VCU, which are taught on our campus and earn both college and high school credit. Topics in Physics, Human Genetics, Human Anatomy and Physiology, Topics in Chemistry, and Bioethics are offered as yearlong courses. Semester courses include Astronomy and Meteorology.

Applications of technology within the classroom involve LabQuest interfaces for data collection, data analysis and graphing. Multimedia resources add extra dimensions to classroom instruction. The various disciplines use a myriad of instrumentation within the laboratory setting such as microscopes, spectrophotometers, pH meters, oscilloscopes, voltmeters, computer-based electronic sensors, electrophoresis equipment, etc.

Teachers employ a variety of classroom instructional techniques. Lecture and class discussions are integral components of instruction used to impart information and stimulate student interest. Open-ended and directed investigations are conducted to support concepts being taught. Individuals and small groups participate in independent library research, as well as experimental research, and present findings both in written and oral forms.

The science curriculum is differentiated both in the rigor of courses offered and in the development of assignments within each course. "Plus" level courses and unique upper level electives are available for the advanced or highly motivated learner. In all subjects, assignments are structured so that students may often choose between diverse projects and outcomes. Teachers present material visually, verbally, and kinesthetically to address different learning styles. Open-ended and independent research opportunities allow students to investigate a topic of particular interest or at his or her individual level.

Writing is an essential component of many assignments within the science curriculum. Formal laboratory reports are graded not only on content but also on grammar and communication style. Teaching the style and components for scientific research and writing reinforces skills introduced through the Foundations of Independent Research and Communication course.

To help the student be successful, each student receives a course syllabus the first class day to inform him or her of expectations, procedures, and policies. Organizational and study skills are emphasized in each course, while increased access to relevant course content and supplemental instructional materials are provided through *itslearning*, our online learning platform. Students experiencing academic difficulties can work with teachers during office hours or before and after school, as well as working with student tutors who are members of the Science National Honor Society.

Many opportunities are available to students who wish to compete with other students in the scientific arena: the Science Talent Search, Metro Richmond Science Fair, Virginia Junior Academy of Science, FIRST Robotics, and Technology Student Association. Additionally, students may enter academic contests such as the Physics Olympiad, the Physics Bowl, and The Chemistry Olympiad. Extra-curricular activities sponsored by the science department include Student Pugwash, the Environmental Club, Technology Student Association, and the Science National Honor Society.

SCIENCE COURSES

MOLECULAR BIOLOGY

Course Number 4001 Credit: 1
Grade: 9

This course is designed as an honors level, lab based survey of the broad themes and concepts of biology. The overarching goal of Molecular Biology is to stimulate interest in the study of biology and an understanding of biology at the cellular and molecular level through both discovery-based and teacher-directed laboratory investigations. Molecular Biology is designed with the explicit intention of developing and encouraging these scientific practices: use of representations and models to communicate scientific phenomena and solve scientific problems; planning and implementing data collection strategies appropriate to a particular scientific question; performing data analysis and evaluation of evidence; connecting and relating knowledge across various scales, concepts and representations in and across domains. Students will be introduced to scientific literature and scientific writing practices through their laboratory activities and analysis of experimental data. The students will be encouraged to think critically about scientific issues and topics that will have a major impact on their lives. Lab fee required.

ANALYTICAL CHEMISTRY

Course Number: 4031 Credit: 1
Grade: 10
Prerequisites: Biology, Geometry
Co-requisite: Algebra II

Chemistry incorporates observations, hypotheses, experiments, theories, and laws into the study of matter and its interactions. Students master nomenclature, chemical principles, mathematical applications, and laboratory skills while participating in student centered activities, computer simulations and experimental manipulations. Laboratory experiences are evaluated, interpreted, and summarized in formal written papers. Students analyze the impacts of chemical processes and principles on our global society as well as synthesize creative solutions to address specific scientific issues. Students develop a variety of science research skills throughout the year. There are many research learning opportunities provided in the course; e.g. experimental design activities, evaluation of published primary research, or inquiry-based individual or team research projects. Each student participates in a research project and produces a formal science paper. Lab fee required.

ANALYTICAL CHEMISTRY PLUS
Course Number: 4032 Credit: 1
Grade: 10
Prerequisites: Biology, Geometry
Co-requisite: Algebra II

This course is designed for students with high interest in the sciences and a strong background in both science and math. The topics covered in Analytical Chemistry are also covered in this course, but at greater depth particularly in the areas of kinetics, equilibrium, and thermodynamics. The laboratory portion of the course is rigorous and requires the synthesis of concepts as the year progresses**. Students planning to take AP Chemistry would benefit from the Analytical Chemistry Plus course.** Students develop a variety of science research skills throughout the year. There are many research learning opportunities provided in the course; e.g. experimental design activities, evaluation of published primary research, or inquiry-based individual or team research projects. Each student participates in a research project and produces a formal science paper. Lab fee required.

PHYSICS

Course Number: 4051 Credit: 1
Grade: (10?) 11-12
Prerequisites: Molecular Biology
Co-requisites: Chemistry/Chemistry Plus, Pre-calculus (formerly Trig/Math Analysis)
Students study the following concepts of physics: motion, force, energy, momentum, (~~rotational dynamics~~), electricity (static and current), waves, sound, light, electromagnetism, and modern physics. This course is laboratory centered and is designed to give students a rigorous exposure to the methods of scientific inquiry as well as a solid background in the conceptual basis of physics. Lab fee required.

PHYSICS PLUS

Course Number: 4052 Credit: 1
Grade: 11-12
Prerequisite: Molecular Biology
Co-requisites: Chemistry Plus, Pre-calculus Plus (with recommendation of Mathematics Dept.)

This course is designed for students who have a strong interest and ability in mathematics and science. (omit bold & underline) Students study the following concepts of physics: motion, force, momentum, rotational dynamics, electricity (static and current), waves, sound light, electromagnetism and modern physics. The topics in Physics Plus are covered to a greater depth and with significantly greater mathematical rigor than topics in the honors level course. This course is laboratory-centered and is designed to give students rigorous exposure to the methods of scientific inquiry as well as solid background in the conceptual basis of physics. **The Physics Plus course is recommended for students wishing to take AP Physics.** Lab fee required.

This course is designed for students who have a strong interest and ability in mathematics and science. Students study the following concepts of physics: motion, force, momentum, rotational dynamics, electricity (static and current), waves, sound light, electromagnetism and modern physics. The topics in Physics Plus are covered to a greater depth and with significantly greater mathematical rigor than topics in the honors level course. This course is laboratory-centered and is designed to give students rigorous exposure to the methods of scientific inquiry as well as solid background in the conceptual basis of physics. **The Physics Plus course is recommended for students wishing to take AP Physics.** Lab fee required.

AP BIOLOGY
Course Number: 4103 Credit: 1
Grade: 11 – 12
Prerequisites: Molecular Biology and Analytical Chemistry
Co-requisites: Pre-Calculus
Guidelines: B+ in previous Biology and Chemistry courses or teacher recommendation

This college level introductory course focuses on biochemistry, the organism, and populations. Students work individually or in small groups conducting independent experimental investigations. The emphasis of this course is on laboratory observations, experimentation, general principles, taxonomy, zoology, botany, genetics, cellular biology, and physiology. Laboratory investigations may require additional time outside of normal classes. Students are prepared to take the Advanced Placement Biology examination. Lab fee and fee for lab manual required.

AP CHEMISTRY
Course Number: 4203 Credit: 1
Grade: 11-12
Prerequisites: Molecular Biology and Analytical Chemistry
Co-requisites: Pre-Calculus
Guidelines: B+ in previous Chemistry course or teacher recommendation

Advanced Placement Chemistry is a laboratory course which provides an opportunity for students to make a comprehensive investigation of chemistry equivalent to two semesters of college level inorganic chemistry and is especially appropriate for students planning a career in biology, chemistry, chemical engineering, or the medical sciences. Students study topics including but not limited to the structure of matter, properties of matter, chemical reactions, rates of chemical reactions, thermochemistry, and equilibrium. Students are prepared to take the Advanced Placement Examination. Lab fee required.

AP PHYSICS
Course Number: 4303 Credit: 1
Prerequisites: Molecular Biology, Analytical Chemistry, and Physics
Grade: 12
Co-requisite: Calculus AB or Calculus BC
Guidelines: B+ in previous Physics course or teacher recommendation.
B+ in previous mathematics course or teacher recommendation.

Students study more sophisticated mathematical approaches to concepts taught in the first year Physics class. First semester focuses on mechanics including: linear dynamics, energy, and momentum-particle systems, rotary motion, and oscillation. Second semester focuses on: electricity and magnetism culminating in Maxwell's equations in integral form. This is an introductory college-level course for physics and engineering majors. Students are prepared to take the Advanced Placement examination in Physics. Lab fee required.

AP ENVIRONMENTAL SCIENCE
Course Number: 4503 Credit: 1
Grade: 10-12
Prerequisite: Molecular Biology
Co-requisite: Analytical Chemistry
Guidelines: B+ in previous Biology course or teacher recommendation

This introductory college level course stresses fundamental scientific principles of ecology, environmental analysis, and earth systems. Also covered are political, social, and economic implications of human interaction with the environment. Major themes include: scientific method, energy conversions, interconnected earth systems, and human interaction with earth systems. Course work includes lecture, discussion, laboratory, field investigation, case studies, and independent research. Students are prepared to take the Advanced Placement Environmental Science exam. Lab fee required.

ENVIRONMENT & SOCIETY: SCIENCE, POLICY, AND HUMAN BEHAVIOR
(AP Human Geography + AP Environmental Science) Credit 2
Course Number: TBA (1 lab science + 1 social studies elective)
Prerequisites: Analytical Chemistry, Molecular Biology, Global Studies I,
Global Studies II
Co-requisite: Junior or senior standing

This course is a combination of AP Environmental Science and AP Human Geography. This unique merged course will allow for deeper exploration of the intersection of man and the environment. The course will examine the influence of the human population from a variety of perspectives and will analyze the effects of human resource use and technology development on history, society, and the environment. Additionally, the course will ask for creative problem solving such as planning sustainable communities and developing best policy and practices. Taught as a two block unit, the class will have more opportunities for out-of-classroom experiences, such as extended field activities for thorough environmental assessment, electronic data mapping, and analysis. Project-based learning will be emphasized through use of technologies such as GPS and ArcGIS. All content required for completion of both AP Environmental Science and AP Human Geography will be included. The expectation is that students will take both AP exams.

ANATOMY AND PHYSIOLOGY
Course Number: 4153 Credit: 1
Grade: 10-12
Prerequisite: Molecular Biology
Co-requisite: Analytical Chemistry

This yearlong course studies both the structure and function of the organs and systems that comprise the human body. The focus of the course will concern not only the interrelationship between form and function of the organs that make up the organ systems, but also the interrelationships between the organ systems in maintaining health and homeostasis in the human body. Hands-on learning is emphasized; dissections, lab activities, field trips and speakers are integral components of the course. Opportunities to explore health issues relating to various body systems are available, with interactions between students and practitioners in various fields of medicine and health care, in addition to researchers studying topics related to the human body. Lab fee required.

ASTRONOMY
Course Number 4556 Credit: ½
Grade: 9-12 Spring Semester
Co-requisite: Geometry

Astronomy is a semester course that includes the history of astronomy, the planetary system, light, optics, telescopes, and the nature of stars, black holes, galaxies, quasars and the fate of the universe. Fascinating facts abound. Labs and activities explore the experimental techniques and methods of data analysis used in Astronomy. There is a field opportunity to test one's learning of three dozen stars, constellations and asterisms. In both the Astronomy and the Meteorology courses, calculations are frequently used to explain natural phenomena and to solve problems. It is strongly recommended that students possess a high comfort level with quantitative representations of information. Lab fee is required.

METEOROLGY
Course Number 4216 Credit: ½
Grade: 9-12 Fall Semester
Co-requisite: Geometry

This semester course is an introductory level survey of atmospheric science. Topics covered include the composition, structure and dynamics of the atmosphere, major determinants of weather, weather prediction, regional and global climatology, air pollution, severe weather, and human interactions with the atmosphere. Activities include meteorological measurements, real-time data analysis, weather prediction (with presentation), prediction analysis, historic data analysis, and independent research. In both the Astronomy and the Meteorology courses, calculations are frequently used to explain natural phenomena and to solve problems. It is strongly recommended that students possess a high comfort level with quantitative representations of information. Lab fee required

BIOETHICS
Course Number: 4726 Credit: 1
Grade: 10-12
Prerequisite: Molecular Biology
Guidelines: Parental informed consent

Bioethics is a full-year course that surveys current ethical concerns facing scientific and medical communities. Topics may include, but are not limited to euthanasia, abortion, living wills, genetic engineering, cloning, organ transplant, etc. Students research current information and complete an independent project as a part of the course requirement. Due to the sensitive nature of the material, parental informed consent is recommended for enrollment in this class. Lab fee required.

BIOPSYCHOLOGY (VCU PSYC 401: Physiological Psychology)
Course Number: 4283 Dual Enrollment
Grade: 11-12 VCU Credit: 3 semester hours
Prerequisites: Molecular Biology, Analytical Chemistry MLWGS Credit: 1
Guidelines: B in prerequisite courses

Physiological psychology introduces the student to the biological basis of behavior. A major component of this course concentrates on how the brain controls behavior, including the senses, movement, learning, thoughts, emotions, and behavioral disorders. This course provides a general description of the field of physiological psychology, including its philosophical assumptions, its experimental methods, its theories, and its major empirical findings. Laboratory activities include both virtual and hand-on activities; other components of the course consist of lecture, speakers, field trips, and literature research. The course provides a scientific basis for forming educated opinions about issues that impact everyday life. Lab fee required.

HUMAN GENETICS AND BIOTECHNOLOGY
Course Number: 4293 Credit: 1
Grade: 10-12
Prerequisite: Molecular Biology
Co-requisite: Analytical Chemistry
Guidelines: Parental informed consent

Human genetics is a yearlong course focusing on the study of inherited variations in the human population. The course covers topics ranging from human development, genetically caused disorders, and theoretical genetics to DNA technologies. New research in the field of genetics has implications at the molecular, cellular, body, family, and population levels. Students are exposed to the latest biotech concepts and perform cutting edge labs such as bacterial transformation and DNA fingerprinting. The class includes presentations by field experts, debates of ethical issues and one oral and written project on a topic of interest to the student. As this course addresses sensitive issues, parental informed consent is recommended. Lab fee required.

TOPICS IN CHEMISTRY
Course Number: 4037 (Chemistry II State Code 4420) Credit: 1
Prerequisite: Analytical Chemistry (plus *or* honors)
Co-requisite: Physics (plus *or* honors)

Topics in Chemistry is an honors level lab intensive course providing the student with an in-depth study of contemporary issues from a scientific viewpoint. Students expand their knowledge of chemical principles through extensive experimentation, independent and group research, and evaluation of practical applications of Chemistry to other disciplines. Students are expected to design and test their own experimental procedures, as well as critically evaluate accepted practices within a field of study. The course continues the laboratory intensity of the introductory Analytical Chemistry course (satisfying the Chemistry II criteria from the VA DOE) while providing a true interdisciplinary experience for students, where the focus moves beyond mastery of particular content to concentrate on appropriate application and synthesis of scientific principles in order to solve a problem or explain an observed phenomenon. Field trips and guest speakers are incorporated when possible to illustrate the extensive societal impacts of subjects. Forensic Chemistry will be the first topic taught under this course title, although other topics could include Chemistry of Art and Restoration, Environmental Chemistry, Organic Chemistry, or Culinary Chemistry. The course topics are flexible and vary based upon instructor and student interest. Lab fee required.

INTRODUCTION TO ENGINEERING (VCU ENGR 101: Introduction to Engineering)
Course Number: 4414 Dual Enrollment
Grade: 10-12 VCU Credit: 4 semester hours
Prerequisites: Algebra II, good academic standing MLWGS Credit: 1
Guidelines: "B" in prerequisite courses

This course will provide an introduction to engineering through instruction on basic concepts of engineering theory and the design process. Engineers are problems solvers with special knowledge of mathematics, natural science and technical theory. Through analysis, research and design, engineers apply this knowledge to the development or improvement of structures, products, systems or processes of benefit to humans. Engineers typically work within a team setting requiring that, in addition to technical proficiency, they also possess adequate written and oral communication skills. This course addresses the major disciplines of mechanical, civil, chemical, biomedical, nuclear, computer, and electrical engineering via the appropriate application of engineering theory, analysis and design. As part of a team, students solve hands on problems typical of these disciplines. This may involve the design and fabrication of a device to accomplish a certain task as well as the development of computer programs to run these devices and other processes or simulations. Students will also complete labs and other projects to learn basic engineering theory, practice and skills. These include the design process, technical drawing, force analysis, PLC, LabView and microprocessor programming, circuit analysis, semiconductor theory, materials science, robotics, engineering economy, quality control, human factors engineering, project management and the techniques and methods of creative problem solving. Lab fee required.

TOPICS IN PHYSICS
Course Number 4076 Credit: 1
Grade: 12
Prerequisite: Physics
Guidelines: Students should be comfortable with mathematics at the level of pre-calculus

The course is laboratory based and continues the survey of Physics topics begun during the first year Physics course. The topics include Fluids, Thermodynamics, Nuclear Physics, Quantum Physics, Special Relativity, Astronomy, Cosmology, Nanotechnology, and Chaos Theory. The emphasis will be on theories and concepts rather than quantitative calculations. Lab fee required.

SCIENCE LAB ASSISTANT
Course Number: 0166 and 0161 Credit: Community Service
Grade:11-12
Prerequisites: Molecular Biology and Analytical Chemistry
Guidelines: Teacher recommendation and approval by Science Department Chair

The student assists in the preparation of stock solutions and equipment for laboratory activities, and inventories supplies and equipment as directed.-The student keeps a daily log of the activities performed that is checked weekly by the Science Department Chairperson or supervising teacher. Students may be placed in any subject area lab.

MATHEMATICS

Philosophy

The Maggie L. Walker Governor's School for Government and International Studies (MLWGS) mathematics program is a rigorous college preparatory course of study. Emphasis throughout the mathematics curriculum is placed on communication, problem solving, critical thinking, creative thinking, and logical reasoning. These aims are achieved by using a variety of pedagogical methods including collaborative learning, technology-based learning, discovery through manipulatives, and the utilization of real-world applications. A variety of assessment techniques are used to account for different learning styles and individual strengths or interests. As a minimum for graduation, all students must complete a core sequence of courses through Pre-calculus (formerly Trigonometry and Mathematical Analysis). In addition, the mathematics department offers a variety of elective courses including AP, dual enrollment, and independent research.

Goals

The program of the mathematics department is based on a set of global objectives from which specific objectives for the individual courses are derived.

The students will:

- make connections between problem situations that arise in the real world and their corresponding mathematical models.
- understand the value of mathematics and its place in the global community.
- use mathematics as an aid to understanding other disciplines.
- use, with increasing confidence, problem solving approaches to investigate and understand mathematical concepts.
- reflect upon and clarify thinking about mathematical concepts and communicate thoughts orally and in writing.
- develop the ability to reason mathematically. This will be accomplished through various introductory experiences including exploration, discovery, visualization, and pattern recognition leading to conjecturing and the construction of logical arguments and proofs.
- develop the study skills and critical thinking skills to be successful both in mathematics and other disciplines.
- integrate the use of calculators, computer software, and other technological tools into the mathematical problem solving experience.
- prepare for standardized testing in mathematics.
- cultivate a respect for student differences through collaborative learning experiences.
- develop an awareness of career opportunities in mathematics.
- develop an awareness of the beauty, creativity, and history of mathematics.

Program Description

The mathematics department offers both college preparatory and advanced courses in mathematics. All students are required to earn 4 units of credit through a minimum of Pre-calculus (formerly Trigonometry and Mathematical Analysis). When students below the ninth grade successfully complete courses offered for credit in grades nine through twelve, standard and/or verified credit shall be counted towards meeting the graduation requirements. Beyond the core sequence, students are offered a variety of AP, college credit classes (dual enrollment with VCU), and other advanced classes.

The core courses consist of those recommended for college acceptance standards. While it is assumed that all MLWGS students plan to attend college, they do not all share the same background, interests, or talents. The program is designed to meet the needs of all students as they continue to grow and develop. The department uses various strategies to ensure that students are successful in attaining literacy in mathematics. Teachers in the core courses work collaboratively to design curricula, lesson plans, and assessments. This ensures that students completing a core course will have similar conceptual understanding and skills.

The mathematics department uses pedagogical techniques that include collaborative learning, discovery through manipulatives and technology, differentiation, and interdisciplinary applications. Mathematical study skills are emphasized and actively taught in all core courses. Oral communication, group effectiveness, mathematical writing, and active listening skills are incorporated into lessons. Students keep organized notebooks as study guides both for the present and future mathematics courses. Students are provided a comprehensive syllabus in all courses and teachers maintain websites with current information for each class.

The mathematics department is committed to the success of all students. Recognizing that students may need additional assistance, the department provides an after-school tutoring lab staffed with a qualified instructor three days per week. In

addition, peer tutoring is available through the Mu Alpha Theta Mathematics Honor Society. The mathematics department also encourages students to work with their individual teachers when assistance is needed.

Students utilize technology throughout the mathematics curriculum. Graphing calculators, spreadsheets, computer-based laboratories, the Internet, and various software tools are used to develop the understanding of mathematical concepts.

Student assessment is an integral part of the curriculum. In an instructional environment that demands a deeper understanding of mathematics, testing instruments that call for only the identification of a single correct response no longer suffice. Therefore, the mathematics department uses a variety of assessments to evaluate student understanding. Assessments include tests, quizzes, oral and written presentations, projects, performance-based tasks, notebook checks, homework checks and teacher observations as well as various student self-assessments.

Core Requirements and Electives

Core curriculum requirements are Algebra I, Geometry, Algebra II, and Pre-calculus (formerly Trigonometry and Mathematical Analysis). Some core classes are offered at the Honors and Honors Plus levels with the Plus classes designed for the highly motivated student. The student should consider the following when choosing between the Honors and Honors Plus class:

HONORS CLASS

- Reviews previous concepts
- Pace adjusted to student need
- Focuses on conceptual understanding and skill development
- Prepares for AP Calculus AB and Calculus I (VCU MATH 200)
-

HONORS PLUS CLASS

- Assumes previous concepts
- Student adjusts to faster pace (independent student learning)
- Focuses on conceptual understanding with more depth and additional content
- Prepares for AP Calculus AB and AP Calculus BC

Students may choose to take Geometry and Algebra II in the same year with permission of the department chair. Students may also choose to take Geometry and Pre-calculus (formerly Trigonometry and Mathematical Analysis) in the same year provided they have completed Algebra I and Algebra II prior to ninth grade and with permission of the department chair. Statistics may be taken simultaneously with Pre-calculus (formerly Trigonometry and Mathematical Analysis). Students may take as many math credits as their schedule permits upon completion of the core.

The mathematics department offers a variety of courses for the advanced student, including non-calculus, calculus and post-calculus classes. Many of these post-core classes are Advanced Placement or Dual Enrollment, allowing the student to earn college credit upon completion of the course.

The following course descriptions are to be used as guides to aid students and parents in course selection. Course offerings are continuously expanded and adjusted to meet the needs of incoming student populations.

MATHEMATICS COURSE OFFERINGS

EQUATIONS, FUNCTIONS, AND PROBLEM SOLVING (Exceeds Algebra I Requirements)

Course Number: 3011 Credit: 1
Prerequisite: Algebra I

This course serves as an introduction to the language and structure of algebra. Properties of real numbers, arithmetic operations, and equality are developed to assist the student in acquiring the skills for manipulating equations. Conceptual understanding of linear, quadratic, and polynomial functions is obtained through graphical and algebraic examination. The context for the acquired skills and concepts is provided by a wide variety of problems, both from within mathematics and as applied to other disciplines. Using Polya's four-step process and applying algebraic strategies, the student analyzes non-routine problem situations. The course exceeds Algebra I requirements and is designed for those students who need additional preparation for the core mathematics curriculum. The class begins in the second nine weeks of the school year. A graphing calculator is required (TI-84+C or other TI-83/84 models recommended). Students enrolled in this course are required to take the Virginia SOL Algebra I Test if not previously passed.

GEOMETRY
Course Number: 3031 Credit: 1
Prerequisite: Algebra I
Guidelines: May take concurrently with Algebra II upon approval by the department chair, counseling, and administration.

This course encompasses the core curriculum for both plane and solid geometry and is taught using a "hands-on" laboratory approach. In general, it includes developing skills and an understanding of conjecture, proof, and creative problem solving. Several cognitive organizers are presented to provide varied models for analyzing and summarizing material. Specific topics include reasoning and proof, perpendicularity and parallelism, properties of congruency and similarity, Pythagorean Theorem and related relationships, beginning right triangle trigonometry, quadrilaterals and polygons, circles, area and volume, transformations and symmetry, coordinate geometry, and constructions. Reasoning skills will be emphasized and students will broaden their mathematical knowledge and how it relates to the world around them. Teachers give historical perspectives and emphasize the laws of logic to encourage their students to relate geometry to the world at large. During the year, students are frequently involved in interdisciplinary activities. A graphing calculator is recommended (TI-84+C or otherTI-83/84 models recommended). Students enrolled in this course are required to take the Virginia SOL Geometry Test.

GEOMETRY PLUS
Course Number: 3032 Credit: 1
Prerequisite: Algebra I
Guidelines: "A" in prerequisite course and successful score on placement test. Mathematically motivated with thorough algebra background. May take concurrently with Algebra II upon approval by the department chair, counseling, and administration.

Geometry plus demands a more challenging approach to the student's study of geometry. This course is designed for students who have demonstrated an advanced level of interest and achievement in mathematics. Many topics are covered at a rapid pace and are taught with more depth than the honors course. The focus is on a deeper understanding of the axiomatic system through a thorough understanding of logic as the basis of proof. Additional topics include transformational geometry using matrix operations and non-Euclidean geometries as time permits. Students enrolled in this course are required to take the Virginia SOL Geometry Test. A graphing calculator is required (TI-84+C or otherTI-83/84 models recommended).

ALGEBRA II
Course Number: 3051 Credit: 1
Prerequisite: Algebra I and Geometry
Guidelines: May take concurrently with Geometry upon approval by the department chair, counseling, and administration.

This Course is designed to refine ideas and extend basic mathematical concepts introduced in Algebra I and Geometry. A common foundation is developed since students come to this course with a variety of algebraic backgrounds. Students are introduced to the four viewpoints of functions of numerical (data), graphical, algebraic (analytical) and verbal. This "Rule of Four" helps to prepare students for future fields of study, including those outside math and science. A thorough treatment of advanced algebraic concepts is provided through the study of algebraic functions and notation, "families of functions," linear and power functions, inverse functions and function combinations such as polynomials, rational expressions and rational functions. Additional topics include equations, inequalities, systems of equations and inequalities, exponential functions, complex numbers, sequences, and series. Emphasis is placed on problem solving as well as modeling and applying mathematics to real-world situations. Conceptual understanding is achieved by exploring topics both algebraically and graphically, solving non-routine problems, communicating both orally and in writing, and utilizing available technology. A graphing calculator is required (TI-84+C or otherTI-83/84 models recommended). Students enrolled in this course are required to take the Virginia SOL Algebra II Test.

ALGEBRA II PLUS
Course Number: 3052 Credit: 1
Prerequisites: Algebra I and Geometry
Guidelines: A in prerequisite courses and successful score on placement test; may take concurrently with Geometry upon approval by the department chair, counseling, and administration.

This accelerated course is designed to refine ideas and extend basic mathematical concepts introduced in Algebra I and Geometry. A common foundation is developed since students come to this course with a variety of algebraic backgrounds. Students are introduced to the four viewpoints of functions of numerical (data), graphical, algebraic (analytical) and verbal. This "Rule of Four" helps to prepare students for future fields of study, including those outside math and science. A thorough treatment of advanced algebraic concepts is provided through the study of algebraic functions and notation, "families of functions," linear and power functions, piecewise functions, inverse functions and function combinations such as polynomials, rational expressions and rational functions. Additional topics include varied techniques of solving equations and inequalities, systems of equations and inequalities, exponential functions, complex numbers, matrices, sequences, series and parametric equations. Although some topics are covered at a rapid pace, many of these are taught in more depth than in the honors course. The focus is on solving complex problems as well as modeling and applying mathematics to real-world situations. In addition, students are provided with opportunities to pursue individual interests in mathematics, through a variety of activities. Conceptual understanding is achieved by exploring topics both algebraically and graphically, solving non-routine problems, writing and analyzing both algebraic and geometric proofs, communicating both orally and in writing, and utilizing available technology. Topics from trigonometry and math analysis are included as time permits. A graphing calculator is required (TI-84+C or otherTI-83/84 models recommended). Students enrolled in this course are required to take the Virginia SOL Algebra II Test.

TRIGONOMETRY AND MATHEMATICAL ANALYSIS
Course Number: 3071 Credit: 1
Prerequisite: Algebra II

This course extends the basic mathematical concepts introduced in Algebra II. The course emphasizes an understanding of functions using four viewpoints: numerical (data), graphical, algebraic (analytical), and verbal. This "Rule of Four" helps to prepare students for future fields of study, including those outside of math and science. A thorough treatment of trigonometry is provided through the study of trigonometric definitions, functions, identities and applications. Students investigate, analyze, and identify characteristics and properties of polynomial, rational, exponential, and logarithmic functions. The course includes real world applications in many fields, including, but not limited to economics, sociology, biological sciences, the arts, business, and geography. A variety of assessments are used to reflect the greater emphasis on real world problems and mathematical models. These include journal writing, laboratories using technology, written projects, group activities, historical explorations, as well as tests and quizzes. Study and organizational skills are stressed throughout the course. Computer activities and graphing calculators are used to enhance the understanding of realistic applications through modeling and aid in the investigation of functions. A graphing calculator is required (TI-84+C or otherTI-83/84 models recommended).

PRECALCULUS (FORMERLY TRIGONOMETRY AND MATHEMATICAL ANALYSIS)
Course Number: 3071 Credit: 1
Prerequisite: Algebra II

This course extends the basic mathematical concepts introduced in Algebra II. The course emphasizes an understanding of functions using four viewpoints: numerical (data), graphical, algebraic (analytical), and verbal. This "Rule of Four" helps to prepare students for future fields of study, including those outside of math and science. A thorough treatment of trigonometry is provided through the study of trigonometric definitions, functions, identities and applications. Students investigate, analyze, and identify characteristics and properties of polynomial, rational, exponential, ~~and~~ logarithmic, and logistic functions. Students solve real-world problems using vectors and are exposed throughout the course to the calculus concepts of limits, continuity, and rates of change. The course includes real world applications in many fields, including, but not limited to economics, sociology, biological sciences, the arts, business, finance and geography. A variety of assessments are used to reflect the greater emphasis on real world problems and mathematical models. These include journal writing, laboratories using technology, written projects, group activities, historical explorations, as well as tests and quizzes. Study and organizational skills are stressed throughout the course. Computer activities and graphing calculators are used to enhance the understanding of realistic applications through modeling and aid in the investigation of functions. A graphing calculator is required (TI-84+C or otherTI-83/84 models recommended).

PRECALCULUS PLUS (FORMERLY TRIGONOMETRY AND MATHEMATICAL ANALYSIS PLUS)
Course Number: 3072 Credit: 1
Prerequisite: Algebra II or Algebra II Plus
Guidelines: Algebra II Plus or an A in Algebra II

This course extends beyond the core course of Precalculus (formerly Trigonometry and Mathematical Analysis). It is designed for students who have a strong interest in the fields of science, technology, engineering, and mathematics (STEM). The course emphasizes an understanding of basic functions using four viewpoints. These viewpoints are numerical (data), graphical, algebraic (analytical), and verbal. This "Rule of Four" helps to prepare students for future fields of study, including those outside of STEM. A thorough treatment of trigonometry is provided through the study of trigonometric definitions, functions, identities and applications. A rigorous approach is taken to the analysis and applications of algebraic, trigonometric, exponential, logarithmic, polynomial, rational, polar, and parametrically-defined functions with an emphasis on the graphical and analytical behavior of these functions. Students are exposed throughout the course to the calculus concepts of limits, continuity, and rates of change. Other topics may include sequences and series and their applications, conic sections, optimization problems and mathematical modeling. There is an emphasis on proofs, mathematical derivations, correct mathematical language, and notation. The course includes real world applications in many fields, including, but not limited to economics, sociology, biological sciences, the arts, business, finance, and geography. All course topics are covered in depth and/or at an accelerated pace to prepare students to take AP Calculus BC. While students are prepared for the AP testing environment, a variety of assessments are used to reflect the greater emphasis on real world problems and mathematical models. These include laboratories using technology, written projects, group activities, historical explorations, as well as tests and quizzes. Study and organization skills are stressed throughout the course. Computer activities and graphing calculators are used to enhance the understanding of realistic applications through modeling and aid in the investigation of functions. A graphing calculator is required (TI-Nspire,TI-84+C or other TI-83/84 models recommended).

DATA ANALYTICS
Course Number: Credit: 1
Prerequisite: Precalculus (Formerly Trigonometry and Mathematical Analysis)
Guidelines: B in prerequisite courses

Data Analytics is an applied mathematics course that utilizes data science to build upon the foundation of previous mathematics courses. Data Analytics is an inquiry-based course that focuses on real-world applications from cross-curricular topics such as epidemiology, climatology, operations research, government and economics. Students will do research, collect data, analyze the data, synthesize the results and present their findings. In addition, students will critically examine data analysis and forecasts encountered in the media.

THE HISTORY OF MATHEMATICS (VCU MATH 291: Topics in Mathematics)
Course Number: 3531 Dual Enrollment
Prerequisites: Precalculus (Formerly Trigonometry and Mathematical Analysis) VCU Credit: 3 Semester hours
Guidelines: B in prerequisite courses or approval of the department chair. MLWGS Credit: 1
The primary focus of this course is the development of mathematics within global and historical contexts. Most of the topics and mathematicians studied are from the time period from 500 BCE to 1800 CE. The course covers the origins and major developments of geometry, algebra, and trigonometry, and it stresses the interrelationships between topics from different times, global regions, and academic disciplines. The class examines the lives and times of the men and women who were instrumental in advancing mathematical understanding, and great emphasis is placed on viewing each person's successes and failures from appropriate chronological, intellectual, and cultural perspectives. Throughout the course of study, each student's mathematical knowledge from the MLWGS core classes is combined with his/her understanding from global studies and international language and culture classes. Ancient as well as modern problem-solving techniques are stressed in the course. For those students who either are simultaneously taking or have completed calculus, the course is differentiated in order to build upon their expanded background.

APPLICATIONS OF CONTEMPORARY DISCRETE MATHEMATICS (VCU MATH 131: Intro. to Contemporary Mathematics)

Course Number: 3214 — Dual Enrollment
Prerequisites: Precalculus (Formerly Trigonometry and Mathematical Analysis) — VCU Credit: 3 semester hours
Guidelines: B in prerequisite courses — MLWGS Credit: 1

This course explores a broad range of interdisciplinary topics in discrete mathematics as applied to humanities, government, art, and the social and management sciences. Topics may include election theory, weighted voting, fair division, apportionment, scheduling, game theory, networks, probability, cryptography, and other topics as time permits. Students gain an appreciation of the value of mathematics in modern global society and confidence in their ability to apply their mathematical skills. Individual and group projects encourage the student to use their creativity along with their writing and verbal skills. Quarterly mathematical current event articles will help students keep up with today's mathematical world. This course offers an alternative to those students who do not wish to take calculus in high school, who plan to major in a field that does not require calculus, or who have taken or plan to take calculus, but wish to explore non-calculus-based mathematical modeling.

BUSINESS CALCULUS (VCU SCMA 212: Differential Calculus and Optimization for Business) & MATHEMATICAL APPLICATIONS FOR BUSINESS (VCU SCMA 171)

Course Number: 3254 — Dual Enrollment
Prerequisites: Precalculus (Formerly Trigonometry and Mathematical Analysis) — VCU Credit: 6 semester hours
Guidelines: B in prerequisite courses — MLWGS Credit: 1

This course consists of a non-rigorous approach to differential and integral calculus with an emphasis on applications during the first semester. The second semester concentrates on applied mathematics including higher-level calculus topics such as multivariate calculus. In addition, the interpretations and applications of the students' solutions are emphasized as well as decisions based on these solutions. Students use graphing calculators, the Internet, and spreadsheet software (Excel). These tools are used to assist students in their critical analysis of real-world situations. This course is designed for students who would rather not pursue the more rigorous Calculus courses; i.e., AP Calculus AB, AP Calculus BC, or Calculus with Analytic Geometry I. A graphing calculator is required (TI-84+C or otherTI-83/84 models recommended).

CALCULUS WITH ANALYTIC GEOMETRY I (VCU MATH 200)

Course Number: 3244 — Dual Enrollment
Prerequisites: Precalculus (Formerly Trigonometry and Mathematical Analysis) — VCU Credit: 4 semester hours
Guidelines: B in prerequisite courses — MLWGS Credit: 1

This course covers concepts and skills found in a first semester calculus course taught at the college level, and it provides the student with a comprehensive introduction to calculus. It begins with a thorough review of polynomial, rational, trigonometric, logarithmic, exponential, and piecewise-defined functions. The calculus topics emphasized include limits, continuity, derivatives, differentials, antiderivatives, definite integrals, and applications. The concepts and problems in the course are studied from multiple perspectives including geometric, numerical, analytical, and verbal. Exploring interdisciplinary applications by means of graphing calculators and computers is another important facet of the course. The historical development of calculus is often used to motivate conceptual ideas and applications. The primary difference between Calculus I and AP Calculus AB is pacing.

CALCULUS II (VCU MATH 201)

Course Number: 3264 — Dual Enrollment
Prerequisite: Calculus I (VCU Math 200) or AB Calculus — VCU Credit: 4 semester hours
Guidelines: B in prerequisite course — MLWGS Credit: 1

This course covers concepts and skills found in a second semester calculus course taught at the college level. It also satisfies the requirements of AP Calculus BC, and thus is an ideal choice for the student seeking a second semester of Calculus. The course begins with a review of the basic concepts of integration, including the Fundamental Theorem of Calculus and the substitution technique. Additional topics include applications of the definite integral, additional techniques of integration, l'Hôpital's Rule and improper integrals, slope fields and differential equations, polar and parametric functions, and infinite sequences and series (emphasizing power and Taylor series representation of functions). Students will learn to use computer algebra and graphing software and/or CAS calculators in problem-solving situations. The historical development of calculus may be used to motivate conceptual ideas and applications. Students are eligible to take the AP Calculus BC test as an additional assurance of college credit and/or placement.

AP CALCULUS AB
Course Number: 3103 Credit: 1
Prerequisites: Precalculus (Formerly Trigonometry and Mathematical Analysis)
Guidelines: "B" Precalculus (Formerly Trigonometry and Mathematical Analysis Plus) or "B+" in Precalculus (Formerly Trigonometry and Mathematical Analysis)

This course provides a comprehensive introduction to calculus equivalent to that of a first-semester college calculus course. The material is intended to be challenging and demanding and designed to be taught over a full academic year. The AP Calculus AB Curriculum Framework specifies the curriculum - what students must know, be able to do, and understand. AP Calculus AB is structured around three big ideas: limits, derivatives, and integrals and the Fundamental Theorem of Calculus. In this course, the concept of limits is foundational; the understanding of this fundamental tool leads to the development of more advanced tools and concepts that prepare students to grasp the Fundamental Theorem of Calculus, a central idea of AP Calculus. Calculus is considered a fundamental tool in many fields of study including science, business, and engineering. This course emphasizes the concepts of differential and integral calculus and provides experience in the methods and applications of these concepts. The unifying themes are limits, derivatives, integrals, approximation, and modeling, and they are developed into a cohesive whole via the functions and skills learned in the MLWGS Core Curriculum. The Mathematical Practices for AP Calculus will be utilized frequently and in diverse contexts to enable students to establish mathematical lines of reasoning and to apply mathematical concepts and tools to solve problems. For example, the concepts and problems in this course are studied geometrically, numerically, analytically, and verbally. The graphing calculator and other technology is used to facilitate discovery and reflection, and the graphing calculator is required on the AP Examination. It is expected that students who complete this course will seek college credit and/or placement by taking the AP Calculus AB test in the spring. The score on the AP exam that is necessary for college credit or placement varies depending on the institution. (For more details on the AP Calculus AB and BC Course and Exam Description including the Curriculum Framework, please go to https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-calculus-ab-and-bc-course-and-exam-description.pdf .)

AP CALCULUS BC
Course Number: 3113
Prerequisites: Trigonometry and Mathematical Analysis Plus Credit: 1
Guidelines: B+ in Precalculus (Formerly Trigonometry and Mathematical Analysis Plus)

The curriculum for AP Calculus BC is equivalent to a first-semester college calculus course and the subsequent single-variable calculus course. The material is intended to be challenging and demanding, and the curriculum is covered at a rapid pace. The curriculum of the College Board Advanced Placement Program for both AP Calculus AB and BC is followed; it specifies what students must know, be able to do, and understand. The AP Calculus BC course of study is organized around the foundational concepts ("Big Ideas") of calculus: limits, derivatives, integrals and the Fundamental Theorem of Calculus, and series. AP Calculus BC is an extension of Calculus AB rather than an enhancement, thus Calculus BC covers additional topics such as techniques of integration, the study of polar and parametrically-defined functions, and infinite series with an emphasis on power and Taylor series representations of functions. The Mathematical Practices for AP Calculus will be utilized frequently and in diverse contexts to enable students to establish mathematical lines of reasoning and to apply mathematical concepts and tools to solve problems. For example, the concepts and problems in this course are studied geometrically, numerically, analytically, and verbally. The graphing calculator and other technology is used to facilitate discovery and reflection, and the graphing calculator is required on the AP Examination. It is expected that students who complete this course will seek college credit and/or placement by taking the AP Calculus BC Test in the spring. The score on the AP exam that is necessary for college credit or placement varies depending on the institution. (For more details on the AP Calculus AB and BC Course and Exam Description including the Curriculum Framework, please go to https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-calculus-ab-and-bc-course-and-exam-description.pdf .)

THEORY OF PROBABILITY, STATISTICS, AND RESEARCH (VCU STAT 210: Basic Practice of Statistics & STAT 314: Applications of Statistics)

Course Number: 3404 — Dual Enrollment
Prerequisite: Algebra II — VCU Credit: 7 semester hours
Guidelines: B in prerequisite course; may take concurrently with Pre-calculus (Formerly Trigonometry and Mathematical Analysis) — MLWGS Credit: 1

This course consists of the study of probability and statistical concepts with incorporated research techniques. It is further enhanced by student research, applications, and technology. The course is designed so students will gain a conceptual understanding of descriptive and inferential statistics and its function in research. Emphasis is placed on applications in diverse fields of study by extracting data from areas such as medicine, economics, business and finance, engineering, sociology, and education. Students utilize statistical and graphing calculators, statistical software, charts and graphs, and statistical tables to aid in their exploration and experimentation. Students participate in hands-on labs and complete both group and individual research projects. In addition, students learn how to be consumers of statistics and how to critically examine statistics presented in the media and in research. Students are eligible to take the AP Statistics test in the Spring as an additional assurance of college credit and/or placement. A TI-83/84 model graphing calculator is required.

ADVANCED MODELING APPLICATIONS WITH CALCULUS (VCU MATH 327: Mathematical Modeling)

Course Number: 3209 — Dual Enrollment
Prerequisite: AP Calculus or Calculus with Analytic Geometry — VCU Credit: 3 semester hour
Guidelines: B in prerequisite course — MLWGS Credit: 1

This course enhances problem-solving capabilities and introduces students to the modeling process. Modeling serves as a bridge between the study of mathematics and the applications of mathematics to various fields. The student investigates meaningful and practical problems from common experiences encompassing many academic disciplines, including the physical and life sciences, operations research, engineering, management, and government and international studies. All facets of the mathematical modeling process are covered, including creative and empirical model construction, data collection, and model analysis. Topics include linear and multiple regression models, differential equation models, probability and simulation models, optimization models, linear programming and case studies. Students are required to participate in the COMAP HiMCM modeling competition.

MULTIVARIABLE CALCULUS (VCU MATH 307: Multivariate Calculus)

Course Number: 3219 — Dual Enrollment
Prerequisite: AP Calculus BC or Calculus II (VCU 201) — VCU Credit: 4 semester hours
Guidelines: B in prerequisite course — MLWGS Credit: 1

In this course students will explore the calculus of vector-valued functions and of functions of more than one variable. It begins with a review of polar and parametrically defined functions and their calculus followed by vector-valued functions and vector operations. The student will then thoroughly examine functions of several variables, cylindrical and spherical coordinate systems, partial derivatives, optimization techniques (including Lagrange multipliers), multiple integrals, line and surface integrals, and the theorems of Green, Gauss, and Stokes. When appropriate, real-world applications and historical connections will be included. Computer algebra and graphing software and computer algebra system calculators are used extensively to enhance the understanding of abstract concepts through geometrical interpretation.

INTRODUCTION TO MATHEMATICAL REASONING (VCU MATH 300: Introduction to Mathematical Reasoning)

Course Number: 3206 — Dual Enrollment
Prerequisite: AP Calculus BC or Calculus II (VCU 201) — VCU Credit: 3 semester hours
Guidelines: B in prerequisite course — MLWGS Credit: ½

This course is paired with Linear Algebra and taught in the fall semester. It provides the student with an introduction to the concepts of mathematical reasoning and the writing of proofs in an elementary setting including direct, indirect and induction proofs. Illustrations of the concepts include proofs from mathematical logic, elementary set theory, elementary number theory, number systems, foundations of Calculus, relations, equivalence relations, graph theory, functions and counting with emphasis on combinatorial proofs. Math Reasoning is generally a core requirement for mathematics and applied mathematics majors.

LINEAR ALGEBRA (VCU MATH 310: Linear Algebra)

Course Number: 3239 — Dual Enrollment
Prerequisite: AP Calculus BC or Calculus II (VCU 201) — VCU Credit: 3 semester hours
Guidelines: B in prerequisite course — MLWGS Credit: ½

This Course is paired with Mathematical Reasoning and taught in the spring semester. The course is designed to study systems of linear equations, vector spaces, linear dependence, bases, dimension, linear transformations, matrices, determinants, quadratic forms, orthogonal reduction to diagonal form, eigenvalues, and eigenvectors with a variety of applications. The theory is developed in a formalistic (proof-based) manner balanced with many examples, applications, and geometric intuition. Graphing calculators and other software are integrated into the course as tools for computation and visualization. A course of this type is typically required of mathematics and engineering majors.

INTERNATIONAL DIMENSIONS OF MATHEMATICS

Course Number: 3501 — Credit: 1
Guidelines: Permission and individual learning plan
arranged through the Mathematics Department Chairperson

This course is a self-directed course designed for the student who desires to study diverse cultures while traveling to relevant sites to obtain knowledge and skills appropriate for multicultural understanding. Since mathematics is a product of the international community, past and present, the focus will be on the following topics: the study of the multicultural nature and history of mathematics, the examination of mathematics as an international language, the analysis of the logic, reasoning, and nature of mathematics within the culture, the survey of mathematical knowledge deemed important for functional literacy within the culture, and the analysis of cultural issues that impact the type of mathematics studied or the way it is studied at the secondary level. Students will attend mathematics classes during their stay to both maintain their level of mathematical competency and to extend their mathematical knowledge. A course syllabus is provided to assist the student in designing their individual learning plan for the pre-departure phase, the travel phase, and the post-travel phase. **Must be taken in conjunction with an international trip.**

TECHNOLOGY

Philosophy

Computers, as tools for design, modeling, information processing, communication, and system control, have greatly increased human productivity and knowledge**.** To live, learn, and work successfully in an increasingly complex and information-rich society, students must use technology effectively. The technology program is an innovative multifaceted course of study that emphasizes communication, problem solving, critical thinking, creative thinking and logical reasoning. These aims are achieved by using a variety of pedagogical methods including collaborative learning and the utilization of real-world applications. The most effective learning environments meld traditional approaches and new approaches to facilitate learning of relevant content while addressing individual needs. A variety of assessment techniques are used to account for different learning styles and individual strengths or interests.

Goals

The program of the technology department is based on a set of global objectives from which specific objectives for the individual courses are derived.

The students will:

- Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs.
- Make informed choices among technology systems, resources, and services.
- Analyze advantages and disadvantages of widespread use and reliance of technology in the workplace and in society as a whole.
- Demonstrate and advocate for legal and ethical behaviors among peers, family, and community regarding the use of technology and information.
- Use technology tools and resources for secure managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
- Routinely and efficiently use online information resources to meet needs for collaboration, research, publications, communications, and productivity.
- Select and apply technology tools for research, information analysis, problem solving, and decision-making in content learning.
- Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
- Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

The following course descriptions are to be used as guides to aid the student and parents in course selection. Course offerings are continuously expanded and adjusted to meet the needs of incoming student populations.

AP COMPUTER SCIENCE PRINCIPLES MLWGS Credit: 1
Course Number: 9061
Prerequisite: Algebra II

This course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, *AP Computer Science Principles* prepares students for college and career. Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. Computer science experience has become an imperative for today's students and the workforce of tomorrow. The AP Program designed *AP Computer Science Principles* with the goal of creating leaders in computer science fields and attracting and engaging those who are traditionally underrepresented with essential computing tools and multidisciplinary opportunities.

INTRODUCTION TO PROGRAMMING (VCU INFO 250: Intro. to Programming/INFO 291: Projects in Programming)

Course Number: 9011 — Dual Enrollment
Prerequisite: VCU placement requirement — VCU Credit: 6 semester hours
Guidelines: Sophomore status and good academic standing — MLWGS Credit: 1
Even Years: e.g., 2018-2019

This course is offered during even years and is designed to be a survey computer science course using modern programming languages. Students gain an understanding of data storage and manipulation within a computer and realize the manner in which high-level languages relate to computer design. Students primarily learn methods of structured modular programming utilizing an object-oriented approach. Through teacher-directed instruction and student-centered laboratory activities, students attain and apply concepts of variables, Boolean algebra, arithmetic and logical operations, iterations, functions, classes, methods, control algorithms, files, search algorithms, arrays, trees, and multimedia/graphical user interfaces. In the first semester, emphasis is problem analysis; algorithm development and implementation; and methods in documentation, testing and debugging. During second semester students will learn object oriented programming, explore high level programming languages, and apply programming in a team development setting as time permits.

TOPICS IN TECHNOLOGY APPLICATIONS: (VCU INFO 202/INFO 291: Intro. to E-Business Technologies)

Course Number: 9051 — Dual Enrollment
Guidelines: Sophomore status and good academic standing — VCU Credit: 6 Semester Hours
MLWGS Credit: 1
Odd Years: e.g., 2017-2018

This course is offered in odd years and includes an introduction to basic computer concepts, essential productivity applications, the World Wide Web, and the use of other interactive technologies. The latest technologies and Web applications will also be introduced. Introduction to programming languages may be included in certain course topics. Internet safety will also be a focus.

Introduction to E-Business Technologies introduces students to many technologies commonly used to design and develop today's web and eBusiness. Components of today's networks & systems are presented and discussed from an historical perspective, and basic skills in the technologies supporting eBusiness are developed. Students learn about current hardware, software, and networking technologies; basic principles of universal design and responsive web design; web content structure and presentation development using HTML5 and CSS3; structured programming using PHP; relational database using MySQL and Object-oriented programming using Javascript. Tools for system analysis and design are introduced and used in exercises to develop requirements for case studies and make designs for systems to meet the requirements. Students are introduced to structured and object-oriented analysis and design techniques using the Unified Modeling Language, Unified Process, and Project Management concepts and tools. In addition, during second semester, students are introduced to ethical, social, and legal issues in computing.

INTERNATIONAL LANGUAGES

Philosophy

Maggie L. Walker Governor's School for Government and International Studies (MLWGS) International Language program is a college preparatory program with language proficiency and cultural understanding integrated throughout. The International Language faculty believes that language is culture, for it is through language that thoughts, attitudes, and ideas are expressed. Our International Language program meets the individual needs of gifted students through a wide variety of teaching techniques that combine oral, aural, and written language. The emphasis is on successful communication. International language experiences form an integral part of our program. All MLWGS students complete four years of one international language and two years of a second. They may elect to complete additional years of study, either in the languages or in elective interdisciplinary courses offered by the faculty of the International Language Department.

Goals

The International Language program's objectives form the basis of each course within the International Language Department. The objectives emphasize connections between the target culture and the student's culture. Students:

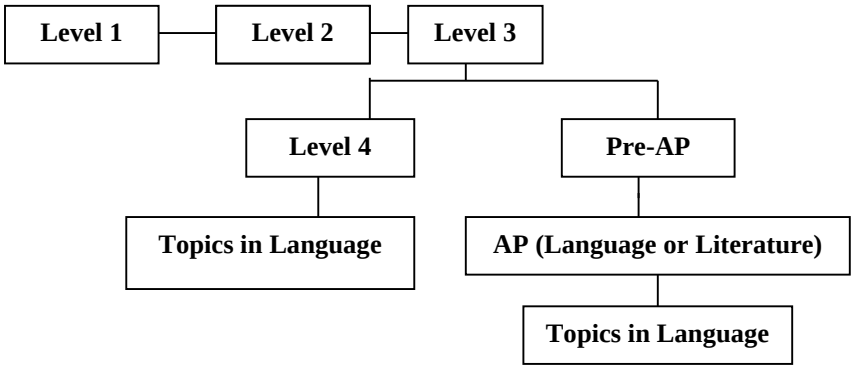
- communicate orally and in writing across cultures using international languages to develop insight into their own language and culture
- acquire new information and content not studied in their native language curriculum
- make linguistic and cultural connections between international languages and other disciplines
- demonstrate familiarity with the intellectual, artistic, and literary contributions of international cultures
- develop an awareness of the importance of international languages in the global community
- obtain information to expand knowledge from authentic documents, media presentations, and human resources
- use the language to communicate outside the school setting, explore the applications of the international language in the immediate community, and use technology to expand awareness of the global community
- become aware of higher educational and career applications of international language proficiency
- conduct research using international languages
- develop insight into the similarities and differences between the governmental structures of international cultures and the American system

Program Description

Languages Taught:	American Sign Language, Arabic, Chinese, French, German, Classical Greek, Italian, Japanese, Latin, Russian, and Spanish
4 Year Sequence Languages:	Chinese, French, German, Latin, and Spanish
2 Year Sequence Languages:	American Sign Language, Arabic, Classical Greek, Italian, Japanese, Russian
Elective Courses:	After finishing the core requirements, all language courses count as electives. In addition, the department offers a number of electives depending on student interest and staff availability
Elective Courses Taught in English:	The department tries to offer non-target language courses whose emphasis reflects the cultural environment of language study. In the past, the department has offered courses in Mythology, English Etymology, Art History, and Greco-Roman Civilization.

The following languages are guaranteed for at least four years: Chinese, French, German, Latin, and Spanish. Additionally, the following languages may be used to complete the two-year requirement: American Sign Language, Arabic, Classical Greek, Italian, Japanese, and Russian.

Sequence of Study:



General Guidelines for Placement: Students shall be placed in a language class where they will be challenged while having a reasonable expectation of success. In the case of a student who has had special language experiences or wishes to follow an accelerated sequence of study, that student will take an appropriate assessment to determine the best placement.

Levels: All classes are taught at the "Honors" level or Advanced Placement Level (AP). In four-year languages, the AP sequence consists of a Pre-AP course and the subsequent AP course in the target language.

Skills: Language pedagogy reflects four skill areas in most languages: reading, composition, speaking and listening. A speaking component is not included in Classical Greek or Latin, nor is there a composition component in ASL.

Culture: A significant portion of each language course covers the cultural environment of the language. Cultural topics include: politics, governmental institutions, literature, architecture, travel, education, philosophy, history, popular culture, music, archaeology, folklore, athletics, and gender issues.

Pedagogy: Language pedagogy involves a wide range of activities designed to help students acquire both a new language and awareness of a new culture. These activities may include role play, dramatic presentations, written presentations, internet research, debates, and portfolios.

Travel: Each year the department may offer a variety of travel opportunities such as exchanges, service trips and interdisciplinary study trips. Students are encouraged to participate in a variety of travel opportunities when school is not in session.

Honors: The department regularly participates in National Language Honor Societies and inducts new students into the various honor societies in the spring. Honor societies include: American Sign Language, Chinese, French, German, Italian, Japanese, Latin, Russian, and Spanish. In addition, many languages offer a national language examination or language essay competitions.

Language Conventions: Some languages hold annual state conventions. Department faculty and numerous students attend these conventions. At these conventions language students make presentations of their creativity and artistic talents, undertake academic competitive testing, and participate in the overall program of the convention.

Language Clubs: Currently there the following language clubs: American Sign Language, Arabic, Club Asia (Chinese & Japanese), French, German, Italian, Classical (Greek & Latin), Russian, and Spanish.

Assemblies: Each year the department holds a National Language Honor Society induction ceremony, and other assemblies as appropriate.

Maggie L. Walker Governor's School requires students to complete four years of one international language and two years of a second. Students need to keep in mind that their choice in a language to fulfill the four-year requirement is made in their 9th grade scheduling. The department encourages the students to study their chosen languages beyond the minimum requirement and to explore other language courses as electives.

LANGUAGE COURSES

AMERICAN SIGN LANGUAGE I

Course Number: 6201 Credit: 1
Prerequisite: None

Throughout the study of ASL, students develop basic communicative skills in this visual and gestural language. Students gain an understanding of Deaf culture, the syntax and grammatical rules of ASL, and a basic vocabulary allowing for interaction with the Deaf community.

AMERICAN SIGN LANGUAGE II

Course Number: 6211 Credit: 1
Prerequisite: ASL I

This course provides students a more sophisticated and in-depth study of ASL structure and vocabulary. The course emphasizes linguistic aspects of ASL, including, for example, classifiers, syntax, locatives, placement, and various sentence types. It also expands skills in expressive and receptive use of ASL.

AMERICAN SIGN LANGUAGE III

Course Number: 6221 Credit: 1
Prerequisite: ASL II

This course focuses on the development of skills in narration, utilizing the applications of non-manual behaviors and ASL structure. Fluency in expressive signing, speed and rhythm, and visual comprehension skills are emphasized. Additional readings and discussion of deafness and Deaf culture enhance the student's knowledge and ASL skills. Extensive interaction with the Deaf community is an integral part of this course.

ARABIC I

Course Number: 5901 Credit: 1
Prerequisite: None

In this course the students study Modern Standard Arabic (MSA). MSA is the primary language of the Middle East, is used in contemporary literature and the mass media, and is the universal formal and written form of Arabic learned in schools across the Arab world. The emphasis is on providing students a foundation for communication, including writing, reading, oral, and listening skills, and deepening their knowledge of the cultures where Arabic is the primary language. Students are introduced to the Arabic Alphabet and sound systems, engage in simple conversations on a range of everyday topics, construct sentences, ask and answer questions, apply basic grammatical structures, read and write Arabic script, and use simple authentic written materials. At the conclusion of the level-one course, students are able to use Arabic for simple oral and written communication, for interpretation of spoken and written information, and for presentations to audiences of listeners and readers, with cultural knowledge integrated throughout their communicative efforts. This course is taught in Arabic as much as possible.

ARABIC II
Course Number: 5911 Credit: 1
Prerequisite: Arabic I

In this course the students continue their study of Modern Standard Arabic (MSA), building on the communication skills learned in level one. Students expand their vocabulary, read passages of increasing length and sophistication in order to enhance their discussion and writing skills, read simple authentic written materials and identify the main ideas, increase the level of complexity of the grammar used, summarize short passages in a simple fashion, develop their ability to use some culturally appropriate idiomatic expressions, and write about unfamiliar topics using familiar phrases. This course includes subjects of historical and social significance in the Arab World, an introduction to biographies and works of famous Arab authors, and exploration of current events and issues through news articles and other authentic materials. At the conclusion of the level-two course, students are able to converse in Arabic using complex grammatical structures and discuss less familiar topics. This course is taught in Arabic.

CHINESE I
Course Number: 5501 Credit: 1
Prerequisite: None

This course provides a foundation for learning Standard Mandarin Chinese. Based on the textbook *跟我学汉语 Gen Wo Xue Hanyu I (Learn Chinese with Me I),* in addition to other commonly used high school Chinese textbooks, this course introduces basic Chinese grammar and phonics. Chinese culture is an integral part of this class. Reading and writing are limited in scope and guided through the use of learned vocabulary and language structures. By the end of the course, students learn to write 120 characters and recognize 200+ characters. Students will also be able to understand, converse, read and write about simple everyday topics.

CHINESE II
Course Number: 5511 Credit: 1
Prerequisite: Chinese I

This course is based on textbook *跟我学汉语 Gen Wo Xue Hanyu 2 (Learn Chinese with Me II),* in addition to other commonly used high school Chinese textbooks. In this course, students will build upon the foundation in Chinese 1 and continue to develop listening, speaking, reading and writing skills in Standard Mandarin. Chinese culture will again be an integral part of this class. By the end of the course, students will learn to write 170-180 characters and recognize 300-450 more characters. Students will also be able to understand, converse, read and write about everyday topics with increasing sophistication.

CHINESE III
Course Number: 5521 Credit: 1
Prerequisite: Chinese II

This course is based on textbook *跟我学汉语 Gen Wo Xue Hanyu 3 (Learn Chinese with Me 3).* Students develop language skills necessary to carry out oral and written activities and utilize analytical and abstract thinking skills. Students read a variety of authentic materials to broaden their range of vocabulary in Chinese. Students focus on conversation and compositional skills by preparing dialogues and short compositions about selected topics. Students review all characters learned from Chinese 1 and 2 and learn additional characters.

CHINESE IV
Course Number: 5531 Credit: 1
Prerequisite: Chinese III

This course uses the textbook *Integrated Chinese Level 1 Part 2* and *Level 2* (中文听说读写 *Zhongwen Ting Shuo Du Xie)*. This course extends the previous year's work and helps students refine and perfect Standard Mandarin language skills for use beyond the classroom. Students will consider current events and social issues in the Chinese language and social context. Students will learn to write 360-390 characters.

AP CHINESE LANGUAGE AND CULTURE

Course Numbers: 5553
Prerequisite: Chinese IV Credit: 1

The course uses the textbook *Integrated Chinese Level 2 (*中文听说读写 *Zhongwen Ting Shuo Du Xie)* and is structured around the Chinese AP exam, which focuses on accuracy in speaking, listening, reading and writing at a high level. Instructional content will reflect interests shared by the students and teacher. In addition to the textbook, the course uses a variety of audio and visual materials, including newspapers, magazines and videos on current events. During the course, the students will develop a strong command of vocabulary and structure and be able to understand spoken Chinese in various conversational situations. The students are expected to maintain accurate grammar in writing and speaking. This course will prepare students for the AP Examination, the College Board Achievement Test, and college level Chinese courses.

FRENCH I
Course Number: 5101 Credit: 1
Prerequisite: None

French I is an introductory language course which develops student proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of French); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). The goal for students is to be able to understand and speak about everyday topics. Reading and writing skills are guided through the use of contextual vocabulary and grammatical structures. The French language is presented with an emphasis on the geography and cultures of French-speaking countries. Workbook required.

FRENCH II
Course Number: 5111 Credit: 1
Prerequisite: French I

French II continues to build on the communicative skills introduced in French I. Through the use of student interaction, teacher-directed activities, and multi-sensory activities, the students continue to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of French); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Vocabulary, grammar, composition, and cultural awareness are expanded through the use of text-based selections and level-appropriate authentic materials. Workbook required.

FRENCH III
Course Number: 5121 Credit: 1
Prerequisite: French II

The French III course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of French); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Using authentic materials, the students expand their knowledge of vocabulary, grammar and culture. They are able to analyze, synthesize, and compare and contrast historical, cultural, and current events in French utilizing a broad range of authentic materials. Workbook required.

FRENCH IV
Course number: 5131 Credit: 1
Prerequisite: French III

The French IV course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of French); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Students exchange and support opinions on a variety of topics related to contemporary and historical events and issues. Students model native speakers, read authentic texts, produce compositions in French. Students use French to access information in other subject areas and to compare and contrast cultural elements in French-speaking countries with their own. The goal of this course is to reinforce and expand the knowledge of the French language and the diverse cultures of the French-speaking world and to practice and apply the skills necessary for future use, academic study, and to become informed 21st century global citizens. Workbook required.

PRE-AP FRENCH
Course Number: 5133 Credit: 1

Prerequisite: French III
Guidelines: B+ in French III or teacher recommendation

Pre-AP French Language is the first course in a 2- year sequence designed for students interested in taking the Advanced Placement French Exam. This course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of French); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Students read, analyze, and discuss authentic texts, mimic native pronunciation, and research a variety of topics in French. The goal of this course is to expand the knowledge of the French language and diverse cultures in the French-speaking world. Students practice and apply the skills necessary to perform successfully on the Advanced Placement French Exam. Pre-AP French requires advanced levels of grammatical accuracy, reading comprehension, essay writing, speaking, and listening comprehension. Workbook required.

AP FRENCH LANGUAGE AND CULTURE
Course Number: 5153 Credit: 1
Prerequisite: Pre-AP French
Guidelines: A "B" or better in Pre-AP French, an "A" in French IV, or teacher recommendation

The goal of this course is to advance the acquisition and development of the four language skills: listening comprehension, speaking, intensive reading and writing. Language and culture are centered around the AP Exam themes of contemporary life, personal and public identities, families and communities, global challenges, science and technology, and aesthetics and the arts. The course AP French Language and Culture also provides an advanced-level review of grammar and vocabulary. Workbook required.

GERMAN I
Course Number: 5201 Credit: 1
Prerequisite: None

German I is an introductory language course which develops student proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of German); the Interpretive Mode (understanding of oral and written messages); the Presentational Mode (communicating with oral or written language). The goal for students is to be able to understand and speak about everyday topics. Reading and writing skills are guided through the use of contextual vocabulary and grammatical structures. The German language is presented with an emphasis on the geography and cultures of German-speaking countries.
Workbook required.

GERMAN II
Course Number: 5211 Credit: 1
Prerequisite: German I

German II continues to build on the communicative skills introduced in German I. Through the use of student interaction, teacher-directed and multi-sensory activities, the students continue to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of German); the Interpretive Mode (understanding of oral and written messages); the Presentational Mode (communicating with oral or written language). Vocabulary, grammar, composition, and cultural awareness are expanded through the use of text-based selections and level-appropriate authentic materials.
Workbook required.

GERMAN III
Course Number: 5221 Credit: 1
Prerequisite: German II

The German III course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of German); the Interpretive Mode (understanding of oral and written messages); the Presentational Mode (communicating with oral or written language). Using authentic materials, students expand their knowledge of vocabulary, grammar and culture. They are able to analyze, synthesize, and compare and contrast historical, cultural, and current events in German. Utilizing a broad range of authentic materials, students gain knowledge of the diverse cultures of the German-speaking world. Workbook required

GERMAN IV
Course number: 5233 Credit: 1

Prerequisite: German III

The German IV course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of German); the Interpretive Mode (understanding of oral and written messages); the Presentational Mode (communicating with oral or written language). Students will exchange and support opinions on a variety of topics related to contemporary and historical events and issues. Emphasis will be on modeling native speakers, reading authentic texts, producing composition, and discussing current events in German. Students will also use German to access information in other subject areas and to compare and contrast cultural elements in German-speaking countries with their own. The goal of this course is to reinforce and expand the knowledge of the German language and the diverse cultures of the German-speaking world. Students will practice and apply the skills necessary for future academic study as well as for personal endeavors and will become informed 21st century global citizens. Workbook required.

PRE-AP GERMAN
Course Number: 5231 Credit: 1
Prerequisite: German III
Guidelines: B+ in German III or teacher recommendation

German Pre-AP is the first course in a 2-year sequence designed for students interested in taking the Advanced Placement German Language and Culture Examination. This course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of German); the Interpretive Mode (understanding of oral and written messages); the Presentational Mode (communicating with oral or written language). This course focuses on advanced levels of grammatical accuracy, reading and listening comprehension, speaking and essay writing. Along with these skills, the students will expand their knowledge of the cultures in the German-speaking countries. Workbook required.

AP GERMAN
Course Number: 5253 Credit: 1
Prerequisite: Pre-AP German or German IV
Guideline: B" or better in Pre-AP German or German IV

AP German continues a student's learning of German language and culture. The course is structured around the AP exam that focuses on accuracy in speaking, listening, reading, and writing at a high level. Instructional content reflects interests shared by the students and teacher. In addition to the textbook, a variety of authentic audio and visual materials is used, including newspapers, magazines, and authentic videos on current events. Within the course, the student develops a strong command of vocabulary and structure, and is able to understand spoken German in various conversational situations. This course prepares students for the AP Examination in German, the College Board Achievement Test, and college level German courses.

GREEK I: INTRODUCTION TO CLASSICAL GREEK
Course Number: 6901 Credit: 1
Prerequisite: None

This course begins the study of Classical Greek and focuses on elementary vocabulary, grammar, and morphology. Through the readings of simple prose, students learn the elements of ancient Greek culture and daily life. Continuous emphasis is placed on derivatives, Greek literature, architecture, archaeology, philosophy, mythology, history, and Athenian political institutions. At least one major work of Greek literature (e.g., Homer's *Odyssey*) is read throughout the year.

GREEK II: INTERMEDIATE GREEK
Course Number: 6911 Credit: 1
Prerequisite: Greek I

In this course the student continues to learn the morphology and syntax of classical Greek. More complex grammar is introduced through societal and historical readings. Cultural emphasis is placed upon the Greek Renaissance, Archaic Age and Classical Age. Students explore the Greek achievement in government, letters, architecture, and artistic expression. By the end of the year the student is reading the authentic prose of Herodotus and Xenophon.

ITALIAN I
Course Number: 5801 Credit: 1
Prerequisite: None

This course is an introductory course designed to provide students with basic speaking and understanding skills for everyday situations. Students explore various aspects of Italian culture. Students practice all four basic skills: listening, speaking, reading and writing. Vocabulary and grammatical structures are presented through communicative expressions and situations. Students are encouraged to use Italian in the classroom as much as possible. Workbook required.

ITALIAN II
Course Number: 5811 Credit: 1
Prerequisite: Italian I

This course reviews and expands upon the essential points of grammar covered in the first year course. Students are encouraged to go from familiar material to more complex constructions through daily reading and speaking in Italian. Class readings form the basis of written work to develop composition skills. Students are encouraged to present their own points of view and relate the readings to their own experience, while using both spoken and written Italian. Workbook required.

ITALIAN III
Course Number: 5821 Credit: 1
Prerequisite: Italian II

In Italian III, students continue to develop their communicative competence by interacting orally and in writing with other Italian speakers, understanding oral and written messages in Italian, and making oral and written presentations in Italian. They communicate on a variety of topics at a level commensurate with their study, using more complex structures in Italian and moving from concrete to more abstract concepts. They comprehend the main ideas of the authentic materials that they listen to and read and are able to identify significant details when the topics are familiar. Students develop the ability to discuss in Italian topics related to historical and contemporary events and issues.

JAPANESE I
Course Number: 5601 Credit: 1
Prerequisite: None

This course provides a foundation for communication skills. Students in this course begin to explore the language and culture of Japan. Students learn to speak and to understand spoken Japanese by using simple vocabulary, everyday expressions and idioms. Students learn to read and write Hiragana, Katakana and some Kanji. Workbook required.

JAPANESE II
Course Number: 5611 Credit: 1
Prerequisite: Japanese I

In this course students develop language skills learned in Japanese I. Students learn to read and write additional Kanji characters. Japanese language and culture are explored in a context which is relevant to the students' own interests and experience, and which promotes the knowledge and appreciation of the diverse culture of Japan and other Asian countries. Linguistic structures include syntax, particles, present, past, future and progressive verb tenses, negative and positive sentences. Students also participate in cross-cultural activities. The course prepares students for higher level of Japanese.

JAPANESE III
Course Number: 5621 Credit: 1
Prerequisite: Japanese II

In Japanese III students will be practicing formal/polite and informal/casual speaking styles. They will write a daily diary in Japanese and will read and express opinions about proverbs, poems, and folk-tales. They will expand their knowledge of Japanese history and geography. The use of *Cultural Notes* deepens students' understanding of Japanese people and other aspects of Japanese culture.

LATIN I
Course Number: 5301 Credit: 1
Prerequisite: None

This course lays the foundation for reading and understanding simple Latin prose. Linguistic emphasis is placed on grammar, morphology, vocabulary, reading skills, and comprehension. Roman culture is studied by following the adventures of a Roman family in connected reading passages. Additionally, Roman mythology, architecture, society, history, and English derivatives are studied throughout the first year.

LATIN II
Course Number: 5311 Credit: 1
Prerequisite: Latin I

In this course students build upon the skills they have learned in the previous year in order to comprehend Latin that becomes increasingly more sophisticated. Students are introduced to complex grammatical structures within the context of mythological stories. There is continued emphasis on Roman life, mythology, derivatives, and history. During the second half of the year, short pieces of authentic Latin literature are used as a learning tool to introduce the student to Classical Latin authors and the history in which the readings are set. Workbook recommended.

LATIN III
Course Number: 5321 Credit: 1
Prerequisite: Latin II

In this course students build upon the skills they have learned in Latin II in order to comprehend Latin that becomes increasingly more sophisticated. This course expands on morphology and linguistic constructions taught in Latin II. Students to continue the study increasingly more complex authentic Latin literature as they continue to explore Classical Latin authors and history. The history and culture of Republican Rome, as well as Greco-Roman mythology, are addressed. Workbook recommended.

LATIN IV
Course Number: 5341 Credit: 1
Prerequisite: Latin III

This course is appropriate for the student prepared to continue the study of Latin, but not at the rigorous pace demanded by the AP trajectory. Latin IV offers the student additional review of the forms and constructions taught in earlier Latin courses which may be accomplished by studying Latin prose and poetic authors such as Cicero, Ovid, Virgil, Plautus, Horace, and Catullus. The primary focus of this course is to introduce the student to holistic Latin texts and their literary analysis. The mythology, history, politics, and culture, which are essential to an understanding of these works, are explored.

Pre-AP LATIN
Course Number: 5342 Credit: 1
Prerequisite: Latin III
Guidelines: An "A" in Latin III or teacher recommendation

This course is designed as the first part of a two-year advanced sequence and is geared to those students who have thoroughly mastered Latin morphology and grammar. Students read large selections of those authors and works from the AP syllabi, such as Caesar, Horace, and Vergil and students focus on the politico-historical environment of the 1st century BC. This course introduces the students to detailed methods of critical analysis of Latin literature. Additionally, the students learn how the historical setting of these authors helps in literary interpretation. Workbook recommended.

AP LATIN LITERATURE: Caesar and Vergil
Course Number: 5363 Credit: 1
Prerequisite: Latin Pre-AP
Guidelines: A "B" or better in Latin Pre-AP or teacher recommendation

Course Description: This course is designed for fifth year students who have thoroughly mastered the forms and constructions of Latin prose and poetry and are ready to move onto an in-depth literary study of individual authors of prose and poetry. Students are expected to move beyond the mechanics of translation to literary and stylistic analysis of Latin prose and poetry. Precise knowledge of vocabulary, translation (prepared and at-sight) and critical analysis are emphasized as preparation for the Advanced Placement Examination. Latin AP: Caesar &Vergil is a detailed course that focuses on Caesar's *Commentarii de Bello Gallico* and Vergil's *Aeneid*. The AP Syllabus (reading list) is precisely followed with additional passages from the corpus of Caesar and Virgil and related authors also read. Students are expected to learn the metrical patterns of hexametric poetry, to read and understand scholarly commentaries on Vergil's *Aeneid* and Caesar's *Commentarii de Bello Gallico* and to compose in English sensitive appraisals of the text on specified topics and themes. In accordance with the AP Syllabus selections from both Caesar and Vergil are read in English translation and analyzed from literary, cultural and historical perspectives. In conjunction with daily reading of Latin texts this course explores the social and political history of late Republican Rome and the early Principate.

RUSSIAN I
Course Number: 5701 Credit: 1
Prerequisite: None

This course is an introductory language class with emphasis on listening and speaking. Students learn the Cyrillic alphabet and a corpus of vocabulary and grammatical forms sufficient as a basis for both novice communication and continued study. Instruction allows for individual expression and creativity in communication and role playing assignments. Interactive and multisensory techniques utilizing visual aids, televised materials, props, and game activities are employed in order to accommodate differences in learning styles. Workbook recommended.

RUSSIAN II
Course Number: 5711 Credit: 1
Prerequisite: Russian I

This course is a continuation of Russian I and completes the study of basic grammar and the declension system. Topics to be discussed include: a review of elements of Russian I, the instrumental case and the genitive plural, verbs of motion, prepositions and prefixes and the formation of participles. Students will apply new information in dialogues, plays, and free writing. Students also are made aware of cultural differences in given contexts, which affects their responses. Supplements to the course include short literary works and selected films that depict the history, culture, and life style of the Russian people. Workbook recommended.

SPANISH I
Course Number: 5401 Credit: 1
Prerequisite: None

Spanish I is an introductory language course which develops student proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of Spanish); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). The goal for students is to be able to understand and communicate about everyday topics. Reading and writing skills are guided through the use of contextual vocabulary and grammatical structures. The Spanish language is presented with an emphasis on the geography and cultures of Spanish-speaking countries. Workbook required.

SPANISH II
Course Number: 5411 Credit: 1
Prerequisite: Spanish I

Spanish II continues to build on the communicative skills introduced in Spanish I. Through the use of student interaction, teacher-directed activities, and multi-sensory activities, the students continue to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of Spanish); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Vocabulary, grammar, composition, and cultural awareness are expanded through the use of text-based selections and level-appropriate authentic materials.
Workbook required.

SPANISH III
Course Number: 5421 Credit: 1
Prerequisite: Spanish II

The Spanish III course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of Spanish); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Using authentic materials, the students expand their knowledge of vocabulary, grammar and culture. They are able to analyze, synthesize and compare/contrast cultural, historical, and current events. Utilizing a broad range of authentic materials, students gain knowledge of the diverse cultures of the Spanish-speaking world. Workbook required.

SPANISH IV
Course number: 5431
Prerequisite: Spanish III Credit: 1

The Spanish IV course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of Spanish); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Students will exchange and support opinions on a variety of topics related to contemporary and historical events and issues. Emphasis will be on modeling native speakers, reading authentic texts, producing compositions, and discussing current events in Spanish. Students will also use Spanish to access information in other subject areas and to compare and contrast cultural elements in Spanish-speaking countries with their own. Workbook required.

PRE-AP SPANISH
Course Number: 5434 Credit: 1
Prerequisite: Spanish III
Guidelines: "B+" in Spanish III or teacher recommendation

Pre-AP Spanish Language is the first course in a two-year sequence designed for students interested in taking the AP Spanish Exam. This course continues to develop proficiency in the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of Spanish); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Students read, summarize and discuss authentic texts, mimic native pronunciation, and research a variety of topics in Spanish. The goal of this course is to reinforce and expand the knowledge of the Spanish language and the diverse cultures of the Spanish-speaking world. Students will practice and apply the skills necessary for future academic study as well as personal endeavors and will become informed 21st century global citizens. Pre-AP Spanish requires advanced levels of grammatical accuracy, reading comprehension, essay writing, speaking, and listening comprehension. Students begin their preparation for successful completion of the AP exam by practicing strategies using a testing format similar to that of the AP Exam. Workbook required.

AP SPANISH LANGUAGE AND CULTURE
Course Number: 5453 Credit: 1
Prerequisite: Pre-AP Spanish
Guidelines: "B" or better in Pre-AP Spanish or teacher recommendation

The goal of this course is to advance the acquisition and development of the four language skills through the three modes of communicative competence: the Interpersonal Mode (interaction with other speakers of Spanish); the Interpretive Mode (understanding of oral and written messages); and the Presentational Mode (communicating with oral or written language). Language and culture are presented through a variety of authentic materials and incorporate many student-led activities. Students will practice and apply the skills necessary for future academic study as well as personal endeavors and will become informed 21st century global citizens. AP Spanish Language and Culture provides an advanced-level review of grammar and vocabulary. Students continue their preparation for successful completion of the AP exam by practicing strategies using a testing format similar to that of the AP Exam. Workbook required.

AP SPANISH LITERATURE AND CULTURE

Course Number: 5463 Credit: 1
Prerequisite: Pre-AP Spanish
Guidelines: A "B" or better in Pre-AP Spanish or teacher recommendation

The Advanced Placement AP Spanish Literature and Culture course is equivalent to a third-year college Introductory Literature course, designed for students interested in the study and analysis of representative literary works from Spain and Latin America, ranging from the Medieval and Golden Age to modern works from the Twentieth Century. This course continues to develop proficiency in the three modes of communicative competence: The Interpersonal Mode (interaction with other speakers of Spanish); The Interpretive Mode (understanding of oral and written messages); and The Presentational Mode (communicating with oral or written language). Students will read, discuss, and analyze authentic texts in the Spanish language while developing critical reading and analytical writing skills in Spanish. Students will examine the literature in relationship to its artistic, historical, social, and cultural contexts. In preparation for successful completion of the AP Exam, students will practice exam strategies using a testing format similar to that of the AP Exam. Workbook required.

INTERNATIONAL LANGUAGE ELECTIVES

Elective courses taught in the target languages or in English and do not satisfy the MLWGS International Language requirement. Elective courses are offered based on student interest and faculty availability.

FRENCH CONVERSATION AND FILM (VCU FREN 307)

Course Number: 5165 Dual Enrollment
Prerequisite: Completion of French IV or above VCU Credit: 3 semester hours
Guidelines: B or above in prerequisite course MLWGS Credit: 1

This course is designed to develop students' conversational skills, oral comprehension ability, and knowledge of contemporary and historic culture through discussion of selected French-language films. Topics will include the history of Francophone film, the role of film in influencing the way in which historical events are understood by the public, the distortions of historical fact in film, the role of politics in films and film-making, and the influence of cultural information portrayed for international audiences on their interactions and/or interpretations of Francophone cultures.

TOPICS IN FRENCH

Course Number: 5171 Credit: 1
Prerequisite: French IV, Pre-AP French or AP French

Topics in French is offered as an elective course to students who have completed their 4 year language requirement. Topics rotate based on student interest and faculty availability. The specific topics of this course stress oral, reading, composition, and aural skills through French literature, cinema, television, radio, journals, newspapers, and magazines. Chosen topics are studied in-depth and allow for student choice and research strategies. Through lectures, outside speakers, site visits, discussions and analysis of text, students investigate aspects of course content. Contemporary media from France and Francophone countries provide students with current and unusual vocabulary. Individual topics and focuses of this course are designed to build upon the knowledge base and French fluency reached in the previous 4 years of study. Students use the Internet connections to chat with French teens and exchange ideas with Francophone students all over the world

FRENCH LITERATURE

Course Number: 5163 Credit: 1
Prerequisite: Pre-AP French
Guidelines: A grade of "B" or better in Pre-AP French

French Literature is offered in accordance with teacher availability and student demand. It is designed to prepare students for advanced study in French Literature. Students focus on the development of reading and discussion skills, the technique of the "explication de texte," and on in-depth literary analysis. Students read selected literary works, review French grammar, expand vocabulary, and develop their composition skills. Purchase of anthology recommended.

TOPICS IN GERMAN
Course Numbers: 5271
Prerequisite: German IV Credit: 1

In this course students deepen their immersion into the German language and culture. The topics selected reflect areas of student and teacher interest, current events, contemporary issues, and the school's interdisciplinary mission. An example of a possible topic is the role of Germany in the European Union and its relationship to the United States. Students use contemporary German literature, online newspapers and journals, film, and Internet websites to investigate the topic and connect with students in German schools to discuss related issues, practice and improve their speaking and writing skills, and strengthen their critical thinking skills. They interpret, synthesize, and evaluate information from a variety of sources from German-speaking cultures and make oral and written presentations about their findings. This approach helps students connect their learning of German language and culture to modern issues and concerns within the national and international context. This course is conducted solely in German.

TOPICS IN SPANISH
Course Number: 5471
Prerequisite: Spanish IV, Pre-AP Spanish or AP Spanish Credit: 1

Topics in Spanish is offered as an elective course to students who have completed their 4 year language requirement. Topics rotate based on student interest and faculty availability. This course is conducted entirely in Spanish. Chosen topics are studied in-depth and allow for student choice and research strategies. Through lectures, outside speakers, site visits, discussions and analysis of text, students investigate aspects of course content. Students work toward increased fluency and self-confidence in speaking Spanish. Students develop conversational skills through the following means: organized debates, readings from original and current sources to enrich the vocabulary, assigned topics for class discussions, writing and performing plays, singing popular songs to practice pronunciation and intonation. Students use the Spanish language as a key to Hispanic art and literature. Individual topics and focuses of this course are designed to build upon the knowledge base and Spanish fluency reached in the previous 4 years of study. Close examination of the Hispanic community in Richmond may be a focus of this course.

The following elective courses are taught in English. Elective courses are offered based on student interest and faculty availability.

CLASSICAL MYTHOLOGY (VCU EUCU 311)
Course Number: 6995 Dual Enrollment
Guidelines: Sophomore status; good academic standing VCU Credit: 3 semester hours
MLWGS Credit: 1

Classical Mythology investigates the role of myths in the artistic, intellectual, religious, philosophical, literary, and artistic expression of Western Civilization. The course begins with a survey of the mythic systems of Near Eastern cultures **(**Egyptian, Sumerian, and Babylonian) and the mythology of Greece in which the focus is the pervasive role of myth in all aspects of culture. Students explore the evolution of classical myth in Rome and the European Renaissance. Students expand the evolutionary process of myth-making by creating and reinterpreting myth in light of contemporary values.

ENGLISH ETYMOLOGY
Course Number: 6806 Semester Course
Prerequisite: None Credit: ½

This course examines the influence of the Greek and Latin languages on the vocabulary of English which owes about 65 percent of its vocabulary to those languages. Topics of study include English word formation; Greek and Latin roots used in English,

relationship between Romance Languages and their influence on English, and language evolution. The course covers specialized vocabulary in medical, scientific, legal terminology, and vocabulary based built from mythological and philosophical achievement of Greece and Rome.

THE FOUNDATIONS OF DEMOCRACY
Course Number: 6976 Credit: 1
Prerequisite: None

This course explores the political evolution of democracy from classical antiquity through the Middle Ages. Political institutions from monarchy, theocracy, tyranny, aristocracy, and oligarchy are studied as precursors to democracy. Primary sources from political historians and philosophers are read to reconstruct the argument for and against democracy and as the foundation for modern political theory. Governmental institutions from Greece, Rome, and Medieval Europe (secular & religious) are studied in light of their influence on French and American ideals and democratic revolutions.

GRECO-ROMAN ART
Course Number: 6957 Semester Course
Prerequisite: None Credit: ½

This course surveys the architectural achievement of the civilizations of Greece and Rome from Greek Archaic-Classical Periods through the European spread of the classical cannons of the Roman Empire. Architectural styles from religious, political, athletic, entertainment, commercial, and domestic arenas and the relationship between form and function are studied. Classical sites like the Acropolis, Delphi, Pompeii, and the Roman Forum form a central core to this course. Lastly, the influence of Classical architecture on the European Renaissance, modern Europe and America concludes the survey. Local and regional field trips are an integral part of this course.

GREEK CIVILIZATION
Course Number: 6946 Semester Course
Prerequisite: None Credit: ½

This course offers an in depth examination of the various forms of Greek literature in English translation. Works of epic, drama, philosophy, and poetry have defined the character and genius of the ancient Greeks and have consequently had a great impact on western civilization. The exploration of this literature offers a commentary on the Greeks as well as ourselves as human beings. A study of Greek literature is also a study of fascinating mythology and profound philosophy.

ROMAN CIVILIZATION
Course Number: 6936 Semester Course
Prerequisite: None Credit: ½

This course offers an investigation of Roman literature in English translation from epic to love poetry and beyond. Latin Literature, especially from the Augustan period, reveals much about the lives of the ancient Romans; the literary products are loaded with social and political meaning and yet the individual voice of the author is never lost. A study of Latin literature is also a study of interesting lives and intriguing events.

SLAVIC FOLKLORE
Course Number: 6626 Credit: 1
Prerequisite: Global Studies I and II

This course examines traditional Slavic culture, its distinctive lifecycle and calendary ritual, material culture, demonology, oral folk narratives, and the beliefs and values that underlie all these phenomena. Through English-language lectures and seminar-style discussions, group and individual analysis of data and artifacts, and presentations of student research of translated documents, the traditional Slavic worldview is studied in an effort to understand its origins, rationales, development, and longevity, with an eye toward understanding universal culture principles through comparative analysis.

FINE ARTS

Philosophy

Maggie L. Walker Governor's School for Government and International Studies Fine Arts program includes courses in visual art, music, and drama. Emphasis throughout the fine arts curriculum is placed on independent thinking and experiential

activities. The department strives to establish clear links with national and state standards while meeting the particular needs of gifted students.

Instruction in the Fine Arts program emphasizes the development of literacy in each content area. For example, in studio art classes, students develop "visual literacy" by learning the particular "language" of the visual arts and producing works of art in a wide variety of art media. In addition, students have the opportunity to explore issues of aesthetics, to become intelligent critics of works of art, and to be exposed to practitioners of the arts so that they come to develop a real-life knowledge drawn from the experiences of these individuals.

The department focuses on the interconnectedness of the disciplines within the context of interdisciplinary global concepts. Instructional strategies provide conditions that allow students to develop their own particular talents, that recognize and develop students' learning styles in multiple intelligences, and that respect the integrity of each student's personal creative expressions.

The Fine Arts program serves a significant number of MLWGS students with its numerous outstanding elective courses in the arts. The department works with students who come with varying degrees of prior experience in these areas and encourages growth according to individual abilities and needs.

Goals

The program of the Fine Arts Department is based on a set of global objectives from which specific objectives for the individual courses are derived.

The students will:

- Experience and understand many creative challenges in the visual, instrumental, choral, and dramatic arts.
- Develop knowledge and skills in the arts drawn from real life experiences of practitioners in the arts.
- Understand that education in the arts is as important as education in science, social studies, math, and languages for negotiating the complexities of the global community.
- Incorporate interdisciplinary experiences to effectively emphasize connections between the arts and other subject areas.
- Internalize information and, as active and original thinkers, transform and interpret this information through the various venues of the creative arts.
- Develop their unique talents in an atmosphere that allows for individual styles of learning and multiple intelligences.
- Experience diversity, variety, and heterogeneity rather than standardization and uniformity in their interpretation of creative challenges.
- Work in an atmosphere that both respects and nurtures their personal beliefs in artistic expressions and provides opportunities based on individual needs and interests.
- Be exposed to the many exciting professions in the arts through experiences such as field trips, visiting artists, and mentorships.
- Become aware of how the arts are a part of their everyday lives.
- Develop critical thinking skills through verbal and written critiques and through the incorporation of the philosophical issues of aesthetics.
- Be exposed to arts-related literature: critical, biographical, and autobiographical.
- Develop an understanding of the history of the various art forms within the context of the history of mankind.

Program Description

Visual Art Program

In studio art classes, students experience a wide variety of art media. Written work includes art critiques based on museum and gallery visits, as well as creative writing options that are motivated by works of art.

Following are some highlights of the studio art program:

Annual Regional "Scholastic Arts Competition" - This event is a juried art show. Governor's School students consistently achieve high recognition in this annual national art contest and exhibition.

Annual Student Art Exhibit- This event is a month-long exhibit of student art work held in the spring and celebrates the importance of the Arts within the school culture.

Annual Senior Art Exhibition - Seniors in advanced art classes work towards an off-site group show of their own. This event provides students an opportunity to show their work in a professional venue.

Opportunities for pARTnerships– Students may apply to a series of workshops with our neighborhood arts organizations such as glass blowing, screen printing, and ceramic wheel throwing.

Guest Artists - Many artists visit the art classes and distinguished art professionals are invited to make presentations to fine arts classes. These opportunities greatly enriched the program and provide a forum for interesting dialogue.

Music Program

Music education is the education of human feelings through the development of an awareness of the aesthetic qualities of sound. Performance classes provide intimate contact with these expressive qualities. In this context, performance is not an end in itself, but a means to an end, which includes:

- the augmentation of knowledge and understanding of the structural elements of music and of music as a creative art form;
- the cultivation of habits, attitudes, and appreciations;
- the development of each student's aesthetic potential, sensitivity, and responsiveness to that which is beautiful in music.

Students who have participated in the music program should demonstrate a knowledge of music as a creative art form in a historical and cultural context; an understanding of the structural elements; and relevant eye, ear, and hand-oriented musical skills.

It is the intent of the music program to help students develop their aesthetic potential, to give them an understanding of their own culture and the cultures of others, and to provide a unique medium for achieving excellence either alone or in cooperation with others. While some students discover talents leading to careers in music, many find that music has the potential to enrich their lives either through performance, study, or appreciation.

Instrumental Music Program

Students in the instrumental music program participate regularly in solo, small ensemble, and full ensemble settings. Technical, expressive, and interpretive skills are developed through performance of a wide range of music. Instrumental students perform, discuss, and critically evaluate characteristics of musical composition. Students discuss relationships between music concepts and other disciplines, and are involved in discussing various cultures, styles, composers, and historical periods.

Guest musical artists, professional musicians, and renowned music educators present master classes to Governor's School students in the class setting.

Students participate in District Band, Senior Regional Orchestra, Central Regional Orchestra, Greater Richmond Youth Wind Ensemble, Greater Richmond High School Jazz Band, District Orchestra Assessment Festival, the Richmond Symphony Youth Orchestra Program, and All-State Band and Orchestra events. Students enrolled in the Governor's School Music Program often travel locally and abroad to represent the school.

Ensembles include the Sinfonettia Orchestra, Chamber Orchestra, Jazz Band I, Jazz Band II, and Jazz Improvisation.

Maggie Walker houses an on- site professional recording studio with industry standard digital recording technology that provides students the capability to record and produce music.

Choral Program

The MLWGS Chorus engages in a diverse choral repertoire with an international perspective. Expressive and interpretive skills are developed through performance of musical genres that include Baroque, Classical, Romantic, Folk, Jazz, and Spiritual, and International styles. Students discuss, evaluate, and perform concepts of music theory, music history, and musical style. Performances include a variety of programs at the local and regional level. Students participate in Regional Chorus and other related District I events.

Drama Program

The drama program offers many opportunities in which the entire student body can participate including:

"Fall Play": Auditions are held school wide for the fall production.

"Fall Festival": Students may research and write five-minute and one-minute versions of Shakespeare's plays for paid performances.

"One-Act Competition": Student directors may compete in this performance competition. Students may produce plays they have written, adapt a literary work for the stage, or adapt an existing piece.

"Spring Play/Musical": Auditions are held school wide for the Spring Production.

VISUAL ART AND ART HISTORY COURSES

ART I - INTRODUCTION TO STUDIO ART

Course Number: 7101 Credit: 1
Prerequisite: None

Art I is a comprehensive introduction to art making, art history, and art appreciation. This foundational course provides students of all ability levels with the knowledge and skills needed to show personal growth. Experiences with two and three-dimensional art materials and processes are designed to foster skills in craftsmanship, critical thinking, fluency in the formal language of art, and an awareness of cultural, global, and personal themes. Observational drawing is an essential component of the Art I curriculum as it supports the foundation of cognitive and practical learning modalities. Students are encouraged to take advantage of these basic skills in order to tap into their own artistic vision/voice. Fee required.

ART II

Course Number: 7111 Credit: 1
Prerequisite: Art I or teacher approval based on student non-sequential application

Art II allows students to explore art making, art history, and art appreciation in greater depth than in Art I. Observational drawing remains an essential component of the Art II curriculum as it supports the continued development of cognitive and practical learning modalities. Additional two and three-dimensional studio experiences will supplement the basic skills learned in Art I while refining abilities in craftsmanship, critical thinking, fluency in the formal language of art, and an awareness of cultural, global and personal themes. These elevated experiences will allow students to make critical choices as they seek their own artistic vision/voice.
Fee required.

ART III

Course Number: 7121 Credit: 1
Prerequisite: Art II or teacher recommendation

The student has a variety of studio art experiences in selected areas that may include drawing, painting, sculpture, ceramics, printmaking, and art history Students' individual areas of interest are encouraged to allow more extensive exploration of media and ideas. Students work towards developing a well-rounded portfolio that fulfills a substantial portion of college portfolio requirements. Fee required.

ART IV

Course Number: 7141 Credit: 1
Prerequisite: Art III
Guidelines: Teacher recommendation

The advanced student has a variety of studio art experiences in selected areas concentrating on areas of particular individual interest. Each student's experience with media must be well rounded, and include both two and three-dimensional work.

Students work toward developing a well-rounded portfolio that fulfills a substantial portion of college portfolio requirements. This course may be followed by Art V, in which the student completes the portfolio and exhibits the work in a capstone off-campus group exhibition. Fee required. Additional fees may be required to cover the cost of materials and expenses incurred by a student for special projects.

ART V
Course Number: 7133 Credit: 1
Prerequisite: Art IV
Guidelines: teacher recommendation

In this course, the advanced student has a variety of studio art experiences in selected areas concentrating on areas of particular individual interest. For the student with a strong commitment to studio art, this course encourages the extended development of a portfolio for possible submission to the AP Program and/or for college submission. Art V students will exhibit the work in a capstone off-campus group exhibition as well as in a solo on-campus exhibition. Fee required. Additional fees may be required to cover the cost of materials and expenses incurred by a student for special projects.

PHOTOGRAPHY (VCU PHTO 243: Darkroom)
Course Number: 7819 Dual Enrollment
Guidelines: Sophomore status and good academic standing VCU Credit: 3 semester hours
MLWGS credit: 1

This course is designed to explore the basics in black and white photography. Emphasis is on giving students general information on understanding the photographic process for personal use. It includes exploration of composition. Students work with light sensitive materials and photographic chemicals. They gain thorough knowledge of the operation of a 35mm camera. The basic history of photography is also covered in this class. Student must provide a 35mm adjustable camera and purchase film from instructor. Fee required.

COMMERCIAL PHOTOGRAPHY
Course Number: 7851 Credit: 1
Prerequisite: Photography
Guidelines: Teacher recommendation

This is a second year photography course for students who want to build on the fundamentals gained Photography (Course Number 7819). The course is a studio art class and mixes lecture, demonstration, field trips, shooting and film processing and printing to help the student understand how commercial photography is made and used. Types of assignments include studio lighting, studio and location portraits, documentary photography, tableau and alternative processes. Portfolio development is also covered. Each semester students are required to create and exhibit a group of images that work together to express a theme or idea. Fee required.

TOPICS IN DIGITAL ARTS
Course Number: 7900 Credit: 1
Prerequisite: Art I, Photography (VCU), or teacher approval based on student non-sequential application

In this course, students work with the latest computer technology as it relates to art and communication in the digital age. This will consist of topic courses which will change yearly based on teacher expertise, student interest, and rapidly changing technology. Topics may include New Media Art, Graphic Design, and digital collaboration in politics and government.

These topics courses allow our students to be proficient in the skills needed in all areas of work and public service in the wired 21st century. Instruction focuses on thematic project-based learning activities and related to authentic "real-world" situations which will drive the coursework. Technology serves as the tool for student generated content. This broad and flexible focus will allow for speed in addressing the fast changing uses of technology as well as being able to support the mission of the school by addressing emerging application of digital communication and media in government, politics, and international affairs**.** Graphic Design will be the first topic taught under this course title using technology already available at school. New Media in the Fine Arts is the second topic taught under this course title and will have students learning about and creating artwork using technology as the medium.

SURVEY OF WORLD ART I – PREHISTORIC THROUGH THE MIDDLE AGES (VCU ARTF 105)
Course Number: 7199 Dual Enrollment
Guidelines: Sophomore status and good academic standing VCU Credit: 4 semester hours
MLWGS Credit: ½; Fall Semester

Part 1 of a 2-part course. This course is a comprehensive survey of painting, sculpture, architecture, and related visual arts from the prehistoric era through the 13th century, including examples from selected regions of Europe, Asia, Africa and the Americas. Illustrated lectures will explore world cultures through visual and comparative analysis with identification of key monuments and artists' work in relationship to historical contexts. Lectures will be supplemented with readings, written responses, class discussions and activities, research projects, and field trips (as possible).

SURVEY OF WORLD ART II – RENAISSANCE THROUGH CONTEMPORARY (VCU ARTF 106)
Course Number: 7194 Dual Enrollment
Prerequisite: Survey of World Art I VCU Credit: 4 Semester Hours
Guidelines: Sophomore status and good academic standing MLWGS Credit: ½; Spring Semester

Part 2 of a 2-part course. This course is a comprehensive survey of painting, sculpture, architecture, and related visual arts from the 14th century through 21st century, including examples from selected regions of Europe, Asia, Africa and the Americas. Illustrated lectures will explore world cultures through visual and comparative analysis with identification of key monuments and artists' work in relationship to historical contexts. Lectures will be supplemented with readings, written responses, class discussions and activities, research projects, and field trips (as possible).

MUSIC COURSES

SINFONETTIA ORCHESTRA
Course Number: 7401 Credit: 1
Open to Freshmen, Sophomores, Juniors, and Seniors
Prerequisite: Previous orchestra or band experience; approval of instructor

Sinfonettia Orchestra is a performance ensemble open to strings, winds, brass, and percussion that rehearses, performs, and explores the history and cultural relationships found in the musical literature of the Baroque, Classical, Romantic, 20th Century, and Contemporary periods. Emphasis is on ear training, listening, analysis, notation, technique, and musical interpretation. Attendance at scheduled rehearsals and performances both in and out-of-school are mandatory.

WIND ENSEMBLE
Course Number: 7411 Credit: 1
Open to Sophomores, Juniors, and Seniors
Prerequisite: 1 high school Concert Band or Jazz Band I credit in good standing; approval of instructor

Wind Ensemble is a study of the literature, rehearsal, and performance techniques utilized in the Chamber and Wind Ensemble. Students perform, discuss, and critically evaluate characteristics of more intricate music compositions. Music

from the Baroque, Classical, Romantic, 20th Century, and Contemporary periods forms the basis of course literature. Performance in the small ensemble, chamber ensemble, and wind ensemble creates opportunities for the exploration of classical and concert styles. Participation in scheduled rehearsals and performances is required. Students must be willing and able to perform at out-of-school functions.

CHAMBER ORCHESTRA
Course Number: 7441 Credit: 1
Open to Sophomores, Juniors and Seniors
Prerequisites: 1 high school credit of Sinfonettia Orchestra in good standing; approval of instructor

Chamber Orchestra is a performance ensemble open to strings, winds, brass, and percussion that rehearses, performs, and explores the history and cultural relationships found in increasingly complex musical literature of the Baroque, Classical, Romantic, 20th Century, and Contemporary periods. Emphasis is on ear training, listening, analysis, notation, technique, and musical interpretation. Attendance at scheduled rehearsals and performances both in and out-of-school are mandatory.

JAZZ BAND I
Course Number: 7421 Credit: 1
Open to Freshmen, Sophomores, Juniors, and Seniors

Prerequisite: Previous band experience; approval of instructor
Jazz Band I is a performance ensemble that rehearses, performs, and explores the history and cultural relationships found in the Blues, Big Band, Swing, Bebop, Latin, and Contemporary jazz styles. Emphasis is on ear training, listening, analysis, notation, transposition, technique, improvisation, and musical interpretation. Attendance at scheduled rehearsals and performances both in and out-of-school are mandatory.

JAZZ BAND II
Course Number: 7451 Credit: 1
Prerequisite: 1 high school credit of Jazz Band I in good standing; approval of instructor

Jazz Band II is a performance ensemble that rehearses, performs, and explores the history and cultural relationships found in more elaborate musical literature of the Blues, Big Band, Swing, Bebop, Latin, and Contemporary jazz styles. Emphasis is on ear training, listening, analysis, notation, transposition, technique, improvisation, and musical interpretation. Attendance at scheduled rehearsals and performances both in and out-of-school are mandatory.

JAZZ IMPROVISATION
Course Number: 7431 Credit: 1
Open to Freshmen, Sophomores, Juniors, and Seniors
Prerequisite: 1 high school credit of Jazz Band II in good standing; approval of instructor

Jazz Improvisation provides an opportunity to study through composition, analysis and performance, the mechanics of harmonic, melodic, and rhythmic structure. Progressive ear training, analysis, composition, transcription, and technical and musical interpretation lead to techniques of improvisation. Theoretical, technical facility, and expressive skills are increased as the student cultivates the many varied tools required to improvise. Students perform, discuss, and critically evaluate characteristics of more elaborate music solo and ensemble compositions. In addition, select jazz artists, periods of jazz history, and stylistic periods are referenced.

CONCERT BAND
Course Number: 7461 Credit: 1
Prerequisite: Prior band experience or director's approval.

Concert Band is offered for students who wish to continue their study of band music and improve their skills to perform at an advanced level. Students should have been enrolled in a band course during the previous year. Music studied in this class includes a variety of styles and range in difficulty.

CHORUS
Course Number: 7351 Credit: 1
Guidelines: Music reading skills are recommended

This is a choral class and performance organization, which offers students opportunities to develop their musical talents through learning many styles of vocal/choral music, as well as through vocal production, music theory and music appreciation. Music literature is selected from varied Western and non-western cultures, languages and time periods. Chorus trains students to use these acquired skills through participation in the classroom and performance opportunities both in and out of school. Although the primary purpose of the organization is choral singing, students who bring prior experience in playing an instrument, especially the piano, will find opportunities to contribute in additional ways.

MUSIC APPRECIATION
Course Number: 7311 Credit: 1
Prerequisite: None

This course seeks to expand the understanding of American and world musical culture as a rich and varied tapestry that can be enjoyed by everyone. Diversity and change are two themes that seem to emerge whenever a discussion of our modern culture occurs. The social, political, and economic interactions are not only reflected in the world of business and government, but they are at the very core of the cultural and aesthetic expressions coming from the people. Contributions of major artists and composers and their influence on global music are examined. Following themes of diversity and change, possible topics include comparing ethnic and non-western music to more traditional music of the European experience throughout the Western Hemisphere, and examining music in the United States, the cultural history of the times, and connections between jazz, blues, country, rock, Motown, hip-hop and other styles. Additional discussions also include women composers, American composers, film and Broadway music genres and the future of music in the digital age.

INTEGRATED MUSIC THEORY I and II (VCU MHIS 145 & 146: Theory and Aural Skills I and II)
Course Number: 7301 Dual Enrollment
Guidelines: Sophomore status; good academic standing VCU Credit: 6 semester hours
MLWGS Credit: 1

Music Theory is the study of the principles of harmony. Emphasis is on melodic and harmonic writing, ear training, and musical analysis. Students compose, arrange, and harmonize in major and minor keys. Musical form is studied through the analysis of music scores and composition; the development of elementary keyboard skills extends to the performance of simple four-part harmony. Discriminate listening and aural analysis are included.

THEATRE COURSES

DRAMA
Course Number: 7601 Credit: 1
Prerequisite: None

This course examines the varied elements of theater including: movement, clown, acting, costume, make-up, technical production, production design, theater history, playwriting, structure of theater companies, careers in theater, and auditioning. Class projects and papers require individual research, reviewing plays, performance, literary analysis, creative interpretation, construction, writing, and both interactive and group skills. Students have the opportunity to participate in a fall play, One-Acts, and a spring production.

FILM STUDIES: Elements of the Moving Image (VCU PHTO 233: Elements of the Moving Image)
Course Number: 7751 Dual Enrollment
Guidelines: Sophomore status; good academic standing VCU Credit: 4 credits
MLWGS Credit: 1

This course examines the impact feature films have on our culture and their relationship to modern society. It includes the exploration of how motion pictures are constructed from the screenplay to the screening. Students watch films and dissect

them to study their every nuance. Emphasis is on the elements of filmmaking including directing, acting, writing, cinematography, set design, art direction, and music scoring. Students are required to write responses to the films screened as well as take cumulative exams.