

*St. Louis University*  
*High School*

*Academic Program*  
*and*  
*Course Description*  
*Booklet*

*(2016-2017 School Year)*

(Revised, December 2015)

# ***TABLE OF CONTENTS***

<b><i>Topic</i></b>	<b><i>page #</i></b>
Mission Statement. . . . .	2
Academic Policies and Program. . . . .	3
Admissions. . . . .	3
Academic Program by Class Year. . . . .	3
Academic Requirements. . . . .	3
Units of Credit. . . . .	4
Registration for Courses. . . . .	4
1818 College Credit Program. . . . .	5
Advanced Placement Examinations. . . . .	5
Report Cards. . . . .	5
Academic Grades. . . . .	5
Grade Point Average (GPA). . . . .	6
Academic Policies. . . . .	6
Report Card Interpretation. . . . .	7
Academic Assistance and Eligibility. . . . .	7
Academic Honesty. . . . .	8
Campus Ministry. . . . .	9
Computer Science. . . . .	9
English. . . . .	12
Fine Arts. . . . .	15
Foreign Language. . . . .	20
Guidance and Counseling. . . . .	24
Library. . . . .	25
Mathematics. . . . .	26
Physical Education. . . . .	28
Science. . . . .	30
Social Studies. . . . .	32
Theology. . . . .	36
Engineering Options. . . . .	38
National Honor Society. . . . .	38

## OUR MISSION STATEMENT

*We are a Catholic, Jesuit college-preparatory school for young men, committed to its presence in the city of St. Louis and dedicated to building Christ's kingdom of truth, justice, love, and peace. We serve young men based on their ability to succeed, rather than their economic circumstances.*

*Through a rigorous academic program, we help our students develop critical minds and a life-long devotion to learning that informs moral choices and transforms lives.*

*In addition to assisting in the intellectual, aesthetic, social, and physical formation of our students, we help them develop compassionate hearts by fostering habits of personal prayer, reflection, and service for the Greater Glory of God.*

## ACADEMIC POLICIES AND PROGRAM

### Admissions for 8th Grade Students

St. Louis University High School (SLUH) admits students of any race, color and national or ethnic origin. SLUH's goal is to promote and maintain a student body composed of students with diverse geographic, socioeconomic and ethnic backgrounds.

Admission to SLUH is based on consideration of many factors including, but not limited to: achievement on standardized tests, academic performance in grades 6,7, and 8, conduct/effort in the classroom, leadership potential, commitment to Catholic education and a personal interview. St. Louis University High School does admit students from other Christian denominations.

The steps required for admission are: 1) Complete the Catholic High School Application. 2) Complete the SLUH application. 3) Participate in a personal interview. Decision letters are mailed in February.

More information on admissions can be obtained from the Director of Admissions.

### Admissions for Transfer Students

Admission for a qualified transfer student is on a space available basis. A transfer student will be considered for admission if the curriculum in his previous school fits with the college preparatory curriculum of St. Louis University High School. Grades of "A" or "B" are required in core subjects.

Applications from a student attending school in the metropolitan area will be considered in the summer only after the following has been sent to the Assistant Principal for Academics: a letter of recommendation from someone at the student's current school; a student's final official transcripts; standardized test scores; a student's personal statement.

An application packet can be obtained from the Office of Admissions.

### Academic Program By Class Year

#### Freshman Year

Algebra I, Accelerated Algebra or Algebra II  
Biology  
Computer Fundamentals (1 sem.)  
English  
Fine Arts (1 sem.)  
Foreign Language  
Global History  
Physical Education/Health  
Theology

#### Junior Year

Algebra II/Trig, Advanced Algebra II/Trig or Pre Calculus  
American History or AP American History  
English or AP English Literature  
Physics or AP Physics 1  
Theology  
Choose two or three electives

#### Sophomore Year

Chemistry or ACC Chem.  
English  
Foreign Language  
Geometry or Advanced Geometry  
Global History or AP World History  
Theology  
Choose one or two Electives

#### Senior Year

English  
Service Project  
Theology  
Choose four or five electives

An *Academic Program and Course Description Booklet* is revised each year at the beginning of the second semester.

### Academic Requirements

Students are expected to be enrolled in at least six hours of classes each class day of each quarter of the school year. Any exceptions to this to this course load can only be given by the Assistant Principal for Academics.

In sophomore, junior and senior years, students are able to request seven courses. This gives students an opportunity to take a Computer Science class or an additional Fine Arts class. The seventh course might also be Physical Education or Weights. Students also have the option of choosing scheduled study time during the school day as their seventh course.

Counselors, with the assistance of the Assistant Principal for Academics, will closely monitor a student's choice of courses to avoid the student becoming overloaded in his academic curriculum.

### **Units of Credit**

The actual required units of credit or years of study per department for graduation are listed below. Twenty-four (24) units of credit are the minimum requirements for graduation.

- 4 units of **English**
- 3 units of **Mathematics**
- 2.5 units of **Social Studies**
- 3 units of **Science** (including Biology, Chemistry, and Physics)
- 2 units of the same **Foreign Language**
- 1 unit of a **Fine Arts**
- 4 units of **Theology**
- 4 semesters of **Physical Education** (1 of which is a Health course)
- .5 unit of **Computer Science**

The remaining units of credit may be chosen from any of the other departmental offerings.

- **Note** that the University of Missouri has a uniform minimum admissions policy for freshmen applicants to its four campuses. A student can prepare to enter any one of the campuses by taking the courses listed below. For certain programs, however, the student should take additional courses. Students are admitted based on academic achievement and performance on standardized examinations such as the ACT or SAT. Regular admission of first-time college students (entering freshmen) requires completion of at least 17 units of credit (1 unit =1 year in class) as follows:
  - A. Four (4) units of English, one of which may be speech or debate. Two units emphasizing composition or writing skills are required.
  - B. Four (4) units of mathematics (Algebra I or higher).
  - C. Three (3) units of science (not including General Science), one of which must be a laboratory course.
  - D. Three (3) units of social studies.
  - E. One (1) unit of fine arts, to be taken in visual arts, music, dance, or theater.
  - F. Two (2) units of a single foreign language.

### **Registration for Courses, Requesting Course Changes**

Registration for courses for the following year takes place during the third quarter. The student works with academic departments and his counselor to enter course requests into the PowerSchool School Information System. The fact that a student requests a particular course does not guarantee that he will be scheduled in that course. Once the "Course Request" form has been completed, changes relating to courses which required a department signature can only be made after the student, his counselor and department head consult. The student has the ultimate decision in choosing courses. During the fourth quarter a student has the opportunity to alter his original course request list. After the Assistant Principal for Academics has completed course scheduling, student schedules are mailed home in mid-summer. After that time, requests for course changes will be considered only by the Assistant Principal for Academics.

In-coming freshmen receive course selection forms at the orientation meeting in the Spring. They are able to consult with their counselor, individual department heads and the Assistant Principal for Academics on course planning. SLUH's placement exams in Foreign Language and Algebra take place in April.

Once the school year begins, a student may request a course change from the Assistant Principal for Academics. The deadline for such a request is at the end of day five of each semester. A request to drop a course must be made in person to the Assistant Principal for Academics who will explain the procedures for dropping a course. Requests to change a course or drop a course can only be granted by the Assistant Principal for Academics.

### **1-8-1-8 College Credit Program**

More than fifty years ago St. Louis University High School was the first high school to cooperate with a college-credit program instituted by St. Louis University. The purpose of the program for high-school students is to provide some opportunities to earn college credit during their junior and senior years of high school. The high school offers certain courses - the syllabi and teachers of which are approved by the various academic departments of St. Louis University - to qualified juniors and seniors. These students are those who are seeking the challenge to accelerate and improve their skills and knowledge at a higher-than-ordinary level of performance and who are likely, in the opinion of their teachers, to make a grade of B or better in such a course.

The courses at St. Louis U. High which carry the opportunity for enrollment in the 1-8-1-8 Program are: AP Biology, AP Calculus AB and BC, Probability & Statistics, Film, African History & Politics, Computer Science, English, AP Modern European History, AP American History, 1818 Theology, French, Latin, Russian, and Spanish. In general a student is permitted to enroll in three such courses during a given semester. In any case no student may earn more than thirty hours of college credit in two years. The fee is determined by St. Louis University. Registration for each semester takes place at SLUH during the first and third quarters. Students are billed by St. Louis University. A transcript showing all courses taken and the grades and credits earned can be accessed at the Saint Louis University website. This transcript will, if requested, be sent to the student's college/university. If the student has specific questions about the 1-8-1-8 Program, he is encouraged to speak with the teacher of the course in question or to call SLU's 1-8-1-8 Advanced College Credit Program Office, 977-3142.

### **Advanced Placement Examinations**

Many juniors and seniors and some sophomores take one or more Advanced Placement Examinations in May in order to earn college credit and/or placement at an advanced level for a college freshman. The AP exams are administered at St. Louis U. High during the first and second weeks in May.

Students interested in taking any AP exam should first speak with their teacher of that subject. In some cases additional preparation (outside the normal course work) is recommended to students who wish to take an AP exam. This is because the "AP syllabus" is not necessarily followed in the courses that we offer but for which a student may wish to take an exam.

Typically the exam subjects that our students choose for an AP exam are: American History, Biology, Calculus-AB, Calculus-BC, Chemistry, Computer Science, Economics, English, Environmental Science, European History, Government and Politics, Latin, Spanish, Statistics, Psychology and Physics.

### **Report Cards**

Each semester consists of the following grading periods:

1. In mid-semester, quarter examinations are given and quarter report card for each student is sent home.
2. At the end of each semester, final exams are given. The final grade for the course is then recorded on the student's permanent academic transcript. A semester report card for each student is sent home.

### **Academic Grades and Numerical Equivalents**

- A+ - 4.5: Superlative achievement.
- A - 4.0: Performance that greatly exceeds the basic objectives of the course.
- B+ - 3.5: Performance that exceeds the basic objectives of the course.
- B - 3.0: A level of mastery and performance that meets the objectives of the course.
- C+ - 2.5: A level of mastery and performance that nearly meets the objectives of the course.
- C - 2.0: Performance below the objectives of the course.
- D - 1.0: Performance seriously below the course objectives.
- F - 0.0: Failure to meet the reasonable minimal objectives of the course.
- E - 0.0: This grade may be assigned only at the end of the first semester and only in a two-semester course. It is a conditional grade. It indicates that the student has failed the first semester but that he can with a concerted effort and added work, meet the course objectives by the end of the second semester and receive a passing grade for both the first and second semesters.

If the second semester grade is one of D or higher, the grade of E from the first semester becomes a grade of D and the student's GPA for the first semester is recalculated. If the second semester grade is a grade of F, then the grade of E from the first semester becomes a grade of F

and the student must withdraw from St. Louis University High School.

- I - 0.0 Assigned in a case where, through some extraordinary circumstance, the student failed to meet one or more requirements of the course. If the requirements are not met within two weeks after the end of the quarter or semester, the "I" becomes a grade of "F" or "E" unless the Assistant Principal for Academics has extended this grace period.

### **Grade Point Average (GPA)**

A student's GPA is computed by multiplying for each course the point value of the letter grade times the credit value for each course and dividing by the total potential course credits for that grading period. Cumulative GPAs are computed using all courses taken since enrollment at St. Louis University High School.

### **Academic Policies**

The rationale for each grade is not a comparison of students but the measure of the student's performance in reference to the objectives of the course and college endorsement. Consequently, the grade of B does not mean that a student is better than other students or average among his school peers (with half the students above him and half below but, rather, it simply means that the student has reasonably mastered the course objectives in view of college preparation.

First semester and second semester grades (grades assigned in January and June) **do not** permit the use of the plus (+) or minus (-) except the grades of A+, B+, and C+.

A letter from the Academic Assistant Principal will be sent with a student's report card at the quarter or semester for a grade of E, F, or I.

A grade-point average from 3.20 through 3.59 merits second honors. A grade-point average of 3.60 or above merits first honors.

A student is placed on academic probation when he receives a grade of F on a quarter or semester report card.

Any student who receives two grades of "F" at the end of any one semester may not continue at St. Louis U. High.

A student who receives a grade of F at the end of the first semester in a full year course is able to remain in the course for the second semester only with the permission of the teacher and the Assistant Principal for Academics. However, he must successfully complete an additional course in the subject for which he received a grade of F before he is allowed to return for the following year (provided the student has met other academic standards to permit his return for the following year). A student who receives a grade of F in both semesters of a full year course will not be allowed to return to St. Louis U. High the following year.

For a student who has received a grade of F at the end of either semester or a grade of E at the end of the first semester, the Assistant Principal for Academics will send a letter to his parents or guardians notifying them of the grade and its consequences for their son's continued enrollment at St. Louis University High.

A diploma will not be granted to a senior who has not earned credit in all of his courses. The grade of F remains on the student's transcript. The registrar notes on the student's transcript that he has in fact earned credit for that course through make-up course work.

A student who does not maintain a cumulative average of 2.00 at the end of freshman, sophomore, or junior years will have their status reviewed regarding their future enrollment at SLUH.

Parent/teacher conferences are held after the first and third quarter grading periods each school year.

## **Report Card Interpretation**

The totals for demerits, jugs and absences are cumulative. Thus, the numbers listed in the first semester, final grade column are the totals for the entire first semester. The numbers in the second semester, final grade column will be for the entire year. On each report card, there is an area for the teacher to make specific comments about a student's work and behavior.

Only semester academic grades are included on a student's transcripts. Likewise, only the semester grades are figured into his cumulative grade point average.

SLUH does not rank its students academically. Rather, colleges and scholarship services are provided a school profile, a grade point average distribution, and a course grade distribution to contextualize a student's academic performance.

## **Academic Assistance and Eligibility**

A student is admitted to SLUH only after the admission committee and administration have judged that he has the ability to engage the SLUH curriculum successfully. His academic success, therefore, is expected and is considered a prerequisite to his participation in co-curricular activities.

**ACADEMIC ASSISTANCE PLAN.** When a student fails to meet the academic expectation—either by earning a current grade point average below 2.00 or earning a grade of F or E in any class—he will be designated for an academic assistance plan for the following quarter. Students who are designated for the plan following the second semester grading period will remain on the plan for the first quarter of the following school year.

When a student fails to meet the academic expectation at a quarterly grading period, a letter will be sent with the student's report card by the Assistant Principal for Academics (APA) informing him that he will be designated for an academic assistance plan. The student and parent will sign the letter and return it to the Assistant Principal for Academics. The student will then meet with one of the school's Learning Consultants to develop a plan to help him improve his academic standing. In all cases, the goodwill and participation of those involved in the development and implementation of the plan, including the student, will be expected.

The parents of a student assigned to an academic plan can check progress reports from their son's teachers at least every two weeks on Powerschool.

**CO-CURRICULAR ELIGIBILITY.** Although participation in co-curricular activities is encouraged and valued at SLUH, it is secondary to academic progress. The purpose of co-curricular eligibility is to meet the MSHSAA eligibility requirements, to motivate students to reach SLUH's minimum academic expectations, and to provide the additional time necessary for remediation of academic deficiencies. Students who receive a grade of E or F at the end of either the first or second semester, or who do not earn 3.00 credits in that semester will lose the privilege of participating in co-curricular activities for the following semester, including but not limited to practices, rehearsals, competitions, performances, and representative positions. A student who receives an F at the end of the second semester and makes up the credit over the summer will regain his eligibility for the first semester of the next year. The APA has the right to remove a student from a co-curricular at any time during the school year if the APA determines that participation in the co-curricular is impeding the student's academic progress.

**PROBATIONARY ELIGIBILITY.** Probationary eligibility confers co-curricular eligibility on an ineligible student during the second semester based on the criteria listed below. Because of MSHSAA rules, a student who earns less than 3.0 credits during the first semester will not be eligible to apply for probationary eligibility or participate in co-curriculars during the second semester.

- An ineligible student who has earned 3.00 credits the previous semester may request probationary eligibility anytime after the publication of the first semester grades that have resulted in his ineligibility. He



can make this request by talking directly to the APA. After the student's academic plan has been in place for two weeks, the APA will discuss the student's performance with each of his teachers, his counselor, and the student himself to assess whether or not the student is actively engaging and making progress in his academic plan and whether or not the time required of his co-curricular activities would hamper his academic progress. With this input, the APA will decide the question of eligibility in the best interest of the student for the remainder of the second semester. If it becomes evident at any time that a student's academic progress is being hampered by his probationary eligibility, the APA can withdraw the student's eligibility for the remainder of the semester.

### **Sending Classwork Home**

Students can be assured that in cases of a prolonged absence due to illness or accident, teachers will always give the student every opportunity to keep pace with his classes by providing assignments and giving the extra help needed when the student returns to school. In cases of extended absences due to illness or accident, the student's teachers should be contacted by email to arrange for make-up work.

### **Academic Honesty**

In its attempt to instill Christian values and academic integrity, St. Louis U. High stands squarely against cheating. As an attempt to pass someone else's work off as one's own, cheating at its root is an act of dishonesty. It compromises the integrity of those involved, destroys the community of learning, and distorts the system of academic evaluation for students and faculty alike. Widespread cheating fosters game-playing, pursuit of grades for their own sake, and getting something for nothing-attitudes fundamentally at odds with the school's desire to foster genuine and enthusiastic love of learning in an atmosphere of love and respect. While recognizing the strength of both the temptations to cheat and the pressure to cooperate in cheating, the school cannot overlook even casual cheating without compromising its mission. Thus cheating will not be tolerated.

Cheating includes - but is not limited to - the passing of answers on quizzes and tests; the seeking, receiving, or transmitting of specific information about questions on a test; the lending or copying of homework; use of cheat sheets or their possession in the testing room; and acts of plagiarism.

The term plagiarism, perhaps, requires further explanation. Plagiarism is the use of another's words or ideas as if they were one's own. To avoid plagiarism when using another person's thoughts, the writer must acknowledge the origin of the ideas and use quotation marks to indicate borrowed language. Within the context of a specific class, a writer may ordinarily incorporate into his paper ideas *discussed* in that specific class without crediting the teacher or fellow-students. In that case, there is clearly no intent to disguise the intellectual debt. However, published material including passages and ideas from hand-outs and class texts must always be attributed.

The burden for enforcing this code of honesty falls on both students and teachers. Students should not lend their work out to others. If one student seeks another's assistance on an assignment, the assistance should be given in *face-to-face instruction* - not by passing written work from one student to another. The student who ignores this advice and makes his answers or work available to another shares responsibility and consequences if cheating occurs.

The faculty member who discovers a student preparing to cheat outside his/her own classroom setting (during an examination, in the library, or in the hallway, for example) will report the incident to the pertinent teacher. The classroom teacher who discovers or receives evidence of cheating will, at an appropriate time, confront the suspected student and, upon confirmation that cheating has taken place and conferral with the Assistant Principal for Academics, register an F as the assignment or test grade. The F grade can range from a 0% to the highest F possible in the teacher's grading scale. This decision should balance a strong consequence for the academic dishonesty with the support necessary for the student to move ahead successfully, having learned from his mistake. The teacher will also notify the student's parent(s) in writing of the specific offense. The Assistant Principal for Academics will maintain a record of these proceedings in powerschool until the student graduates or otherwise discontinues his enrollment at St. Louis University High School. If a second act of cheating occurs, the Assistant Principal for Academics will call for a conference with the student's parents to discuss the student's continued enrollment at St. Louis University High School. The manner of the offenses (quiz or examination? impulsive or premeditated? momentary or sustained?) will determine the severity of the consequences.

\* \* \* \* \*

# *Campus Ministry*

Rev. Pedro Arrupe, S.J., a former Superior General of the Society of Jesus, is quoted as follows:

*Today our prime educational objective must be to form men-for-others; men who live not for themselves but for God and His Christ - for the God-man who lived and died for all the world; men who cannot even conceive of love of God which does not include love for the least of their neighbors; men completely convinced that love of God which does not issue in justice is a farce.*

## *Community Service Program*

The Community Service Program (CSP) offers students of all four years weekend and after-school volunteer opportunities to place themselves at the service of others. Students go out into the greater St. Louis community to work with children who were born drug-addicted or HIV-exposed, homeless women and their children, elementary and junior-high students in underprivileged neighborhoods, people with inadequate housing and others in need. CSP is not a club, but the program cooperates with numerous clubs and agencies throughout the school to encourage broad participation.

## *Pastoral Program*

In accordance with the school's objective to form men-for-others the Pastoral Program offers activities which allow the love, which is outlined in the following quote from Saint Luke, to flourish and mature:

"You shall love the Lord your God

with all your heart,

with all your soul,

with all your strength,

and with your mind;

And you shall love your neighbor as yourself." (Luke 10, 27)

Through pastoral activities we seek to foster the aforementioned three loves of God, others, and self. This occurs through liturgies, prayer services, retreats, reconciliation days, and fast Fridays.

## *Senior Project*

"Senior Project" is the name given to the intensive, full-time "community service" experience for our fourth-year students. It was inaugurated in 1970 and has been a part of our curriculum since then. The time-period that is devoted to this is three weeks, in January, just prior to the start of the seniors' second semester. The various service projects that are offered to the seniors are designed to challenge them to go beyond the purely personal acquisition of knowledge and to use their skills and God-given talents in the service of others. The projects will give to the seniors a broader view of society's problems, a deeper appreciation of their own gifts, and an awareness of their responsibility as Christians to be of service to their fellow human beings. Once the seniors have returned to class, their experiences, as recorded in their journals, become the basis for reflection and discussion, particularly in their theology classes.

\* \* \* \* \*

# *Computer Science*

The computer department at SLUH realizes the importance of the computer in the lives of our students. As such, freshmen at SLUH are required to take the Computer Fundamentals course and sophomores, juniors, and seniors are offered a variety of elective courses.

SLUH offers the basic freshman course, Computer Fundamentals, during the summer as well as during the regular school year. This course is offered once in June and again in late July. This summer opportunity is open first to students wishing to free up time in their schedule to concentrate on their Fine Art or Music classes during the traditional school year then to students who have a special interest in computer science and desire to take

Introduction to C++ during their freshman year. Other students can enroll in this summer class as space allows.

**Required Computer Curriculum** (.500 credit)

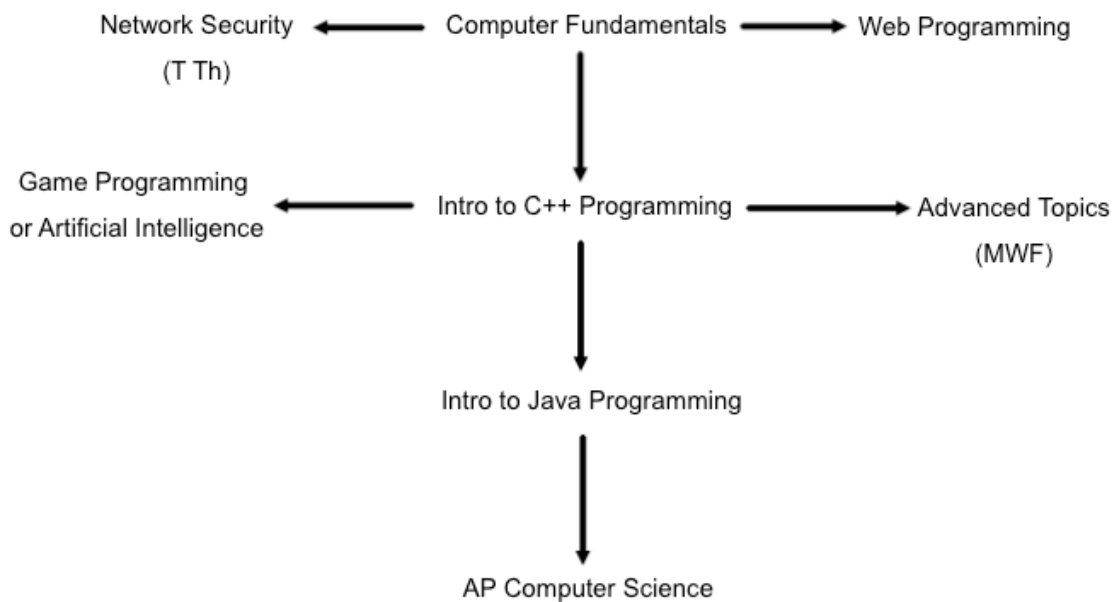
Computer Fundamentals  
(This course is required of all Freshmen.)

**Elective Computer Curriculum** (.500 credit)

Introduction to C++ Programming  
Introduction to Robotics  
Web Programming (HTML5, JavaScript and PHP)  
Advanced Computer Science Topics  
Game Programming  
Introduction to Artificial Intelligence  
Introduction to Java Programming  
Introduction to iPhone Application Development  
AP Computer Science  
Introduction to Network Security

**Typical Course Sequence for Computer Science**

(Arrows indicate that the previous course is a prerequisite.)



*Computer Fundamentals*

This is a required course for freshmen. In this course proper keyboarding techniques are taught, as well as computer concepts (input, process, output, bits, bytes, RAM, ROM, auxiliary storage, networks, telecommunications and more). Mac operating system concepts and an introduction to the Web page design using html is also part of this course. Software applications, including word processing, spreadsheet, and data base assignments, provide students with a hands-on learning experience. Scratch, a software development tool used to teach programming concepts, is also used in this class. Students learn how to use the computer as both a productivity tool as well as a tool for communication. Internet access is possible at all terminals.

*Introduction to C++*

This course includes an introduction to structured programming and a basic understanding of C++ syntax. A look at procedures, functions, selection statements, repeat loops, files and arrays will be the focus of the class. Emphasis on problem solving skills and variable tracing in completing selected programming assignments.

### *Introduction to Network Security*

The fastest growing area in Computer Science today is in Computer Security. St. Louis U High has established itself as a leader in the Computer Science field at the secondary level. It makes sense that we offer our students an opportunity to gain knowledge and understanding in this field. This will serve our students very well as they continue their CS education at the university level. For those students who do not move on to study CS at the university level, it will give them a basic understanding of the important issues that involve computer security and how it will impact them and their lives now, and in the future.

### *Web Programming – HTML5, JavaScript and PHP(Offered every other year)*

This class will introduce students to all the design and programming needed to create a web site. The programming part of the course includes HTML5 and CSS, JavaScript and PHP. The HTML is needed to create the basic static page and the CSS gives more flexibility and power to the project. JavaScript is a scripting language that allows client side processing to be done. The interactivity of the site and form validation are examples of this type of processing. PHP is a server side language that takes the data sent back to the server and allows this data to be processed and organized.

### *Computer Science: Advanced Topics (MWF)(Offered every other year)*

This course will cover topics that students will see in as they progress thru the Computer Science field. Data storage, graphic storage, adding and subtracting of data inside the computer, memory addressing, logic notation, switches, logic gates, modular encryption are some of the topics. Other topics include, recursion, linked lists, and binary trees. The course will discuss quantum computing and security issues as well. This course can be taken after the C++ course. It is a 3 day/week course for one semester giving the student the opportunity to take another course with this class.

### *Computer Game Programming(Offered every other year)*

This course prepares the students to use a fully featured game engine. Students will use the Unity game engine to produce several aspects of games and, in the end, produce a game of their own design. Working collaboratively in teams and knowledge sharing will be emphasized throughout the course. In addition to learning to work on a game program with others using a game engine, students will learn efficient production concepts that will help them streamline their work together. (Introduction to C++ is a prerequisite.)

### *Introduction to Artificial Intelligence(Offered every other year)*

This course introduces students to the world of artificial intelligence (AI) including a discussion of what AI is and is not. It will take up both the history and the future of AI including a study of the important people who have shaped AI and their contributions to the field. Students will study genetic algorithm, neural networks and fuzzy logic. They will also look closely at the programming code used in genetic algorithm. (Introduction to C++ is a prerequisite.)

### *Introduction to Java*

This course offers an introduction to object oriented programming and a basic understanding of Java syntax. A look at control structures, selection statements, loops, files, and arrays will be the discussed of the class. Also, encapsulation, inheritance and polymorphism will introduced. (Introduction to C++ is a prerequisite.)

### *Introduction to iPhone Application Development*

The course will introduce students to the objective-c programming language and the Cocoa-touch application programmer interface for the Apple iPhone and iTouch. Students will use the iPhone simulator built into the X-code development environment to develop and test their applications. Students will emerge with a basic understanding of how to create iPhone applications and enough experience for them to begin independent development. (Intro to C++ and Intro. to Java are prerequisites)

### *AP Computer Science (Can be taken for 1818 credit).*

The prerequisites for this course are Algebra, Geometry, Introduction to C++ and Introduction to Java. Students will use the object-oriented paradigm of the Java programming language and mathematical principles to address important computer science topics like static and dynamic arrays, recursion, algorithm efficiency, elementary data

structures, searching and sorting, and many other topics. Students will be required to complete a significant amount of programming in the course and will practice for the AP Computer Science exam.

#### *Introduction to Robotics*

The course will introduce students to Robotics and the Robot-C programming language. The students will apply the language and their problem solving skills to several group related projects. These projects will focus on different sensor related assignments.

• \* \* \* \* \*

## *English*

The English Department intends that our students grow during their four years of English in their ability to write well (with clarity, precision, energy, grace and truth) and to read well (understanding with heart and mind the direct meaning and more distant implications of words, images, characters and events).

#### *Freshman English*

Freshman English prepares students to read with greater understanding and to write with greater precision. A concentrated study of grammar allows students to gain a deeper comprehension of their language. Students also study the specific vocabulary associated with their reading. Writing assignments emphasize the relationship between forceful thesis statements, topic sentences that echo the thesis, and well-chosen supporting details. Other writing assignments require narration and description. The students read and discuss several longer pieces—for example, *The Odyssey*, *Narrative of the Life of Frederick Douglass*, *Huckleberry Finn*, *Romeo and Juliet*, and *Lord of the Flies*.

#### *The English Tutorial*

During one activity period each week, students who demonstrate a need for additional support in Freshman English attend this extra thirty-minute class. The tutorial is taught by the students' regular English teachers and focuses on reinforcing the instruction in the class, answering students' questions, practicing skills, and discussing the students' methods of preparing for class, quizzes, and tests.

#### *Sophomore English*

The sophomore curriculum continues the department's emphasis on close analytic reading and precise writing. Early in the year, students learn Frye's definitions of comedy and irony and use these to interpret the characters and outcomes of poems and short stories (such as those of Irish writer Frank O'Connor). Students talk and write about these short works and, later in the year, about the four or five longer works (such as *Sir Gawain and the Green Knight*, "*Master Harold*"... and the boys, Shakespeare's *Macbeth*, Kent Haruf's *Plainsong*, and J. D. Salinger's *Catcher in the Rye*). Most writing assignments demand close analysis of these text in support of a clear interpretive thesis, but some assignments allow students to practice narrative and descriptive writing. Instead of the systematic study of grammar included in the freshman curriculum, Sophomore English addresses common usage problems, especially those that appear on standardized tests for college admission.

#### *Junior English*

The short story, poetry, the novel, and a Shakespearean play (usually *Othello* or *Much Ado about Nothing*) receive approximately equal attention. The course requires students to write closely focused, well-organized, longer essays in and out of class. These essays demand a responsive reading of the text, forceful theses, careful presentation of evidence, tight transitions, and an intelligent structure. Students also write and rewrite an autobiographical essay of the sort that many colleges require on applications for admission.

#### **1818 Classes**

Through St. Louis University's 1-8-1-8 Program, students may take AP English Literature and most of the senior electives for college credit. Students may earn three hours of credit for each SLUH class that matches St. Louis University course for which the student has not already received credit. Numbers in

parentheses indicate which St. Louis University classes the SLUH classes match.

#### *AP English Literature/Jr. Honors (En190, En202)*

In its structure, this course resembles Junior English; but the writing instruction, presuming mastery of basic skills, challenges students to write with considerable sophistication and insight. Readings are often longer and more challenging: *Hamlet*, *Light in August*, *As I Lay Dying* or *Jude the Obscure*, for instance. Students in this course are often ready to perform well on the Advanced Placement test in Literature and Composition at the end of their junior year, or they may elect to take the course for St. Louis University credit.

#### *Senior English Electives*

All of the following are one-semester electives. The senior elective offerings change somewhat from year to year. In all of these electives, except Reading and Writing Fiction, students write about the literature they read. Most of the classes require other kinds of writing as well: e.g., personal essays, imitations, poetry. All Senior electives except Reading and Writing Fiction may be taken for college credit through St. Louis University's 1818 Program. Each class a student takes for 1818 credit must match a different SLU class from any he has already taken. He may not earn credit for a 202 course more than once, for instance. The numbers in parentheses next to course names indicate which St. Louis University courses the SLUH elective matches.

#### *African-American Voices*

This course will give students a sense of the African American experience from slavery to freedom and beyond, primarily through close reading of the novels, poems, stories, essays, memoirs, songs, and films that African Americans have produced. The course will likely include authors such as Harriet Jacobs, Charles W. Chesnutt, Booker T. Washington, W. E. B. Du Bois, Langston Hughes, James Baldwin, Ralph Ellison, Gerald Early, and ZZ Packer. Students will study key periods in African American history, discussing slavery, Reconstruction and its collapse, the New Negro Renaissance, the Great Migration, the Civil Rights Movement, as well as contemporary issues. The course will feature a special emphasis on the African American experience in St. Louis. Films for the course include Marlon Riggs's *Ethnic Notions* and *Eyes on the Prize*, the seminal documentary produced by SLUH alumnus Henry Hampton. Students will also study cultural and political figures like Marcus Garvey, Duke Ellington, Louis Armstrong, Bessie Smith, Billie Holiday, Martin Luther King, Jr., Malcolm X, Stokely Carmichael, and Barack Obama. We will consider the meaning of African American contributions to blues, jazz, R&B, and hip-hop. The course will be centered on class discussion, and it will be writing intensive.

#### *Alienated Hero*

This course will focus on protagonists who do not fit into society, rebels who stand outside or beyond the social norms. Class work will include quizzes, tests, and analytic essays. Possible books include *The Things They Carried*, *Death of Salesman*, *A Streetcar Named Desire*, and *The Handmaid's Tale*. The course will also consider a few films or episodes from television, perhaps *Invasion of the Body Snatchers*, *The Wild Bunch*, *Children of Men*, *Richard III*, and/or *The Office* (UK).

#### *American Literature*

What's so "American" about American culture? Are we a nation of cowboys and pioneers? Or of Puritans and accountants? Why is Bill Gates's hero Jay Gatsby? What is the American dream, and where did that idea come from, and how has it developed over the course of our brief history? We will study selected works from major American writers and filmmakers in order to discover what is specifically "American" about these works and to see what this literature tells us about the idea of America. We will study well-known early American authors in order to explore the foundations of central American ideas, and then look at how more contemporary 20th and even 21st century writers and filmmakers build on those foundations. Films studied in the past have included *The Searchers*, *Chinatown*, *Man on Wire*, and *Six Degrees of Separation*.

#### *British Literature: A Survey*

Why do knights ride horses? Where do the monsters live? What are the servants up to? How do I know if I'm a gentleman and why should I care? Why are we all always falling for the wrong lover? What is the proper way to make tea? In this survey course Students will be introduced to significant works of British writers from the Middle Ages through the 20th century. Our goal is to acquire an understanding of the ideas and literary texts that form the basis of an English-speaking culture. All readings will be considered in a literary and historical context so that the student will gain an understanding of the historical, cultural and philosophical influences that shape the texts. Students will express their understanding of key concepts through class discussions, various writing assignments, a project and a final exam.

### *Dante & the Modern World*

This course will guide students through all three volumes of Dante's masterwork, the *Divine Comedy*, journeying with the poet-pilgrim through the three realms of the afterlife. In the *Inferno* (Hell) Dante's portrait of the lost souls in torment serves as a meditation on the emotional and spiritual destruction we unleash in our own lives when we choose selfishness over love—and on the ways in which that destruction ripples outward, poisoning our communal institutions of religion and government. In *Purgatorio* (Purgatory) Dante re-examines suffering through the lens of hope, exploring the possibility that a life of discipline and self-surrender can open the way to a new kind of freedom. Finally, in *Paradiso* (Heaven) Dante reveals to us the vision of cosmic harmony and all-encompassing beauty toward which we have been journeying through all three volumes. Just as Dante's poem tries to connect the Greek and Roman literature of his past to the urgent questions of his own day, so our course will focus on the way that Dante's writing (at the very beginning of the modern age) continues to speak to us in the twenty-first century. With that goal in mind, we will do all our reading of Dante in modern English translation, supplement that reading with contemporary poems, short stories, and/or films inspired by the *Divine Comedy*, and focus essay topics on connections between Dante's world and our own. In addition to such essays, students should expect regular reading quizzes, two or three tests on the objective content of the course, and a culminating creative project.

### *Introduction to Irish Literature*

Is Ireland doomed to repeat forever the past it knows perhaps too well: invasions, English oppression—real and imagined, fatal hunger strikes, aborted revolutions, bombings and snipers, leaders who sometimes inspire, sometimes self-destruct and never unite the many factions of Ireland for very long? By studying some of the best sagas, poems, plays, stories, and films of the culture, we can dig beneath clichés like shamrocks and leprechauns and blarney to answer questions like this one, improve our understanding of Ireland's compelling history and, most of all, enjoy some of the world's best literature—in other words, get at the good turf. Students should expect to write essays, take tests, and develop an independent project through which they explore their own interests in a way that leads to a demonstration of what they have learned.

### *The Literature of Initiation*

The texts of this course explore events central to the human psyche: first encounters with significant and often traumatic events. Often these events mark the passage from childhood to adulthood. Some societies mark the coming of age with rituals of initiation. More often in modern literature, the initiation is not planned but forced upon the protagonist by hard circumstances. The course will also focus on initiations by which an adult steps into a circle of hidden and often terrifying knowledge. Possible texts include *Into the Wild*, Hemingway Short Stories, *Goodbye Columbus*, *The Glass Castle*, *The Road*, *The Kite Runner*, and *Extremely Loud and Incredibly Close*. We will examine individuals who are changed, for better and worse, by radical circumstances and thereby initiated into alternative ways of life. Possible movies include two of the following: *Winter's Bone*, *Ulee's Gold*, *Juno*, *My Life as a Dog*, and *The Graduate*.

### *Poetry*

This course is intended to provide students with the broad background and practice necessary for the analysis, appreciation and composition of poems. It is an introductory course meant to expose students to poetry as both readers and writers of the genre. Although it is impossible to cover everything that ought to be covered, by the end of the course, students should be aware of the history and richness of the English language and its poetic tradition, be acquainted with a few major poets from different periods in literary history (from the medieval to the contemporary), understand the basic, technical aspects of formal verse in English (what is called prosody), have improved their skill in the close reading of poems, have a sense of

the importance of the sound of poems, be able to convey that sense through polished recitation, and have written and revised a portfolio of finished, original poems of which they can (we hope) be proud.

*Reading and Writing Fiction* (cannot be taken for 1818 credit)

Students will spend about two-fifths of the semester reading short stories and the other three fifths writing them. The stories we read will be those of contemporary authors whose voices, methods, and themes students can absorb and emulate. At first the class will read and discuss analytically one author's stories, probably those of Tobias Wolff, Ethan Canin and Maile Meloy. Gradually, the reading and class activities will direct their attention less to the reader's experience of the stories and more to the writer's craft, particularly his or her ways of creating characters, scenes and dialogue. In their journals, students will respond to specific assignments to excavate their own experience as well as their imaginations for scenes and plots. Students will spend many days writing in the writing lab and many nights rewriting. By the end of each quarter, students will submit a portfolio of fifteen pages of revised and polished fiction, not including science fiction, fantasy, and horror stories. Some days will be set aside for small- and large-group conferences about student work. Late in the course, one week will be reserved for students to devote themselves to reading independently (and journaling about) a collection of stories by a single writer (perhaps John Cheever, Raymond Carver, Bobbie Ann Mason, Anton Chekhov, George Saunders, Jhumpa Lahiri, Richard Wright, Dan Stolar, or Tim O'Brien).

*Satire*

What's so funny about what's wrong with the world? This course will investigate the great literary tradition of wit and humor in the service of social critique and reform: satire. How important is satire to a culture? Can satire be something more than entertainment, disaffection, or a step somewhere on the slippery slope to cynicism? The course will investigate its expression in varied genres, explore numerous types of satire, and consider the techniques of master satirists within their historical context—from the great Ancient Roman satirists to 21<sup>st</sup> century satirists writing today. We will dissect and at times imitate various forms of satire and read, discuss, and analyze satirical poems, essays, novels, short fiction, and films; we'll also investigate some satirical 20<sup>th</sup> and 21<sup>st</sup> century multimedia—television, cartoons, online newspapers, and websites to consider how this fine art of mockery has progressed over time, and why it is still one of the most common and popular ways to attack vice and corruption in our world. The course will certainly feature the essentials: Horace and Juvenal, Chaucer, Swift. Novels or collections of stories that might be read include Kurt Vonnegut's *Slaughterhouse Five*, George Saunders' *In Persuasion Nation*, and Swift's *Gulliver's Travels*. Two short formal papers (2-3 pages) and a longer culminating course project required, in addition to regular reading quizzes, weekly reading response journals and assignments, and two to three tests that cover course content (readings, historical contexts, and applying techniques of satire to demonstrate comprehension).

*Shakespeare*

This study of Shakespeare emphasizes the variety as well as depth of his achievement. The class will read and discuss some of the sonnets and four plays—including perhaps Richard II, Measure for Measure, Midsummer's Night's Dream, and King Lear. The approach to the plays will emphasize performance criticism—that is, consideration of how the texts suggest staging, costume, gesture, and intonation.

*Short Story Writers*

When a new acquaintance tells you one joke, you may understand the joke, but you hardly know the joker: he or she may only be passing on a story his mechanic recently told him. But when a joker tells you several stories, you can begin to figure her out: you begin to see a pattern in her interests and obsessions. By reading a dozen or so stories by each of four or so authors (perhaps Hawthorne, Hemingway, Flannery O'Connor, Alice Munro, George Saunders and/or Raymond Carver), we see the maker of the stories as well as the stories themselves. And seeing the creator, we then understand better the creation.

\* \* \* \* \*

## *Fine Arts*

The Fine Arts Department is dedicated to fostering all that is creative and intuitive in our students by offering a wide range of visual and performing arts courses. Though the content and teaching methodologies are diverse, each offers



to students an opportunity to develop an aesthetic and critical sense, enabling them to create and comprehend a work of art and develop an understanding of an aspect for the creative process.

The department believes the study of Fine Arts to be a process-oriented act as well as one requiring critical thought, careful training and formidable preparation. Our faculty aims to find a balance between intuition and training, between imagination and discipline.

We recognize our students as both potential creators and potential patrons of the arts. We appreciate the unique styles, gifts, insights and humanity of each individual.

It is our belief that through the study of an participation in the arts, students gain insights into other peoples and cultures and through self expression, gain insights into themselves.

*Freshman Fine Arts Survey* (One-semester Freshman Fine Arts elective)

a dynamic team-taught course that offers students the opportunity to experience studio art, music and Theater in an integrated setting. The basics of design, color, drawing, movement, rhythm and acting will be explored through a combination of hands-on activities, performance exercises, lectures and computer use. The goal of this course is to provide the student with a broader experience in the arts and background for more informed choices for subsequent Fine Arts courses. No experience necessary.

*Oral Interpretation of Literature* (Full year elective for sophomores; meets three days per week; for .6 credit; no prerequisite)

Interpretation is the art of communicating to an audience, from the printed page, a work of literary art in its intellectual, emotional and aesthetic entirety. Students will learn to analyze, prepare and present material from prose, poetry and drama. The course will include the study of solo, small group and large group performance techniques. We will focus on developing body posture, strong vocal production, eye contact and gestural skills in service of the given texts. Sophomores who take this course would be able to take Physical Education or Weights the other two days per week.

*Oral Communication* (One-semester elective; sophomores, juniors and seniors)

The purposes of the course are three fold: (1) A basic understanding of the processes and methods of communication; (2) The practice of these processes through a number of oral presentations; and (3) An increase in general knowledge. The basic understanding is achieved through readings and class discussion. Examples of the oral presentations are informative speeches, demonstration speeches, persuasive speeches, etc. The general knowledge comes from listening to the above presentations.

*Acting Improvisation* (One-semester elective; sophomores, juniors, and seniors)

Improvisation is the art of crafting dialogue, stage blocking, and characters on the fly. This course pushes students to make bold choices, think on their feet, listen to each other, and work as an ensemble. We learn the tools and fundamentals of Chicago-style, longform improvisation in conjunction with readings, acting games, and scene work exercises. While certainly invaluable to the student interested in acting, this course is helpful to anyone looking to experience more effective group dynamics and comfort in front of crowds.

*Acting Scenes* (One-semester elective; juniors, seniors)

The purpose of this course is to give the student a basic understanding to the creative process of the actor as he approaches a scene from a script. The course starts with a study of some of the fundamentals of acting and script analysis. The theories learned in the first section are then applied to a number of solo and multiple person scenes presented in class. During the semester, there are at least two field trips to local professional theater productions in order to observe acting and production for class discussion and student enrichment.

*Introduction to Technical Theater*

(Full year elective; meets two days per week) for .5 credit; juniors and seniors; no prerequisite)

The purpose of this course is to teach students the fundamentals of technical theater. The topics covered include the following: tool identification, use, and safety; reading and translation of blue prints; making simple flats, parallels, and stair units; lighting, its identification, use, and safety; sound, its identification, use, and safety. Student class projects will probably require work in studio/shop outside of class time.

*Advanced Technical Theater*

(Full year elective; meets two days per week for .5 credit; juniors and seniors; prerequisite is Introduction to Technical Theater or Departmental Approval)

In addition to the review of those items taught in Introduction to Technical Theater, the student will study: scenic

painting, lighting design, sound design, fundamentals of scene design, i.e., script analysis, design problems, floor plans, rendering, and model making. Student class projects will probably require work in studio/shop outside of class time.

*Fundamentals of Film* (one-semester elective; freshman)

The central purpose of this course is to train a student to watch a movie intelligently, to "read" it as he would any text. The student is trained to examine movies for their specific details of plot, dialogue, camera placement, etc. Through this process, the student will begin to watch movies actively and to think critically about them. Among the movies that will be watched are: Hitchcock's North By Northwest, Chaplin's The Gold Rush, the Marx Brothers' Duck Soup, The Treasure of the Sierra Madre, Rebel Without a Cause, On the Waterfront, Breaking Away, and Schindler's List. The films screened in class will serve as the primary texts. However, students will do some reading at home from a textbook and handouts. They will also have some written homework and will take short-answer tests. They will constantly be working to think about what they see.

*American Film Directors* (One-semester elective; juniors and seniors)

The central goal of this course is to train students to watch film intelligently. Another goal is to equip students with a more intelligent understanding of the major directors who worked in American film. The course attempts to analyze their cinematic methods and recurring themes. Among the movies we will watch are: *Psycho*, *Rear Window*, *Citizen Kane*, *The Searchers*, *The Godfather*, and *Raging Bull*. In-class and out of class work is required to indicate the student's ability for film criticism and evaluation and for critical thinking.

*American Film Genres* (One-semester elective; juniors and seniors)

The central goal of this course is to train students to watch film intelligently. Another goal is to equip students with a more intelligent understanding of the genres of American film. The course focuses on: gangster, film noir, horror/science fiction, comedy, war, and Westerns. Each of these types has a specific tradition--recurring themes, plots, and characters. Among the movies we will watch are: *Bonnie & Clyde*, *Chinatown*, *The Fly*, *The Road Warrior*, *Platoon*, and *The Wild Bunch*. In class and out of class work is required to indicate the student's ability for film criticism and evaluation and for critical thinking.

***Freshman Band Program***

Freshmen who participate in a full-year band class must take the Computer Fundamentals class during the summer before their freshman year.

**Fundamentals of Band** (One semester course; no prerequisite) (To continue in the band program sophomore year students must complete fundamentals of band and take the freshman band class second semester of their freshman year.)

This course gives students an opportunity to learn how to play a band instrument in a group experience. It helps students discover if they have any talent in music by providing them with a semester of "hands on" experience with an instrument. Students learn proper playing techniques, how to read music, and basic musicianship skills. Students who want a chance to try out a musical instrument will find this course very exciting and rewarding. Instruments may be rented from the school or local music stores. Most student elect to continue in the Freshman Band during the second semester if they take the Computer Fundamentals class during the summer.

**Freshman Band** (Second semester; prerequisite: Fundamentals of Band)

The band studies and performs popular, jazz and classical music. Musical style and form is learned by analyzing, practicing and performing representative music. Included in the course is the study of basic musicianship and instrumental techniques. The group performs at concerts.

***Upper Level Band Program***

**Lab Band** (Full year course; prerequisite: Fundamentals/Freshman band or department approval and placement)

The Lab Band class meets three days a week during the regular school day. This course is intended only for piano, guitar and bass players that plan to continue into upper level bands. This intermediate level ensemble is open to students who have taken Freshman Band or have previous private instruction on their instrument. Primarily a course for Sophomores, this band practices jazz and traditional scales, chord voicing, chord structure, improvisation and performs in popular, jazz and rock styles. The band performs in concerts and school events.

**Concert Band.** (Full year course)

The Concert Band meets five days a week during the regular school day. All incoming freshman band and string

students that participated in their 8<sup>th</sup> grade orchestra or band are placed in this intermediate level band. It is SLUH's policy that freshman band and string students must be enrolled in this ensemble to participate in District and State activities. This ensemble studies and performs popular, jazz, and classical music. Students will continue to develop their performance and analytical skills. The Concert band performs in concerts and school events. Some school instruments are available to students who need to rent an instrument.

**Symphonic Band** (Full year course; prerequisite: concert band) meets five days a week during the regular school day. It is SLUH's policy that band and string students must be enrolled in this ensemble to participate in District and State activities.

This band is an advanced performance ensemble that studies and performs a wide variety of music, representing all musical styles, while stressing the elements of musical performance and understanding. The Symphonic Band performs at concerts, music festivals and school events. Some school instruments are available for students who need to rent an instrument. Students must be enrolled in a daytime instrumental ensemble to be chosen for pit orchestra duty.

**Chamber Orchestra (Full year course: prerequisite-previous experience and director approval)**

The Chamber Orchestra meets five day a week during the regular school day. This ensemble studies and performs a wide variety of music, representing all music styles, while stressing the elements of musical performance and understanding. Students will perform as a whole, but will also focus on small ensemble performance and literature (trios, quartets, etc...) as well as solo and audition preparation. Students will receive clinics from renowned string performers and private instruction from string teachers. The group(s) will perform at concerts, music festivals, and school and community events.

### *Jazz Program*

**Note:** To participate in the Jazz Program a student must be in the Symphonic Band or Concert Band (except piano and guitar players).

**Jazz Band I** (Full year course; prerequisite: by audition only and must be a Symphonic Band member) (Prerequisite for piano, guitar and bass guitar players: by audition only)

This course meets during zero hour three days a week. To qualify for Jazz Band I, students must be proficient on their instrument, good music readers, and must have a strong desire to seriously study and perform the contemporary and historical styles of music. Primarily a course for seniors and very advanced underclassmen, the various jazz styles are studied in this band by analyzing, practicing, and performing representative music. Performances are critically analyzed and the quality of the group is maintained at the highest possible standard. The group performs in school and public events both locally and nationally.

**Jazz Band II** (Full year course)

(Prerequisite for piano, guitar and bass guitar players: by audition only)

This course meets during zero hour three days a week. This intermediate Jazz Band will study and perform a wide variety of jazz music from the traditional Big Band standards to the contemporary jazz/rock styles. Musical style and form is learned by analyzing and performing representative music. Basic improvisation skills will be developed. The group performs at concerts, competitions, festivals and local tours.

**Combo** (Full year course; prerequisite: Concert band, lab Band)

The Combo meets during zero hour two days a week and is available to students enrolled in the instrumental classes during the day and rhythm section players that have completed lab Band. Students will study and perform a variety of jazz styles and develop basic improvisational skills. The group will perform at school concerts and alumni events.

**Music Theory** : In addition to receiving music theory instruction within the vocal and instrumental classes a student may select to further their studies in these **independent study courses**:

*Music Theory I* (Full year course; prerequisite: department approval)

This class advances the student's note reading skills and ear training abilities. Students learn the structure of scales, intervals and chords. Much of the skill training is done in our computer music lab. Basic composition and keyboard skills are introduced.

*Music Theory II* (Full year course; prerequisite: department approval)

This class continues to develop the skills taught in Music Theory I and covers the more advanced structures in melody, harmony and rhythm. Musical styles and forms are learned through analysis of music and student composition.

*Music Theory III* (Full year course; prerequisite: department approval)

Students who want to continue to study music in college, either as a major or minor, need to get a strong background in music theory to help ready them for college level work. The content of the course is geared to prepare students for the AP test in music theory and includes voice leading and four part harmony writing. Melodic, rhythmic and harmonic dictation skills are developed as well as form and analysis of common practical musical styles.

### ***Vocal Music Program***

*Varsity Chorus* (Full year elective, five days per week; open to all four years, but by audition only)

This chorus is an advanced performance organization that specializes in a variety of contemporary musical styles. Members stage and/or choreograph many of the selections. Students learn stage movements, vocal technique, microphone technique, basic music reading, and ensemble singing which help the students prepare for both theater and music auditions. The repertoire includes jazz and Broadway music as well as classical selections that it performs with the Concert Choruses. Besides performances here at S.L.U.H., Varsity Chorus performs off-campus for a variety of audiences. Varsity Chorus goes on a major tour every two years. Past tours have included performances in New Orleans, Kansas City, New York City, Denver, Phoenix and San Jose, Los Angeles., and in 2012 China.

*Concert Chorus* Full or half year course (full year to fulfill fine arts requirement), three days per week zero-hour; three days per week during the school day; Prerequisite: none

Concert chorus is available to all students. It meets three times a week at Zero-Hour (earns .3 credit per semester) or three times a week during the school day (earns .3 credit per semester). These Choruses performs a wide variety of musical styles. The students learn basic vocal technique, music reading and performance skills. These students combine with Varsity Chorus to form a large combined Chorus which performs on the Fall, Winter, Late Winter, and Spring concerts and other off-campus performances.

### ***Studio Art Program***

*Drawing I*

(One-semester elective open to freshmen (2nd semester only) sophomores, juniors and seniors or as a full year, 3 day per week course; no prerequisite)

The student learns the importance of composition and the use of the primary media (pencil, charcoal, pen and ink, brush and ink) and the elements of drawing (line, shape, composition, perspective, shading, etc.) through a variety of exercises and projects. The student works both from still life and imagination.

*Drawing II* (A second-semester elective; sophomores, juniors and seniors; prerequisite: Drawing I)

This second semester course in drawing builds on the foundations taught in Drawing I. In addition to the basics as described above, there is the study of portraiture, figure drawing, and landscape drawing in color. This course is recommended for the student who wants to study drawing in depth and for anyone who plans to take additional art courses.

*Ceramics I* (A one-semester elective; juniors and seniors; no prerequisite)

This class is an introduction to the chemical make up and various types of clay. Four building techniques used in construction of ceramics pieces will be taught and various glaze techniques used to finish a completed ceramics piece.

*Ceramics II* (A one-semester elective; juniors and seniors; prerequisite: Ceramics I)

In this course students will develop projects which expand, both technically and conceptually on basic techniques already learned. Students wishing to develop skill using the wheel may devote the semester to that end. Students will also learn to develop and mix their own glazes.

*Advanced Ceramics* (A one-semester elective; juniors and seniors; prerequisite: Ceramics I & II)

Advanced methods of clay hand building techniques and throwing on the wheel will be pursued by students. They will also be expected to take more initiative in developing projects on their own. More detailed technical information on clay, glazes and kilns will be presented. Students will also become more attentive to and critical of the form and design of their projects and more proficient in glaze application and mixing.

*Painting in Acrylics* (A one-semester elective open to sophomores, juniors and seniors; prerequisite: Drawing I) The basic techniques of painting are introduced, starting with exercises in black and white. The student then learns about

color, how to mix colors, and how colors interact. He works from still life, landscape, and imagination.

*Painting in Watercolor* (A one-semester elective open to sophomores, juniors and seniors; prerequisite: Drawing I)

In this course basic watercolor techniques and materials are introduced, followed by independent work in landscape, still life, portraiture, and design.

*Printmaking* (one-semester elective open to sophomores, juniors and seniors; prerequisite: Drawing I)

This course will introduce the student to a variety of printmaking techniques: mono-prints, linoleum block, embossing and etching. In each medium the student will produce a limited edition of prints.

*Two-Dimensional Design* (one-semester course or full year, 3 day per week course; sophomores, juniors, seniors; no prerequisite for this class)

This course addresses the principles and elements of design, they are used as a foundation as well as for learning effective design techniques to design in an orderly plan. The computer along with traditional techniques will be taught, and advertising studied. The student learns practical application through his work producing original and creative designs.

*Three-Dimensional Design* (one-semester elective open to juniors and seniors; prerequisite: One semester of studio art beyond Freshman Survey of Art)

An Introduction to the basic elements of 3-dimensional design and structural problem solving: such as order, balance, movement, proportion, and rhythm. Students will work with a range of materials including, but not limited to plaster, clay, chipboard, aluminum and wire. Within the limits of the materials students can experiment with linear and spatial arrangements.

### ***Dance Program***

#### ***Dance I***

This is a full-year course for sophomore, juniors and seniors. It is taught twice a week as an option to Physical Education class for a half unit of Fine Arts credit or half a unit of PE credit. Dance I is an introductory course in dance focusing on performance as well as the social aspects of dance. Performance studies include musical theater dance, jazz, hip hop, along with musical development, coordination and flexibility. Classes include complete full-body warm-ups and various combinations. Dance I students perform in a Fine Arts Concert at the end of each semester.

#### ***Dance II***

This is a full-year course for juniors and seniors. It is taught twice a week as an option to Physical Education class for a half unit of Fine Arts credit or half a unit of PE credit. This course is a continuation of material completed in Dance I. Dance II offers a more advanced level and new challenges in performance jazz, tap, fundamentals of dance, and specific student dance interests. Dance II students perform in the Fine Arts Concerts.

#### ***After School Dance I***

This is a full-year course for all class years. It is taught twice a week after school as an option to Physical Education class for a half unit of Fine Arts credit or half a unit of PE credit. It is an introductory course in dance focusing on performance aspects of dance. Studies include musical theater dance, jazz, hip hop along with coordination and flexibility. Classes include complete full-body warm-ups and various combinations. After School Dance students perform in the Fine Arts Concerts. Students may take this course more than once.

#### ***After School Dance II***

This is a full-year course for juniors and seniors. It is taught twice a week as an option to Physical Education class for a half unit of Fine Arts credit or half a unit of PE credit. This course is a continuation of material completed in Dance I or After School Dance I. After School Dance II offers a more advanced level and new challenges in performance jazz, tap, fundamentals of dance, partnering and specific student dance interests. After School Dance II students perform in the Fine Arts Concerts. Students may take this course more than once.

\* \* \* \* \*

## ***Foreign Languages***

All students are required to successfully complete two credits in the same foreign language. Greek I and all other languages above the II level are electives.

## **CHINESE**

### *Chinese I*

This course is an introduction Chinese language course for students who have none or little prior experience in the language. It is to develop students' four skills of listening, speaking, reading, and writing the Chinese language, as well as gaining understanding of Chinese culture. Pinyin (Phonetic symbols) will be used as a supplementary tool to learn the spoken language. Students will be asked to recognize simplified characters from memory. Computer-assisted technology and online course materials are an integral part of the instruction in this class. Ipad is integrated in the class instruction in the learning of Chinese language. Students will acquire basic Chinese computing skills in order to produce typed characters in simplified forms. One hundred characters and their combinations are studied with occasional practice in writing with a Chinese Brush.

### *Chinese II*

This course is a continuation course designed for students who already have the basics of Chinese (e.g. pinyin, four tones), learned either through taking Chinese I, or through some other relevant experience. The emphasis of the course is on listening, speaking and reading Chinese, plus exercises with writing skills. Students will develop their vocabulary capacity through reading and improve daily oral Chinese. Communicating in Chinese II will enable students to use Chinese comfortably in making travel arrangements and in daily conversation. Additionally, the course will integrate the Chinese culture into the language learning and enhance the practices of Chinese language. This course will integrate Ipad in the learning of the Chinese language. An additional 150 characters and their combinations are studied. Games, contests and songs are used to keep up interest and practice of the language. Students have the opportunity to of travel to China or Taiwan in the summer for the expansion of culture awareness.

### *Chinese III*

This course is designed for students who successfully completed Chinese I and II courses. As an intermediate course, students will continue to develop listening, speaking, reading and writing skills for the Chinese language. They will also learn more complex grammatical structures and sentence patterns to communicate on familiar topics through interaction and description. Students will also participate in conversation, sign Chinese songs, create and perform skits in Chinese. This class is enhanced with audio-visual aids, games, songs, short films, and festival celebrations. Language lab will be used as an integral part of the curriculum to strengthen students' learning. Great effort is made to speak only Chinese in Chinese, with the exception of complex grammar explanations. The goal is to help students develop proficiency to understand and speak Chinese. Students in Chinese III have chance to visit our sister school Nanjing Foreign language school for 2 weeks in the spring break. Students also have the opportunity to travel to China or Taiwan in the summer for the expansion of Culture awareness.

### *Chinese IV*

This advanced level course is designed to further students' progress in the development of the four language skills while deepening their insight into various aspects of the culture of China. Students will learn Chinese through pop TV shows, movies, and music. Also, students will participate in the pen pal program to communicate with same age Chinese teens. Students will gain greater insight into the structure of Chinese language through a focus on popular idiomatic phrases and the goal is to speak and write like a native Chinese. Students have the opportunity to showcase their Chinese skills by producing a video drama. They also have the opportunity to visit our sister school, Nanjing Foreign Language school for 2 weeks during the spring break and travel to China or Taiwan for the expansion of the Culture awareness.

## **FRENCH**

### *French I*

The main goal of this first year is to enable the student to speak French and to understand spoken French at a level where he could function in a French-speaking environment in areas of basic necessity. The reading and writing skills are also developed, but the emphasis is on speaking and listening. The text provides a series of "culture capsules" that center on real-life situations appropriate to the teenager. A major component of the course is regular and consistent use of the language in class, through the use of flash dialogues, role-playing, puppet-shows and reader's theater techniques. Giving students an appreciation of another culture is also an important goal of the course; to this

end, we listen to/learn culturally important folksongs and popular songs, and look at major artworks together, using these as a vehicle to express opinions, likes and preferences.

### *French II*

The second-year course has two main goals: to reinforce and develop previously learned grammar and vocabulary, and to use them in speaking, reading, listening, and writing. The text is supplemented by realia from France, including news broadcasts, magazines, and newspapers as well as video clips of current events, popular songs, and cultural practices around holidays. We read several children's books in French together; these allow for practice of essential phrases and structures through engaging repetition within a story context, and a template for simple conversation about the often profound themes simply discussed in excellent children's literature.

### *French III*

At this point the foreign language course is an elective. It is assumed, therefore, that the student taking the course will have a demonstrated record of success in the first two years and will have the motivation to begin to master the language in its oral and written complexities as well as have a desire to assimilate as much of the French culture as can be assimilated through the normal classroom outlets. Correct speaking of French is a high priority. The basis for the acquisition of the speaking and listening skills is the text, a series of "culture capsules" that are age-appropriate and topic-appropriate. Exposure to more complicated and more sophisticated oral French is provided through the regular and consistent use of targeted readings and mind-maps for developing thought before speaking, to the end of substantive group conversation. Since practice is essential to progress, the students and teacher are speaking *in French* during much of the class time. Nightly study of class notes is essential to retention of new structures for use in class. We offer 1818 credit through St. Louis University for the second semester of FR 3.

### *French IV*

The more complex structures of the French language are mastered in this course. The main thrust of the course however is a genuine understanding and appreciation of the culture and civilization of France. Several areas studied are: the history and government of France, French literature, French entertainment (theater, film, and music), French art (painting, sculpture, architecture) and French customs and traditions. In French IV students are expected to focus the entire class period on *thinking in French*. They must come prepared each day to use the material from the previous introduction in discussions of increasing complexity. They will have announced quizzes throughout the year and a group video project each quarter. We offer 1818 credit through St. Louis University for both semesters of FR 4.

### *French V*

This elective earns half-credit for each semester, and is available as a tutorial to students who entered SLUH in FR 2 as Freshmen. They will read *Le Petit Prince*, by Antoine de St. Exupéry and have focused conversations on topics of French literature and culture. Practice with the AP course book for French is optional, should the student be interested in taking the AP test at the end of the year.

## **GREEK**

### *Greek I*

Greek I is an elective that is open to seniors who are currently studying another foreign language or who did not take a third year of a foreign language during their Junior year. This course is designed to give students a foundation in ancient Greek -- the grammar, syntax and structure of the language. The course will also introduce students to Greek history and culture with emphasis on the ideals and values of 5th century Athens. Readings from Herodotus and Thucydides, in translation and in the original, will enhance the students' appreciation of the forces at work in Greece between the time of the Persian Wars and the Peloponnesian War. In addition to developing the students' skills in translation, there is a unit devoted to the study of English derivatives from Greek roots.

## **LATIN**

### *Latin I*

The course work in Latin I is designed to give the student a mastery of the basic grammar and vocabulary of the language. The study of Latin grammar should aid the students' understanding of English grammar while a knowledge of Latin words will build English vocabulary skills. In addition to working in the language itself, the student is introduced to material dealing with the daily life of the Romans from the first century B.C. through the first century A.D.

### *Latin II*

This course is designed to continue the students' development of their skills in second-year Latin. Students will be introduced to readings of original texts. Increased emphasis will be given to the study and discussion of the history and culture of the Roman people from the first century B.C. through the first century A.D.

### *Latin III*

The course work in Latin III is designed to increase the students' mastery of the Latin language through translation of texts of ancient authors. At this level there is also a review of Latin grammar and vocabulary as well as the study of English derivatives from Latin roots. By the end of the year the students should be able to translate increasingly difficult material. In addition to working with texts of Roman classical authors, students will read a novel of historical fiction to supplement their knowledge of the events and personalities that shaped Roman history from the death of Julius Caesar in 44 B.C. through the reign of Nero that lasted until 68 A.D. Diagnostic tests in these areas will be given to prepare students to take the College Board Achievement Test in Latin.

### *Latin IV*

The course work in Latin IV is designed to give the students a better understanding of the language and people of ancient Rome through an intensive study of Vergil's *Aeneid*. This work describes the Romans' image of their race as descended from the gods through the Trojan leader Aeneas. Thus, it embodies the ideals, legends and beliefs that characterized the Romans of the first century A.D. In addition to exercising their translation skills through the readings of ancient texts, students will continue their review of grammar, syntax and vocabulary.

## **RUSSIAN**

### *Russian I*

The beginner's course in Russian introduces students to the history and culture of Russia and teaches them the Cyrillic alphabet. Once they have learned the alphabet, they learn many everyday expressions and vocabulary items. They learn to talk and write about the world around them and to understand when others speak about their family, school, and their country. During the year the structures they use become progressively more complicated and expressive.

### *Russian II*

The second-level course in Russian reviews much of the work of the first year, but continuously adds more complex structures and vocabulary to allow students to more completely express their thoughts. By the end of the second year students have covered the basic grammar of Russian and can carry on a simple conversation on many topics.

### *Russian III*

The third-level course in Russian continues to build upon the work of previous years. Increased attention to vocabulary and expressive structures makes it possible for students to interact with native speakers with understanding. Our exchange with St. Petersburg Gimnaziya #209.

### *Russian IV*

Fourth-year Russian continues the work of the third year, but at an increasingly complex level. Students do a great deal more reading and discussing of materials in Russian. Many of these students will have participated in the previous year's exchange and have developed excellent speaking skills. The main effort is to refine what has been learned through interaction with native speakers into literate language.

### Summer Russian Immersion Program

The course involves three weeks of study at our partner school, St. Petersburg Gimnaziya #209. Students take three 45 minute classes each weekday, taught by faculty of the partner school. The classes focus on helping students activate their knowledge of previously learned Russian and apply it to the real world they are living in during the course of the program. New topics and skills are also quickly acquired in this natural, immersion setting. Students stay with host families, participate in daily excursions to museums and other historic sites in St. Petersburg, and the course concludes with a two-day visit to Moscow. Students receive a quarter credit on their SLUH transcript, and regular tests and final course paper are required elements of the academic program.

## **SPANISH**



*Spanish I*

Spanish 1 is an introductory level course to the language and the cultures of Spanish speaking countries. This course teaches basic language patterns and vocabulary. It focuses on students learning structures. Using the TPRS method, comprehensible and compelling input is integral to the course. The focus is on all four-language skills: listening, speaking, reading and writing. The language and cultures are introduced through the use of media, dramatizations, gestures, readings, novels and class discussions. In addition to written tests and quizzes, students will also be assessed by means of aural activities. Active participation is required in this course; students are empowered to participate in class in a meaningful way.

*Spanish II*

Spanish 2 follows a similar format to Spanish 1. It builds on all previous knowledge and skills obtained in Spanish 1. Using the TPRS method, comprehensible and compelling input is integral to the course. The focus remains on all four-language skills: listening, speaking, reading and writing. Structures that are more difficult are acquired along with an exposure to more of the tenses weaved into stories, embedded readings, extended readings and novels. In addition to written tests and quizzes, students will also be assessed by means of aural activities. Active participation is required in this course.

*Spanish III*

This course reinforces, intensifies and further develops the skills acquired in Spanish I and II. Advanced grammatical points are presented to help the student refine his language usage. Practice in understanding and speaking Spanish is continued through the use of audio-visual materials which accompany the student text. Reading is given more emphasis on this level through the presentation of short literary selections, newspaper and magazine articles in Spanish, text and workbook exercises and teacher-prepared exercises. Students begin to write longer and more complex paragraphs and short essays. Completion of this course gives the student all of the basic grammatical structures and a wide vocabulary to express himself in a variety of situations.

*Spanish IV*

This course is designed to round out the student's knowledge and abilities in speaking, comprehension, and writing. It is a continuation of the Spanish III course, with active vocabulary acquisition on an even wider scale. The use of Spanish iPodcasts, CD's to accompany the student text, and selected videos assist the student in these areas. Reading and writing are given more emphasis through the literary presentations in the text and selected articles from newspapers and magazine articles in Spanish. Successful completion of the course enables the student to use Spanish as a real means of daily communications.

*Spanish AP*

This course is designed for those students interested in taking the AP Spanish exam. The course emphasizes listening and speaking skills in addition to essay writing and short story reading. Due to the nature of the class the number of students admitted will be very limited. All students need departmental permission with at least a B+ or A average in Spanish 300 or, for advanced students, a B or better in Spanish 400.

N.B. Third and fourth year French, Latin, Russian, and Spanish can be taken for college credit through the 1-8-1-8 Program of St. Louis University.

\* \* \* \* \*

## *Guidance and Counseling*

Through individual meetings, group guidance activities, interaction with parents, evening meetings for parents and consultation with other adults in the school community, the guidance and counseling program assists students at

each grade level in academic, personal and social development and effective decision-making. A student is assigned a counselor in freshman year that works with the student and his parents for all four years. Because counselors develop a relationship with students and their parents in the first two years of the program, they are better equipped to help students in the junior and senior years to find colleges that are the best match for the student's learning style, personality and individual preferences.

*Goals and Objectives of Guidance and Counseling Department*

- To assist students in the adjustment to the new high school environment.
- To help students to become involved in school activities.
- To help students understand their learning styles.
- To help students develop good study habits.
- To assist students in understanding standardized test scores (Freshman test, PSAT and ASPIRE).
- To assist students in becoming more aware of their personality types via the Do What You Are and other self-assessment surveys.
- To meet individually with all parents of freshmen to discuss their son's educational progress, involvement in the school community, goals, future aspirations and future course schedules.
- To provide personal counseling, crisis counseling and referral to outside professionals as needed.
- To conduct regularly scheduled large-group parent meetings on issues related to guidance and counseling.
- To meet with each junior and his parent(s) to discuss college planning and financial planning for college.
- To conduct individual meetings with juniors to develop a college profile and develop a first list of appropriate colleges.
- To assist seniors in completing the college application process.
- To conduct regularly scheduled large-group parent meetings on college planning and financial aid.

*Care-Team*

The Care Team is a group of counselors, select faculty members, the learning consultants, school administrators and a consulting psychologist that meets weekly to confidentially discuss at-risk students and plan appropriate interventions to help these students.

\* \* \* \* \*

## *Library*

The Robinson Library contains an extensive collection of both print and electronic materials. We provide a computer lab of thirty computers and keep extended hours both morning and evening to provide students with a comfortable space to work and study. Our comprehensive electronic collection also enables students to work from home or off campus providing them with multiple resources such as digital books, journals, magazines and newspapers.

Library and research orientation is provided to freshmen in their global I classes during the fall semester. Students are also given project specific library instruction throughout the remainder of their education at SLUH in collaboration with their teachers and courses.

Our goal is to assist students with their research needs as well as provide them with a good foundation for using libraries and preparation for research at the college and graduate levels.

\* \* \* \* \*

# *Mathematics*

All students are required to take three years of mathematics. The normal sequence is Algebra I, Geometry and Algebra II/Trig. Those students who enter St. Louis U. High having demonstrated a knowledge of Algebra I are required to take Algebra II, Geometry and Precalculus the first three years.

Advanced courses are available in Geometry and Algebra II/Trig for those students who are highly motivated in the area of mathematics and have demonstrated by their performance in previous math courses that they are talented and interested in the study of mathematics. Teacher recommendation is required for admission into these courses.

All mathematics courses in the Senior year are electives. AP Statistics, Calculus BC and Calculus AB are advanced placement college credit courses taken for the entire year. Precalculus I, Senior Math Topics, Advanced Studies in Geometry, Precalculus II, and Probability & Statistics are offered for one semester only. It is the goal of the mathematics department that all teachers will incorporate as much modern technology into their courses as possible. All students will master the use of the graphing calculator while the computer and iPad will be used for demonstration as well as a hands-on learning tool when appropriate.

## *Algebra I* (Required for Freshmen)

The goal of this course is a mastery of the technique of solving linear and quadratic equations along with the introduction of functions, inequalities and systems of equations. The student will work with monomials, polynomials, rational expressions and irrational expressions. He will learn to factor, graph linear and quadratic equations and solve many types of word problems.

## *Accelerated Algebra I* (For Freshmen who have some knowledge of Algebra I)

The topics to be addressed in this course include all of the above from Algebra I in addition to synthetic division, solving equations of higher degree, parabolas, a greater emphasis on many types of functions, fractional exponents and complex numbers.

## *Algebra II* (Required for Freshman who test out of Algebra I)

This course will review the topics from Algebra I in greater depth and will introduce the student to the following: the complex number system, fractional exponents, imaginary numbers, quadratic functions, rational functions, polynomial equations and their solutions, synthetic division, the conics, logarithms, exponential functions and matrices.

## *Geometry* (Required for Sophomores)

This course is strongly oriented toward the methods of mathematical proof and introduces students to experiences with mathematical thinking necessary for deeper understanding in subsequent mathematics courses. The topics included are: logic, congruent triangles, constructions, parallels, polygons, area, similarity, circles, trigonometry of triangles, solids and volume.

## *Advanced Geometry* (For Sophomores recommended by Freshmen teachers)

This course is designed to introduce students not only to the individual topics of geometry but also to develop in the student an understanding of a logical structuring of topics and the power to do that structuring or use that structure to solve problems. The topics include all those in the regular Geometry course in addition to Riemannian and Hyperbolic geometries. An emphasis is placed on proof through much of the course.

## *Algebra III/Trig* (Required for Juniors)

This course will review the topics from Algebra I in greater depth and will introduce the student to the following: the complex number system, fractional exponents, quadratic functions, polynomial equations and their solutions, polynomial division, rational functions, logarithms and exponential functions. The course includes a thorough introduction to the study of trigonometry including circular and trigonometric functions and their graphs, trigonometric identities and trigonometric equations. Sequences and series are also covered in this course.

## *Advanced Algebra III/Trig* (For Juniors recommended by Freshmen and Sophomore teachers)

This course will cover all the topics in Algebra II/Trig from a functions approach. Material from Algebra I will be reviewed as necessary when it naturally arises in the study of a particular function. The relationship between functions and their graphs will be emphasized throughout the course. The trigonometric functions will be studied in

much greater depth than in the regular Algebra/Trig course. This course will emphasize many concrete applications for all the topics covered. A unit on probability will be covered as well as sequences and series. The graphing calculator is used extensively in this course.

*Acc. Precalculus* (For Juniors who took Algebra II as Freshmen)

This course is a Precalculus offering which is an algebraic and graphing approach to the study of functions. In the first semester, a student will study polynomial functions, rational functions, the conics, exponential & logarithmic functions and their graphs. Trigonometry is covered extensively. Sequences and series and be introduced as well as the study of polar coordinate graphing, matrices, limits of sequences and limits of functions. The graphing calculator is used extensively in this course.

AP Stats with Precalculus (For Juniors who took Algebra II as Freshmen and recommended by Freshmen and Sophomore Teachers)

This course offers the Precalculus curriculum during the first semester and the AP Statistics curriculum in the second semester. During the first semester, the student will study polynomial functions, rational functions, trigonometry, matrix algebra, the conics, exponential and logarithmic functions, and polar and parametric graphs. There is an emphasis on graphing throughout the Precalculus curriculum, thus each student is required to have a graphing calculator as it is used daily in class and on homework. During the second semester the student will learn to analyze data sets by examining the center, shape, and spread of the distribution of the data. The student will examine two-variable data using linear regression. He will learn to create a highly controlled experiment to collect data and he will learn and practice valid sampling methods. The student will learn probability concepts and use them as bridges to studying inferential statistics. In doing so he will apply probability to the concept of random variables and sampling distributions. He will apply estimation theory using confidence intervals and hypothesis testing. The graphing calculator will be used throughout the second semester as well. College credit may be earned for this course by successful completion of the AP Statistics Exam or through St. Louis University's 1-8-1-8 program.

*Precalculus I* (Semester elective for Seniors)

This course prepares the student to effectively analyze and manipulate the algebraic functions that will be encountered in calculus. There is a major emphasis on the relationship between functions, their graphs, and their applications. Functions are analyzed numerically, algebraically, and graphically and the concept of a limit is incorporated regularly. The graphing calculator and other graphing technology is used frequently in the course to gain a deeper understanding of the algebraic functions.

*Precalculus II* (Semester elective for Seniors--prerequisite is Precalculus I)

This course is a Precalculus offering which is an algebraic and graphing approach to the study of geometric figures and the equations associated with them. In particular, a student will further study trigonometric functions, the relationship between polar and rectangular coordinates, the conics, and an introduction to Calculus through limits.

*Senior Math Topics* (Semester elective for Seniors)

Senior Math Topics is a one semester course in applications of mathematics to every day life. Following the text "Quantitative Reasoning: Mathematics for Citizens of the Twenty-first Century", the course seeks to put many topics previously studied into contexts which are relevant to rising responsible adults. Many topics will be chosen by the students to present, and could include student presentations. Standard topics each year include: "Large & Small Numbers: From Scientific Notation to the National Debt", "Logic & Reasoning: The Mathematics of Rhetoric" "Exponential Growth: From Global Warming to College Savings Plans" "The Mathematics of Music and Art". Combinatorics, rates of change, the infinite, and math in sports may also be covered.

*Advanced Studies in Geometry* (Semester elective for Seniors)

This second look at geometry would take students on some different avenues into and through a course that they might have enjoyed as sophomores and would like to continue. Topics include integration of art and geometry, coordinate geometry, the geometry of the infinite, transformations and constructions. This course might include some concepts previously studied by the students, but from a different point of view, or it could include completely new topics. This course could be taken by a wide range of students, students who have had a lot of success in math classes, and giving a different option to students not enrolled in an AP course. Much of the work would done by the students by hand, with tools they control so they develop their own knowledge as they go. This allows for the "low threshold" mentioned earlier. But the ideas are broad and deep, so there must be a way for the ambitious student to

go further with them. These can be individualized research by students or problem sets for the class to do.

*Probability and Statistics* (Semester elective for Seniors)

This is an introductory course to the field of statistics. During the first half of the course students will learn to analyze data sets by examining the center, shape, and spread of the distribution of the data. They will learn to collect data using valid sampling methods as well creating a distribution through simulation. Also in the first half of the course students will learn counting methods and probability theory.

During the second half of the course the counting methods and probability theory are a bridge to study inferential statistics. In doing so, they will apply probability to the concept of random variables and sampling distributions. They will apply estimation theory using confidence intervals and hypothesis testing. Students will end the course by applying the information and techniques they learned in a final project. In this project, each student will propose a project topic, collect data, make a hypothesis, validate assumptions for using statistical techniques, and conduct hypothesis tests. This course is an excellent preparation for students who are required to take a statistics course in pursuit of their chosen major in college and may be taken for credit through St. Louis University's 1-8-1-8 program.

*AP Statistics* (Two-Semester elective for Seniors; Class meets 4 days per week but earns a full credit)

The purpose of the Advanced Placement course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) Exploring Data: Observing patterns and departures from patterns, (2) Planning a study: Deciding what and how to measure, (3) Anticipating Patterns in Advance: Producing models using probability and simulation, (4) Statistical Inference: Confirming models. The AP Statistics course adheres to the philosophy and methods of modern data analysis. The fundamental tool of data analysis is the computer (calculator) and it will be used extensively throughout the course. Other important components of the course include projects and laboratories, cooperative group problem-solving, and writing as a part of concept-oriented instruction and assessment. College credit may be earned for this course by successful completion of the Statistics Advanced Placement Exam or through St. Louis University's 1-8-1-8 program.

*AP Calculus AB* (Two-Semester Elective for Seniors)

Calculus AB is a college level course requiring departmental approval and a B+ average or better in Algebra/Trig. The material covered approximates three-fourths of a two-semester college calculus course. The recommended advanced placement calculus curriculum is followed throughout the year. The topics included are: limits, continuity, differentiation with applications, integration with applications and analysis of the transcendental functions. Four hours of college credit may be earned through St. Louis University's 1-8-1-8 program or by successful completion of the Calculus AB Advanced Placement Exam. Students will be required to use a graphing calculator in this course.

*AP Calculus BC* (Two-Semester Elective for Seniors)

Calculus BC is a college level course requiring departmental approval and an A/A+ average in Advanced Algebra/Trig or Pre-Calculus. The material covered goes beyond that covered in a two-semester college calculus course. All the topics in Calculus AB are studied along with the following additional topics: advanced techniques of integration, application of calculus to polar equations, improper integrals, parametric equations, vectors and series. Eight hours of college credit may be earned through St. Louis University's 1-8-1-8 program or by successful completion of the Calculus BC Advanced Placement Exam. Students will be required to use a graphing calculator in this course.

\* \* \* \* \*

## *Physical Education*

Physical Education is an integral and vital component of the St. Louis U. High curriculum. Regular physical activity, not only essential for the student's healthy growth and development, may also provide the following benefits:

- **Improved Physical Fitness**
- **Enhanced Motor Skills Development, Greater Flexibility and Improved Coordination**
- **Higher Academic Achievement**

- **Stress Reduction and Greater Mindfulness**
- **Higher Student Accountability and Responsibility for Their Personal Health & Fitness**
- **Improved Self Discipline and Motivation**
- **Development of Leadership Skills, Good Sportsmanship & Fair Play, and Working with Others**
- **Improved Self Confidence and Self Esteem**
- **Great Ability to Focus on Tasks and Achieve Goals**

Physical Education offers students the opportunity to participate in a variety of individual and team sport activities, as well as weight training. To go along with these activities, topics that are pertinent to the total health, wellness and fitness of the students are discussed in order to make students more knowledgeable of these topics and to help them in making decisions in regard to these topics.

Weight training follows the “Bigger, Faster, Stronger” program which emphasizes a total body workout to enhance strength, agility, quickness and speed.

#### *Freshman Health* (a one-semester, required course for freshmen)

The Freshman Health course is designed to introduce students to health issues in today's society and assists them in building a thorough understanding of healthy lifestyles, behaviors, and responsible decision-making. This course prepares students for health challenges in areas of nutrition, exercise, emotions, stress, substance use, and relationships. Course objectives include identifying and applying new knowledge to achieve lifelong wellness with emphasis in areas of influence, prevention and promotion, and commitment to an active lifestyle. Successful learning is accomplished through instructional strategies that are student centered and guided by carefully articulated lessons. Students have unique opportunities for discovery and collaboration in the classroom as the integration of technology provides exciting and productive ways of learning. The commitment and delivery of course material through visual, kinesthetic, and auditory learning aims to connect with diverse learners to ultimately challenge and heighten new levels of understanding.

#### *Freshman and Sophomore PE*

Students participate in a variety of activities that include: stretching, bashball, basketball, football, physical fitness, wiffleball, kickball, soccer, volleyball, ultimate frisbee, dodgeball, floor hockey and yoga.

The purpose of these classes is to introduce students to a variety of sports and exercises in a safe and supportive environment while challenging them to improve their overall fitness level. Sophomores may elect weight training.

#### *Junior and Senior Year PE*

Students participate in activities which include: stretching, bashball, basketball, football, wiffleball, kickball, jogging, soccer, volleyball ultimate frisbee, dodgeball, floor hockey, yoga, and weight training.

The purpose of these classes builds upon the goals of Freshman & Sophomore PE while challenging the students to more effectively work with others along with improving their mental and physical performance as well.

#### *Summer PE Electives*

Periodically, summer electives in lifetime sports (including Mountain Biking, Yoga, Rock Climbing and Bicycling) are offered for students who have completed their freshman, sophomore, or junior year. These courses offer one semester of PE credit and apply to a student's PE requirement. Note: These classes do carry an additional tuition.

One semester of Physical Education and one semester of health are required for Freshmen. A student must then complete two more semesters of Physical Education or Weights in his sophomore, junior or senior year. The grade earned for Physical Education or Weights is counted into both the student's current and

cumulative grade point averages.

*Dance Courses (Listed under Fine Arts)*

Students may choose Dance courses listed under **FINE ARTS** for either PE or Fine Arts credit.

\* \* \* \* \*

## *Science*

*SLUH Science Statement of Philosophy*

As a Jesuit institution, St. Louis University High School offers an academically distinguished program designed to challenge students to achieve their full potential. “Love of God, love of self, love of all things as coming from God, recognition of one’s place in creation, analysis and evaluation of what helps or hinders in achieving a life goal, inner freedom, self-discipline, choice, the desire to be better and to do more – these make up the First Principle and Foundation both of the Ignatian vision and of Jesuit education” (John J. Callahan, S.J., *Discovering a Sacred World*, 1997).

The Science Department offerings at St. Louis University High School consist of a variety of courses designed to stimulate interest in the sciences. The goals of the department are to foster an appreciation for the intrinsic value of knowledge and to educate the students in both information and process. Central to this is the development of proficiency in terminologies, theories, and relationships, as well as the development of skills in laboratory techniques, observation, experimentation, scientific modeling, hypothesis testing, drawing conclusions, problem solving, and critical thinking. Students are taught the use of technology in science and use technology in data collection and analysis.

In studying the physical world and its phenomena the scientist’s point of view is not the only concern of the department. In the mass media on a nearly daily basis there are issues of scientific and technological developments that require information gathering, statements of problems, and the making of moral and ethical decisions. The student’s study of science better enables him to make these moral and ethical judgments in response to local, national, and international issues as they may affect humankind now and in the future. The desire is to develop students who can see the need for stewardship of the earth. Department members strive to model and encourage a love and appreciation of nature and our physical world.

*SLUH Science Requirements*

Students are required to complete three units of science for graduation. These three must include Biology, Chemistry, and Physics. All freshmen take Biology. Sophomores choose from one of two Chemistry courses. Juniors choose from one of two Physics courses. A variety of electives are offered to seniors.

*Biology (Freshmen)*

The general Biology course allows students to develop an appreciation for, and an understanding of, the diversity and complexity of organisms and the relationships among them. Further, as this is our student’s introduction to lab science at SLUH, emphasis is placed on the creative, inquiry based, collaborative approach needed for discovery. Skills and experiences include: experimental design, data acquisition, analysis and presentation, technology of the scientist and digital probe-ware, lab protocol and safety, study approach and organization, graphing, the microscope, interactive tutorials, and projects. Students also experience local resources such as the Saint Louis Science Center, Forest Park, and researchers from local universities. The first semester emphasizes unifying topics in the study of Biology. These include: an introduction to science and the scientific method, biochemistry, cellular structure and function, and genetics. The second semester focuses on the evolutionary progression of organ systems and ends with a survey of botany, with emphasis on local flora.

### *Chemistry (Sophomores)*

The general Chemistry course will build off of the skills students were exposed to in the freshman biology course. Skills and experiences include: quantitative problem solving, experimental design, data acquisition, analysis and presentation, technology of the scientist and digital probe-ware, lab protocol and safety, study approach and organization, and graphing. The course will cover the classic principles, laws, models and concepts of chemistry and will include many collaborative, skill based and structured inquiry, laboratory experiments whose emphasis is toward relating chemical knowledge to scientific study and the real world.

### *Accelerated Chemistry (Sophomores)*

The direction of the course is toward the theoretical and quantitative problem-solving nature of a chemistry course. The course will cover the classic principles, laws, models and concepts of chemistry, especially the study of kinetics, equilibrium, oxidation-reduction, and electrochemistry. The course will include many collaborative, skill based and structured inquiry, laboratory experiments whose emphasis is toward relating chemical knowledge to formal scientific study and the real world. A strong background in math, as well as a mature attitude for learning, are needed for success in this class. Instructor approval and high math and biology grades are required for the accelerated class.

### *Physics (Juniors)*

Physics is the study of matter and energy and their relationships. The purpose of the course is to provide the student with an understanding of the fundamental physical relationships that govern our universe! Topics covered include motion, forces, energy, fluids, heat, waves, sound, light, electricity, magnetism, and modern physics. Laboratory work is an essential part of the course.

### *AP Physics I (Juniors)*

AP Physics I is the equivalent of a first-semester college course in algebra-based physics, but it is taught over a full academic year to enable students to develop deep understanding of the content and to apply their knowledge through inquiry labs. The full year also allows time for inclusion of content that is outside of the AP curriculum. The course covers motion, forces, momentum, energy, waves, and electricity. AP Physics I is recommended for students earning a B+ or better in either Chemistry course.

## ***Science Electives***

### *AP Biology (Senior elective; two-semester course)*

AP Biology is the equivalent of a first-year college introductory biology course. The major topics include ecology, biochemistry, cell biology, Mendelian and molecular genetics, evolution, taxonomy, and vertebrate body systems (with special emphasis on the nervous, endocrine, and immune systems). Laboratory work is a major part of the course as all College Board recommended labs/investigations will be done. Students are to meet during Activity Periods on lab days unless otherwise instructed. This course has a summer study component/reading. The prerequisites include completion of Biology, Chemistry, and Physics courses with grades of B+ (or better) *and* approval from the AP Teacher. Dual credit offered through UMSL.

### *Anatomy and Physiology (Senior elective; one-semester course)*

The major human body systems are addressed in the senior Anatomy and Physiology course including the skeletal, muscular, nervous, digestive, excretory, respiratory, circulatory, and immune systems. The anatomy and physiology of each system are discussed in depth. Laboratory exercises include dissections of sheep organs, as well as several physiology labs using Vernier sensors and software. A field trip to Saint Louis University's Anatomy lab for a cadaver dissection is used as a summary and review of course topics.

### *AP Chemistry (Senior elective; two-semester course)*

AP Chemistry is the equivalent of an introductory college chemistry course whose design will prepare students for the AP test in the spring. It is a deeper follow-up to concepts covered in the regular or accelerated sophomore class



with a goal of enabling AP students to apply their knowledge through collaborative inquiry labs. The laboratory will place an emphasis on student-designed experiments appropriate to the first year college Chemistry course. This course has a summer study component of basic concepts. The prerequisites include completion of a Physics and Chemistry course with grades of B+ (or better) *and* approval from the AP Teacher.

*AP Environmental Science (Senior elective; two-semester course)*

The goal of the AP Environmental Science course is to provide students with the ability to: 1) better understand and appreciate the interrelationships of the natural world; 2) identify and analyze environmental problems (natural & man-made) and their associated risks; and 3) examine various solutions for resolving and preventing these problems.

The following themes will be addressed: environmental quality & pollution, human population dynamics, renewable & nonrenewable resources, biogeochemical cycles & forces, and global changes and their consequences. The social ramifications and ethical issues associated with these topics will be also be explored in light of Catholic social teaching. The two-semester course features a strong laboratory and field investigation component.

*Biotechnology and Genetics (Senior elective; one-semester course)*

The course focuses on modern fundamentals of genetics with an emphasis on human traits to reinforce concepts. The first half of this semester course will concentrate mainly on understanding human gene function along with new advances in genetics and biotechnology This includes: genetic engineering, DNA fingerprinting, The Human Genome Project, and gene therapy. In addition to learning how the technology works through biotechnology laboratory experience, the social ramifications and ethical issues associated with these technologies will be explored in light of Catholic teaching. The second half of the semester course will concentrate on the inheritance of genetic traits as it applies to humans and genetic disorders. Laboratory experience includes the crossing of different fruit fly strains to analyze the inheritance of their traits.

*AP Physics 2 (Senior elective; two-semester course)*

AP Physics 2 is the equivalent of a second-semester college course in algebra-based physics, but it is taught over a full academic year to enable students to develop deep understanding of the content and to apply their knowledge through inquiry labs. The full year also allows time for inclusion of content that is outside of the AP curriculum. The course covers fluid mechanics, thermodynamics, electricity, magnetism, optics, and nuclear physics. Prerequisites include completion of either Physics course and either Chemistry course with grades of B+ or better and approval from the AP Teacher.

*Astrophysics (Senior elective; one-semester course)*

This course is for all who have ever wondered about the mysteries of the universe. Students will learn the nuts and bolts of our immediate and extended neighborhoods and will study physical phenomena like gravity and electromagnetic radiation that enable us to collect information and offer explanations for what we see going on out there. Topics will include stellar and galactic evolution, black holes, dark matter, white dwarfs, and current theories on the history and scope of our universe.

*Environmental Science (Senior/Junior elective; one-semester course)*

This course is designed to address 6 significant issues facing our world today: declining biodiversity, natural resource depletion, shift to renewable energy, water quality and availability, food quality and availability, and global climate change. There will be an emphasis on hands on learning and project work. This would include such projects as investigations into wind, solar, and geothermal energy, vertical hydroponics, analysis of current and historical climate data, techniques for water purification, both pre- and post-use, analysis of pollution patterns in relation to socio-economic status, and more. Prerequisites are completion of a biology and chemistry course.

\* \* \* \* \*

## ***Social Studies***

Members of the Social Studies Department see their role in the education of the St. Louis University High School

students as facilitators in the student's development of knowledge, skills and attitudes in the field of Social Studies. The department is committed to the highest standard of excellence in all aspects of the curriculum.

The Social Studies Department has selected ten learning goals as top priorities for the department. This list of goals is intended to be directive, not comprehensive. They are stated in general student competencies to be mastered by the end of the instruction at SLUH.

1. Development of critical thinking skills and problem-solving skills.
2. Appreciation for the global interdependence of the world.
3. Assembling of an essential data-base of western and non-western heritage.
4. Development of an interest in and a curiosity about the world around us.
5. Consideration of how Christian principles apply to the real world.
6. Fostering of a concern for justice.
7. Developing responsibility for one's own learning.
8. Examination of the forces that made the USA.
9. Understanding of one's own and other's cultural frame of reference.
10. Fostering of Citizenship skills.

### *Global History I*

The student will explore the heritage of Western Civilization and the legacy of non-Western cultures and civilizations by studying the cultural and political contributions up to the period before the European Renaissance. Emphasis will be placed on methods of historical inquiry and objectivity in order to reach a true understanding of these various cultures and their importance to our own times. This course meets three days per week all year. Students are enrolled in Physical Education the other two days per week.

### *Global History II*

The student will continue to study both our Western heritage and the characteristics and contributions of non-Western cultures. The year will begin with the Renaissance proceeding to the study of the development of nation-states, the rise of nationalism, the cultural and political ideas that have had impact on the world of the 20th Century. Emphasis will be placed on methods of historical inquiry and critical-thinking skill development.

### *AP World History*

AP World History is a macro-history of human civilization taught in a balanced geographical approach. Divided into six time periods, the history of the humanity is discussed through five major themes: interaction between humans and the environment; development and interaction of cultures; state-building, expansion and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures. Through these historical themes, AP World History teaches important historical thinking skills including crafting arguments, using historical evidence, chronological reasoning, comparison and contextualization, and historical interpretation and synthesis. In this a one-year course, students will be challenged to strengthen their reading, writing, and research skills in preparation for the national exam for AP World History in the spring. A historical research project is a major component of this course.

### *United States History*

The United States History course is a survey of the political, economic and social forces which formed and continue to form the institutions and government of the United States of America. Students are required to analyze critically historical evidence both verbally and in writing. Emphasis in this course is placed upon the student's development of historical interpretation, analysis, synthesis, and other intellectual skills used by historians.

### *AP United States History*

This is a two-semester college-level survey course of American history, from colonial times to the present. The AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. The course will examine various themes in U.S. history, including American diversity and identity, culture, economic transformations, environment, globalization, religion, politics, and diplomacy. In addition to exposing students to historical content, the course also teaches students to analyze and interpret primary sources. The course may be taken for preparation for the Advanced Placement examination and/or 1-8-1-8 credit. The purpose of taking history in high school is not just to learn a body of knowledge or prepare for further historical study. It is also to practice thinking critically; reading and interpreting historical documents; writing using historical sources and modern interpretations; and to become familiar with some of the methodology used in historical inquiry. Throughout the course, students will interpret a variety of

documents (letters, speeches, government acts, Supreme Court cases, diaries, photographs, audio recordings, lyrics, films). Students will also be required to complete a substantial research paper.

#### *AP Modern European History (Senior Elective)*

This is a two-semester course, though either semester may be elected. This course serves as preparation for the AP European History Exam, with 1818 SLU college credit also available. Students taking this course will survey the history of Europe from feudalism to the present through four time periods: 1450-1648, 1648-1815, 1815-1914, 1914-Present. We examine the political, social, and economic history of the continent and its relationship to the rest of the world. Greater understanding of Western intellectual development is of particular emphasis. However, Eastern Europe is studied through the various empires that have sought to dominate the many ethnic groups throughout time. Major topics in the first semester include: Renaissance, Reformation, Scientific Revolution, Global Exploration/Trade, Enlightenment, and the Atlantic Revolutions. Major topics of the second semester include: Industrialization, Developing Political Ideologies, Mass Politics, Nationalism, Imperialism, Global Warfare, Totalitarianism, Socialism, the Cold War, and the European Union. Homework load is typical of an AP Course, with about 5 pages of reading per night. One 3-4 page essay is required per quarter over a short book read for the course. One 10 min. presentation is due at the end of the semester. Former students of the class have had a very high rate of passing this AP exam.

#### *Microeconomics/Macroeconomics (Junior and senior elective)*

A generalized definition of Economics would be that it is the study of man's behavior in producing, distributing and consuming goods and services. The objective of the course is to attain some degree of economic literacy. In our ever-changing and complex world, individuals need a higher level of economically-sound thinking skills in order to be good decision makers. Generalized topics are the scarcity problem and economic systems. Microeconomics topics include resource allocation, market structures, demand and supply and competition. Macroeconomics topics include inflation and unemployment, economic growth and stability, money and monetary policy, fiscal policy and the role of government and international trade. Each topic is covered in a semester; students may elect to choose one or both semesters.

#### *AP Microeconomics & AP Macroeconomics (Junior and senior elective)*

This is an offering to accommodate those students who wish to be prepared to successfully pass the Advanced Placement Examinations offered in Microeconomics and Macroeconomics. The course work will be a more intensive treatment of the topics listed above, and will stress graphic analysis (theory of the firm, aggregate demand and supply) and basic forecasting which are included on the AP Test. Students choose these courses over the regular courses if they have a desire for an in-depth look at economic questions, and wish to have adequate preparation for the AP test.

#### *Psychology (Junior and senior elective)*

This is a two-semester course, though either or both semesters may be elected. Psychology, the discipline that deals with the behavior and thinking of organisms, focuses on the development of the individual both physically and mentally. In this course, students will acquire an understanding of not only themselves but how people exist in and react to different situations. Students will develop an understanding of some of the major social problems that plague American society today and how people deal with these problems. The course will analyze how American society came to be, what it is today, and how it might be altered in the future.

Specifically the topics covered in the first semester are: the history of psychology; the biology of psychology (the mind and the nervous system); conditioning (operant and classical); memory and learning; research methods in psychology; sensation and reality; perception; states of consciousness (sleep, dreams and substance abuse); cognition and creativity.

The topics covered in the second semester are motivation and emotion; health, stress and coping; the life cycle, from birth to death; personality; intelligence; social psychology; relationships; attitudes and society.

#### *AP Psychology (a two-semester senior elective)*

This course is designed to prepare students for the Advanced Placement Examination in Psychology. In the regular Psychology course, students may take either or both semesters. In the AP course students are required to take both semesters in order to adequately prepare for the AP exam. The course will take a more intensive approach in exploring the topics discussed above. In addition to those topics, the course will also emphasize statistics, genetics, testing and individual differences, abnormal psychology and the treatment of psychological disorders. This courses will give students ample preparation to be successful on the AP exam.

*AP American Politics (One-semester senior elective)*

The goals of American Politics are: to gain an understanding of, and think critically about, the United States political system, the characteristics and workings of the national government; discuss the major current political issues; to develop essay-writing skills. The content of the course will include the fundamental characteristics of the Constitution, factionalism, mass media, political participation, political parties, the election process, the Presidency, the Judiciary, the Congress. The course is a one-semester course. The course will prepare students for the Advanced Placement Examination in U.S. Government and Politics.

*AP Comparative Government and Politics (One-semester senior elective)*

The purpose of this course is to develop some understanding of the world's diverse political structures and practices by studying both specific countries and their governments, utilizing general concepts to interpret the political relationships and institutions found in virtually all national polities. The focus will be on five countries: Great Britain, France, China, Russia (\*Foundation for developing paradigms of different types of political systems) and a developing nation (eg. India, Mexico, Nigeria). The developing nation will show political/economic development. An additional aspect of the course will be to analyze within each of these contexts the impact of United States foreign policy. The topics addressed will include: the sources of public authority and political power, society and politics, citizen and state, political framework, political change and introduction to comparative politics. This course will work toward preparation for the Comparative Government and Politics AP examination.

*Introduction to Anthropology and Archaeology (One-semester junior/senior elective)*

Anthropology, from Greek, literally means "the study of humans." The study of anthropology is an interdisciplinary course that emphasizes the understanding of other groups of people and seeks to understand the origins of humans and its various cultures. This course is divided into four sub-fields: Physical Anthropology, Archaeology, Cultural Anthropology and Linguistics. In this survey, all fields are explored. The course is intended to mirror a college introductory-level anthropology course. Topics discussed include: human evolution and genetics, human variation, similarities and differences between humans and primates, human prehistory, methods in archaeology, the creation and destruction of ancient civilizations, the Neolithic Revolution, foundations of food production and creation of warfare, and economic systems, and gender. Homework load is on par with non-AP electives, requiring a few pages of reading a night and a weekly quiz. Class activities include a short paper, internet activities, guest speakers, and a field trip. Anthropology is an 1818 SLU college credit course.

*Introduction to Modern African History and Politics (One-semester senior elective)*

The primary intention of this course is to provide a general overview of the history and politics of Africa. Using illustrations and case studies from various countries, it examines rival theoretical perspectives in the study of African history and politics, salient themes in African politics such as the colonial experience, nationalism and independence, the challenge of nation-building, African political parties, the role of the military in African Politics, and transition to democracy. 1818 credit is available for successful completion of this course.

*Personal Finance (Summer – Juniors and Seniors)*

This course is for future professionals who want to learn more about personal finance and how to better manage their resources. The topics include purchasing/leasing cars, home acquisitions, investing in stocks and bonds, mutual funds, retirement planning and health and life insurance. Special emphasis will be on the nontechnical aspects of these issues. Credit can be earned through the University of Missouri--St. Louis will transfer anywhere in the Missouri system as well as many additional schools. Check on the credit transfer policy of schools you are interested in attending to be sure the credit will be accepted. The course will count on your SLUH transcript as a 1 semester (.5 credit) Social Studies class.

*Business and Entrepreneurship (Summer)*

This course is an introduction to the business world. Students will learn about most of the major fields of study within business including entrepreneurship, management, human resources, finance, marketing, and operations. The goal is to get students interested in the business world by exposing them to the various fields they could choose to focus on in college. The course will count on your SLUH transcript as a 1 semester (.5 credit) Social Studies class.

*History of St. Louis (Summer)*

This course will study history of the greater St. Louis area through the spatial and cultural creations and restraints of ethnic neighborhoods, their corresponding architecture and culinary identities. We will analyze the development of local architecture and food as methods of creating a shared, yet unique sense of place for a specific people and as a

gateway or opportunity to gain access to or knowledge of a community. It will be a hands-on course that invites students to get outside the classroom and to experience and observe the lessons of St. Louis history.

\* \* \* \* \*

## *Theology*

The Theology Department of St. Louis University High School offers a four-year required curriculum. Specifically, the curriculum consists of:

- A seven semester program of required courses in which the general scope and sequence, overall goals and objectives, student work load and student evaluation are basically consistent among teachers at each level.
- A one semester program of electives in the second semester of the senior year in which specific topics are pursued in greater depth and perhaps with more creativity and student independence than in the required courses.

This curriculum is designed to:

- Inform students about the major elements of the Catholic Faith,
- Encourage them to interiorize this faith,
- Incorporate their faith into their daily lives,
- Encourage the practical habits of personal prayer and reflection.

Teachers strive to present students with reading material, lectures, classroom activities and student assignments that are:

- Appropriate to the developmental stages of adolescent faith,
- Consistent with the expectations we have of students in a College Preparatory academic program,
- Reflective of Jesuit pedagogical philosophy and traditions,
- Faithful to Church teaching as found in the Catechism of the Catholic Church and other key sources of magisterial teaching.

Faith formation and religious education are the responsibility of the entire SLUH community. Accordingly, we seek to collaborate with the Campus Ministry team, the Community Service program, other academic departments and, especially, with parents who are their son's first and most important teachers in matters of faith. Finally, we seek to keep Christ ever before the eyes of our students and at the center of all that we do as teachers. We claim Jesus as the model, message, and incarnation of a truly generous and loving God and a fully human "man for others."

### ***Freshman Year***

This year-long course introduces freshmen to the story of salvation history, the Catholic approach to understanding the Bible in its historical context, and how to apply the Scriptures to their everyday lives. Students will engage with current theological insights, will have the opportunity to relate to and interact with Scripture both intellectually as well as spiritually, and will be encouraged to study Scripture in a holistic manner. The study of the Hebrew Scriptures will focus on the foundational aspects of Judaism and its relation to Christianity; the study of the Christian Scriptures will focus on the person of Jesus Christ and the significance of his life and ministry. Students will also spend time familiarizing themselves with Ignatius of Loyola, a brief history of the Society of Jesus, and Ignatian Spirituality.

### ***Sophomore Year***

First Semester: Building on the freshman year, this semester history and Christology course introduces students to the early church's answers to Jesus' question, "Who do you say that I am?", and invites students to develop their own personal answers to that question, based on their own experience and that of the Church. By the end of the course, students will be able to explain how the Church has grown into its role as the Body of Christ throughout its history in the world, and they will learn how the Archdiocese of St. Louis has similarly grown to become what it is today. Additionally, students will explore ways in which they can participate in the Church's continued movement toward fulfilling its role as the Body of Christ.

Second Semester: The second semester is itself composed of two quarter courses. The first quarter centers on the presence of Jesus in the Church through the Seven Sacraments. Students study the history, theology, and practice of the sacraments, and they explore the meaning and purpose of sacraments in their own lives and in the life of the Church. In the second quarter, the focus shifts to the theology of the body as developed by Saint Pope John Paul II. The course works to foster positive attitudes on sexuality and Catholic moral principles.

### **Junior Year**

First Semester: This semester course serves as an introduction to important fundamental ideas about how a Catholic understands Faith and how key beliefs of our Faith can be explained in an intelligent manner. We also investigate ideas of thinkers who challenge our beliefs, especially thinkers who are popular in some academic circles in American universities. Another aspect of this course is to show how the tools of reason are used in the service of coming to a deeper understanding of Faith as understood in a Catholic context. Finally, clear thinking is essential for being an articulate Catholic. We consider and learn to use the intellectual tools of framing good questions, marshaling appropriate evidence for our positions, and presenting our religion in an intellectually vigorous manner.

Second Semester: The aim of the course is that students will become more moral by coming to know morality as an outgrowth of our mutual, loving relationship with God, and how their connection with Jesus Christ manifests itself in their relationships with themselves, with others, and with all of creation. In doing so, they will become more conversant with Church teaching and with the inner workings of many specific moral issues. This course teaches basic Catholic Moral philosophy and principles such as Natural Law and the double effect and the basic principles of Catholic social thought. It also asks students to apply these principles to the compelling moral questions of the day such as stem-cell research and war.

### **First Semester Senior Year**

This semester course is concerned with the choices students face in the present, the choices that loom in their immediate future, and the choices they will face in adult life. The course is designed to help the student look seriously and critically at the decisions he has already made and will make. Time is spent examining some foundational issues: the nature of human life and freedom, the relevance of the humanity and divinity of Christ in their own lives, an Incarnational view of the world, and a Christian view of sexuality and the body. The specific topics to which the above discussion is applied include: dating and relationships, marriage, ministry and priesthood, preparing for college, and choosing a career.

### **Second Semester Senior Year Electives**

#### **1818 Theology – Advanced College Credit**

This is an introductory college level course offered in conjunction with Saint Louis University through the 1818 Advanced College Credit Program. This course begins the disciplined reflection on religion in the university. Along with providing the basic vocabulary, method of theology, and key theological concepts, it equips the student with the historical, textual, and comparative methods and skills that are foundational for further study on the university level.

#### **Beatitudes**

This course will consider the Beatitudes from Jesus' Sermon on the Mount. (Matthew 5-7) Students will be exposed to an overview of the Beatitudes and then study each of the nine Beatitudes in depth, with an eye toward understanding their importance in our contemporary world. Students will read a wide variety of essays, articles, poems and literature for the purpose of fuller understanding. A number of films will be used to help us in the process of understanding and practical application. Students will play an active part in the planning of the Holy Sacrifice of the Mass, which will be connected to our study of the Beatitudes. There will be visits from guest speakers as well as times for quiet reflection. Assignments will consist primarily of reading assignments and reflection essays for each of the Beatitudes.

#### **Church and Ministry**

This course will focus on answering the question, “How do we live out our Christian Identity as a community?” We will gain insights about the documents and people that guide the work of the Church. Since seniors will be returning from their Senior Service Projects, this course will also try to build on that experience by studying ministry within the St. Louis Archdiocese.

### **Spirituality and Prayer**

This course is an introduction into the deeper spirituality of life, the church, and the world. We will explore many different areas of spirituality and prayer, living by the Ignatian maxim of finding God in all things. It examines themes such as spiritual experience and what it is like, spiritual places and their effect on us, technology and its impact on the spiritual life, and Ignatian spirituality and its relevance in this era. The course also introduces students to a number of different methods of prayer, such as lectio divina and centering prayer, and, through the practice of prayer, invites students to make prayer a more regular part of their lives.

### **World Religions**

What great truths, stories and rituals lie at the heart of some of the world's great religions? What experience of the divine does each tradition offer to the faithful? What vision of the human person is presented? What great, common truths do these religions share and on what crucial issues do they differ? How can our dialogue with these faiths enrich our appreciation of our own Christian and Catholic faith? In this course, students will explore Native and Aboriginal religions, Buddhism, Hinduism, Confucianism, Taoism, Islam, and Judaism. We cannot hope to do more than scratch the surface of the vast worlds each tradition represents, but we can hope to catch glimpses of the wisdom and beauty of each. At the end of the course we will return to Christianity and Catholicism, hoping to appreciate them at a deeper level for having considered the others. As a part of the course, students will visit a Hindu Temple and a Mosque.

\* \* \* \* \*

## ***Engineering and Architectural Option***

*Engineering Graphics* (one-semester elective; seniors; no prerequisite)

This course carries no fine-arts credit. To present an idea to another person the inventor/designer must create in the person's mind a picture or visualization of that idea. The picture must be complete, showing the external shape of the object as well as the shape and construction of its component parts. This course covers the skills and knowledge of techniques which are required in this specialized field of drawing. It gives certain amount of "drill" work in the use of the instruments used in engineering graphics and shows the student how to become adept at making neat and accurate drawings.

• \* \* \* \* \*

## ***National Honor Society***

The Anna F. Backer chapter of the National Honor Society (NHS) is an organization at St. Louis University High School which not only recognizes the academic achievements of students but also encourages achievement in the areas of service, leadership and character. A further purpose of the chapter is to improve the academic and moral climate of St. Louis University High School consistent with its Christian ideals and philosophy.

At the end of each school year sophomores and juniors are eligible for membership in the National Honor Society.

To become a member of St. Louis University High School's NHS Chapter requires a 3.6 grade point average, 32 hours of service and other obligatory duties, faithful attendance at NHS meetings, and a good citizenship record (no more than one jug in any one year).