

JSERRA CATHOLIC HIGH SCHOOL

26351 Junipero Serra Road

San Juan Capistrano, CA 92675

Phone: (949) 493-9307, Fax: (949) 493-9308

www.jserra.org



Course Catalog

2015-2016

Foreword

The JSerra Catholic High School course catalog is designed to assist JSerra students in the selection of classes. As such, students and parents should consult this catalog when planning classes not only for the upcoming year, but also for all four years of a student's education.

As detailed below, JSerra's curriculum is college preparatory in nature. It includes an academic program and an accelerated program that consists of Honors and Advanced Place courses. The academic classes that JSerra offers have been approved by the University of California system as part of its A through G requirements. Graduates of JSerra who only take the minimum number of academic courses will fully meet the admission requirements of both the UC and California State University systems. Of course, we encourage all of our students to take the most rigorous academic schedule that each student can accommodate.

To assist in planning for post-secondary education, this catalog also describes the admission requirements for University of California and California State University schools, including minimum standards for grade point average and standardized test scores. Students should also seek the guidance of our counseling department when considering education options beyond high school.

Please review the course descriptions and prerequisites carefully. It will be difficult to make schedule changes during the course of the year.

If you have questions about JSerra's curriculum in general or about a specific class, do not hesitate to contact me.

Sincerely,

Mr. Eric Stroupe
Head of Faculty and Administration

Graduation Requirements

To graduate from JSerra Catholic High School, students must successfully complete a minimum of 270 credits. Completion of course work must include the following requirements:

Theology	4 years	40 credits*
English	4 years	40 credits
Mathematics	3 years	30 credits
Science	3 years	30 credits
Social Studies	3 years	30 credits
World Language	2 years	20 credits
Fine Arts	1 year	10 credits
Health	1/2 year	5 credits
Freshman Comm.	1/2 year	5 credits*
Physical Education	2 years	20 credits
Electives		<u>40 credits</u>

Credits required to graduate 270 credits**

* Freshman Communications is not required for transfer students 10th-12th grades.

* Previous Theology credits will be waived for transfer students coming from public schools.

**A Christian service component (80 hours) is required for graduation. Transfer students are required to do 20 hours per year they attend JSerra.

All students must remediate any D's and/or F's in order to graduate from JSerra.

Grading Scale

A+	98 - 100%
A	93 - 97%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D+	67 - 69%
D	63 - 66%
D-	60 - 62%
F	Below 60%

JSerra, University of California, and California State University Requirements

	JSERRA	UC	CAL STATE
Subject Area	JSERRA Graduation Requirements	University of California Admission Requirements	California State University Admission Requirements
Theology	4 years – 40 credits	No requirement	No requirement
Social Studies <i>A Requirement</i>	3 years – 30 credits	2 years (20 credits) to include one year of world history and one year of U.S. History	2 years (20 credits)
English <i>B Requirement</i>	4 years – 40 credits	4 years (40 credits)	4 years (40 credits)
Math <i>C Requirement</i>	3 years – 30 credits (4 years recommended)	3 years (30 credits) to include Algebra I, Geometry, Algebra II <i>4 years recommended</i>	3 years (30 credits) to include Algebra I, Geometry Algebra II
Science <i>D Requirement</i>	3 years – 30 credits (2 years must be lab science, 1 in Biology) (4 years recommended)	2 years (20 credits) to include at least two of the three subjects: Biology, Chemistry, & Physics <i>3 years recommended</i>	2 years (20 credits) to include one year biological lab science & one year physical lab science
World Language <i>E Requirement</i>	2 years – 20 credits in the same language (3 years recommended)	2 years (20 credits) in the same language; <i>3 years recommended</i> <i>*ASL accepted</i>	2 years (20 credits) in same language
Fine Arts <i>F Requirement</i>	1 year – 10 credits	1 year (10 credits) to be selected from Dance, Music, Theater/Drama and Visual Arts (<i>course must be selected from a single Visual & Performing Arts area</i>)	1 year (10 credits) to be selected from Dance, Music, Theater/Drama and Visual Arts (<i>course must be selected from a single Visual & Performing Arts area</i>)
Health and Freshman Communications	1 year – 10 credits	No requirement	
Physical Education	2 years– 20 credits	No requirement	
Electives <i>G Requirement</i>	4 years – 40 credits	1 year (10 credits) to be selected from any area on approved “a-g” course list	1 year (10 credits) to be selected from any area on approved “a-g” course list
Credits Required to Graduate	270 credits*	150 credits	
Exam Requirements	No requirement	SAT or ACT w/Writing Some majors may require SAT II Subject Tests UC takes the best sitting	SAT or ACT; CSU’s superscores Critical Reading & Math (SAT) and subscores from ACT
Honors Points	JSerra gives 1 extra point for Honors & AP classes	Max of 8 extra points awarded for approved honors, AP & transferable college courses.	

For up to date UC and Cal State approved courses, please visit www.doorways.ucop.edu and click on A-G Course Lists

*A Christian service component is required for graduation.

Updated on 4-5-2016

J Serra Catholic High School

UC/CSU- Approved Course List

A: History/ Social Studies (2 years required)

Two years of history/social studies, including one year of World History or Ancient World History; and one year of US History or one-half year of US History and one-half year of American Government/ Civics.

Course Titles:

- American Government (s)
- Ancient World History
- AP European History*
- AP American Government*
- AP United States History*
- US History
- US Foreign Policy (s)
- US History Through Film (s)
- World History
- World History Honors

B: English (4 years required)

Four years of college preparatory English. Students may only use 1 year of ESL/ELD English.

Course Titles:

- AP English Language and Composition*
- AP English Literature and Composition*
- English 1
- English 1 Honors
- English 1A
- English 2
- English 2 Honors
- English 2A
- English 3
- English 3A
- English 4

C: Mathematics (3 years required, 4 years recommended)

Three years of college preparatory mathematics that includes the topics covered in Algebra 1, Geometry and Algebra 2.

Approved Integrated Math courses may be used to fulfill part or all of this requirement.

Course Titles:

- Algebra 1
- Algebra 1 Honors
- Algebra 1A
- Algebra 1B
- Algebra 2
- Algebra 2 w/ Trig Honors
- AP Calculus AB*
- AP Calculus BC*
- AP Statistics*
- Calculus
- Geometry
- Geometry Honors
- Intermediate Algebra
- Pre-Calculus
- Pre-Calculus Honors*
- Probability and Statistics

D: Laboratory Science (2 years required, three recommended)

Two years of laboratory science, including two of the three fundamental disciplines of Biology, Chemistry and Physics.

Course Titles:

- Anatomy and Physiology
- AP Biology*
- AP Chemistry*
- AP Environmental Science*
- AP Physics 1*
- AP Physics 2*
- AP Physics C*

- Biology
- Biology Honors
- Chemistry
- Chemistry Honors
- Conceptual Chemistry
- Marine Biology
- Physics

**E: Language Other than English
(2 years required, three years recommended)**

Two years of the same language other than English.

Course Titles

- AP Latin*
- AP Spanish Language*
- American Sign Language 1, 2, 3
- French 1, 2, 3, 4
- Latin 1, 2, 3
- Latin 2 & 3 Honors
- Mandarin 1, 3, 4
- Spanish 1, 2, 3, 4
- Spanish 2 & 3 Honors

**F: Visual & Performing Arts
(1 year required)**

Course Titles

- Advanced Dance Production
- Advanced Women's Ensemble
- AP Art History*
- AP Music Theory*
- AP Studio Art: Drawing *
- Beginning Band
- Chamber Choir
- Chamber Orchestra
- Concert Choir
- Dance 1, 2, 3, 4
- Digital Photography 1 & 2

- Drawing and Painting 1 & 2
- Film Making 1 & 2
- Flash Animation
- Graphic Design
- Beginning Guitar
- Guitar Workshop
- Percussion Ensemble
- Photography 1 & 2
- Photojournalism
- Theatre 1 & 2
- Wind Ensemble

G: Elective (1 year required)

One year (two semesters), in addition to those required in "a-f" above. All courses must be listed under "a-f" above.

Course Title

- Aerospace Engineering
- AP Macroeconomics*
- Astronomy
- Comparative Religions (s)
- Computer Science and Software Engineering*
- Conceptual Physics
- Creative Writing (s)
- Earth Science
- Economics (s)
- Intro. to Computer Science
- Intro. to Engineering Design
- Journalism
- Principles of Engineering
- Psychology (s)
- Speech and Debate

*Denotes classes that are given honors weight when calculating GPA for 10-11 grades

UC and CSU Admission Guidelines

The minimum high school grade point average (GPA) required for UC freshman eligibility is 3.0. The minimum GPA required for a CSU is a 2.0. The top 12.5 percent of California high school graduates will be considered eligible for UC admission. In the class of 2014, 26.5% of JSerra graduates were admitted to a UC and 46.5% were admitted to a Cal State.

Students must meet certain minimum academic requirements to be considered eligible for admission to the University of California system. For most prospective freshmen, eligibility is determined by:

1. Completion of the required A-G college prep courses in high school;
2. The GPA earned in A-G courses taken in the 10th and 11th grades;
3. Scores on the ACT w/ Writing or on the SAT.

Grade Point Average

To determine your eligibility, the University calculates your GPA in the a-g subjects by assigning point values to the grades you earn, totaling the points and dividing the total by the number of a-g courses. Points are assigned as follows: A=4 points, B=3 points, C=2 points, D=1 point, and F=0 points. (Pluses and minuses are not calculated in the grade point average.)

Only the grades you earn in a-g subjects in the 10th and 11th grades — including summer sessions — are used to calculate your preliminary GPA. Courses you took in ninth grade can be used to meet the Subject Requirement if you earned a grade of C or better, but they will not be used to calculate your GPA.

Honors and AP Courses

The University assigns extra points for up to eight semesters of University-certified honors-level and Advanced Placement courses taken in the last three years of high school: A=5 points, B=4 points, C=3 points. No more than two yearlong UC-approved honors level courses taken in the 10th grade may be given extra points. A grade of D in an honors or advanced placement course does not earn extra points.

The courses must be in the following a-g subjects: history/social science, English, advanced mathematics, laboratory science, language other than English, and visual and performing arts. Also, they must be certified as honors courses by the University. In these subjects, acceptable honors-level courses include Advanced Placement courses and college courses that are transferable to the University.

D and F grades

If a student has earned a D or F in an A-G course, he or she must repeat the course with a grade of C or better. The original D or F grade will be included in the GPA calculation, and the new

grade will be averaged in with the old grade. If the student repeats a course in which he or she initially earned a grade of C, the second grade will not be used.

Eligibility in the Local Context

Eligibility in the Local Context (ELC) is a program by which the University of California identifies top-performing California high school students. Unlike the broader statewide eligibility pathway, which seeks to recognize top students from throughout the state, ELC draws qualified students from among the top 9% of each participating high school.

To be designated as ELC, a student must have attended an eligible, participating California high school, satisfactorily completed a *specific pattern* of 11 UC-approved courses prior to the start of senior year, and have a UC-calculated GPA that meets or exceeds the top 9% GPA benchmark established by UC for their school. To maintain the ELC status, the student must satisfy the general admissions requirements including the successful completion of the 15 required “a-g” courses, maintain a 3.0 GPA and submit an official copy of ACT with Writing or SAT Reasoning Test scores.

Please visit www.universityofcalifornia.edu/admissions for more information.

Private Colleges and Universities:

Entrance requirements and expenses vary. Check with the specific colleges or universities to view their requirements. Tests required: ACT or SAT Reasoning test and SAT Subject tests

JSerra Catholic High School

NCAA Eligible Course Lists

Before a high school student can be eligible to play Division 1 or 2 sports, he or she must meet academic requirements in high school. Those standards include the successful completion of these 16 core courses:

4 years of English, 3 years of math, 2 years of natural or physical science (including one year of lab science), 1 extra year of English, math or natural or physical science, 2 years of social studies, 4 years of extra core courses (from any category above, or world language, nondoctrinal religion or philosophy)

English:

Creative Writing (s)
English 1/H
English 2/H
English 3/AP
English 4/AP
Journalism
Speech & Debate (s)

Social Studies:

American Government(s)/AP
Ancient World History
AP European History
AP Macroeconomics
Economics (s)
Military History (s)
Psychology (s)
US Foreign Policy (s)
US History/AP
World History/H

Mathematics:

Algebra 1/H
Algebra 1A (.5 UNIT)
Algebra 1B (.5 UNIT)
Algebra 2
Algebra 2/Trig Honors
AP Calculus AB
AP Calculus BC
Calculus
Geometry/H
PreCalculus/H
Statistics/AP

Natural / Physical Sciences:

Anatomy/Physiology/H
Astronomy
Biology/H/AP
Chemistry/H/AP
Concepts of Genetics/H
Conceptual Chemistry
Conceptual Physics
Earth Science
Environmental Science
Marine Biology
Physics/H
AP Physics B
AP Physics C

Additional Courses:

American Sign Lang 1, 2, 3
French 1/H
French 2/H
French 3/H
French 4/AP
Latin 1
Latin 2/H
Latin 3/H
Latin 4
Mandarin 1, 2, 3
Spanish 1/H
Spanish 2/H
Spanish 3/H
Spanish 4/AP

J Serra Catholic High School

Online Courses

The following classes are UC and NCAA approved online courses. All online students are required to take their Theology class on campus and attend weekly Wednesday all-school Mass.

Language Arts

English I
English II
English III
English IV
AP English Literature
AP English Language

Mathematics

Algebra 1
Geometry
Algebra 2
AP Calculus AB
AP Calculus BC
Statistics
AP Statistics

Social Studies

World History
U.S. Government*
Economics with financial literacy*
AP Macroeconomics*
AP Microeconomics*
US History
AP US History
AP US Government*
Psychology*
AP Psychology

World Languages

Chinese 1
Chinese 2
Chinese 3
French 1
French 2
Latin 1
Latin 2
Latin 3
Spanish 1
Spanish 2
Spanish 3
Spanish 4
AP Spanish

*Semester Course

Honors and Advanced Placement Courses

Honors Courses: Honors courses are designed for academically advanced students. They move at an accelerated pace and study topics in greater detail as compared to standard courses. Additional reading and writing assignments are included in the program of study. Honors classes earn one additional grade point for an A, B, or C grade.

Advanced Placement Courses: Advanced Placement (AP) courses are designed to offer students the opportunity to earn college credits. These courses are challenging, taught at the college level, and require teacher approvals for enrollment. AP courses lead to corresponding AP examinations. It is required that a student enrolled in an AP course will take the related AP exam. AP classes earn one additional grade point for an A, B, or C grade.

*Students must maintain a total, cumulative gpa of a 3.0 and a B in order to remain in an honors and/or AP class.

Honors and AP Course Offerings:

<u>English:</u>	English 1 H, English 2 H, AP English Literature & Composition, AP English Language & Composition
<u>Mathematics:</u>	Algebra 1 H, Geometry H, Algebra II/Trigonometry H, Pre-Calculus H, AP Calculus AB, AP Calculus BC, AP Statistics
<u>Science:</u>	Biology H, Chemistry H, Physics H, Anatomy and Physiology H, AP Biology, AP Chemistry, AP Environmental Science, AP Physics 1 AP Physics 2, AP Physics C.
<u>World Languages:</u>	Spanish 2 H, Spanish 3 H, AP Spanish Language French 2 H, French 3 H, AP French Language, Latin 2 H, Latin 3 H, AP Latin
<u>Social Studies:</u>	World History H/MUN, AP European History, AP US History, AP American Government, AP Macroeconomics, AP Psychology*
<u>Visual and Performing Arts:</u>	AP Art History, AP Music Theory, AP Studio Art, Chamber Choir H, Advanced Drawing and Painting
<u>Engineering Magnet:</u>	Intro to Engineering H, Principals of Engineering H, Engineering Computer Science and Software, Aerospace Engineering
<u>Law Magnet:</u>	Business Law H, Criminal Law H, Trial Advocacy H, Constitutional Law H, Contract H
<u>Medical Magnet:</u>	Intro to Health Sciences H, Ethics in Healthcare H, Concepts of Genetics H, Intro to Neuroscience H

Sample Four Year Plan for Graduation

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3 <i>(recommended)</i>	World Language 4 <i>(recommended)</i>
Algebra 1	Geometry	Algebra 2	Pre-calculus or Statistics
Conceptual Physics	Biology	Chemistry	Science or Elective
Ancient World History	World History	US History	American Gov (sem)/ Economics (sem)
Freshman Communicatons/Health	Fine Art, PE or Elective	Fine Art, PE or Elective	Fine Art, PE or Elective

Sample Four Year Plan for: Student Athlete, Artist or SERP

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3 <i>(recommended)</i>	World Language 4 <i>(recommended)</i>
Algebra 1	Geometry	Algebra 2	Pre-calculus, Statistics or higher
Conceptual Physics	Biology	Chemistry	Science or Elective
Ancient World History	World History	US History	American Gov (sem)/ Economics (sem)
*PE Sport Class, Fine Art or Study Skills	*PE Sport Class, Fine Art or Study Skills	*PE Sport Class, Fine Art or Study Skills	*PE Sport Class, Fine Art or Study Skills
*Summer School (prior to 9th)			
Freshman Communications/Health			

*Extra fees required

Business Magnet Program Sample Four Year Plan

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	Fine Art	PE
Algebra 1	Geometry	Algebra 2	Pre-calculus or Statistics
Conceptual Physics	Biology	Chemistry	Science or elective
<i>Prof Leadership/ Speech & Debate</i>	<i>Intro to Business</i>	<i>2 BMP Electives</i>	<i>Senior Capstone H/ BMP Elective</i>
Freshman Communications/Health	World History	US History	AP Macroeconomics (<i>recommended</i>)

Sample BMP Four Year Plan for: Student Athlete, Artist or SERP

This plan is for students who want to take extra classes in the above subject areas

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3 (<i>recommended</i>)	World Language 4 (<i>recommended</i>)
Algebra	Geometry	Algebra 2	Pre-calculus or Statistics
Conceptual Physics	Biology	Chemistry	AP Macroeconomics (<i>recommended</i>)
<i>Prof Leadership/ Speech & Debate</i>	<i>Intro to Business</i>	<i>2 BMP Electives</i>	<i>Senior Capstone H/ BMP Elective</i>
*PE Sport Class, Fine Art or SERP	*PE Sport Class, Fine Art or SERP	*PE Sport Class, Fine Art or SERP	*PE Sport Class, Fine Art or SERP
*Summer School (prior to 9th)	*Online Course	*Online Course	
Freshman Communications/Health	World History	US History	

**Extra fees required

Business Magnet Program

Sample Four Year Plan Class of 2020 and beyond

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	Fine Art	PE
Algebra 1	Geometry	Algebra 2	Pre-calculus or Statistics
Conceptual Physics	Biology	Chemistry	Science or elective
<i>Intro to Business</i>	<i>Sales & Marketing H</i>	<i>Accounting I H /Business Comm. H</i>	<i>Senior Capstone H/ Business Law H</i>
Freshman Communications/Health	World History	US History	AP Macroeconomics (recommended)

Sample BMP Four Year Plan for: Student Athlete, Artist or SERP Class of 2020 and beyond

This plan is for students who want to take extra classes in the above subject areas

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3 (recommended)	World Language 4 (recommended)
Algebra	Geometry	Algebra 2	Pre-calculus or Statistics
Conceptual Physics	Biology	Chemistry	AP Macroeconomics (recommended)
<i>Intro to Business</i>	<i>Sales & Marketing H</i>	<i>Accounting I H /Business Comm. H</i>	<i>Senior Capstone H/ Business Law H</i>
*PE Sport Class, Fine Art or SERP	*PE Sport Class, Fine Art or SERP	*PE Sport Class, Fine Art or SERP	*PE Sport Class, Fine Art or SERP
<i>*Summer School (prior to 9th)</i>	<i>*Online Course</i>	<i>*Online Course</i>	
Freshman Communications/Health	World History	US History	

**Extra fees required

Engineering Magnet Program PLTW©

Sample Four Year Plan

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3	PE or Fine Art
<i>*Geometry or higher</i>	<i>*Algebra 2 or higher</i>	<i>*Pre-Calculus or higher</i>	<i>*Statistics, Calculus, or higher</i>
<i>*Conceptual Physics or higher</i>	<i>*Biology or higher</i>	<i>*Chemistry or higher</i>	<i>*Science or EMP elective</i>
<i>*Intro to Engineering</i>	<i>*Principles of Engineering</i>	<i>*EMP Elective</i>	<i>*EMP Capstone</i>
Freshman Communications/Health	World History	US History	American Gov/Economics

Sample EMP Four Year Plan for: Student Athlete, Artist or SERP

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3 (recommended)	World Language 4 (recommended)
<i>*Geometry or higher</i>	<i>*Algebra 2 or higher</i>	<i>*Pre-Calculus or higher</i>	<i>*Statistics, Calculus, or higher</i>
<i>*Conceptual Physics or higher</i>	<i>*Biology or higher</i>	<i>*Chemistry or higher</i>	<i>*Science or EMP elective</i>
<i>*Intro to Engineering</i>	<i>*Principles of Engineering</i>	<i>*EMP Elective</i>	<i>*EMP Capstone</i>
**PE Sport Class, Fine Art or SERP	**PE Sport Class, Fine Art or SERP	**PE Sport Class, Fine Art or SERP	**PE Sport Class, Fine Art or SERP
**Summer School (prior to 9th)	**Online Course	**Online Course	**Online Course
Freshman Communications/Health	World History	US History	American Gov/ Economics

*All **EMP courses** need to be taken in class

**Extra fees required

Law Magnet Program Sample Four Year Plan

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
<i>*English 1 or H</i>	<i>*English 2 or H</i>	<i>*English 3 or AP Lit & Composition</i>	<i>*English 4 or AP Lang & Composition</i>
World Language 1	World Language 2	PE	Fine Art
Algebra 1 or higher	Geometry or higher	Algebra 2 or higher	Pre-calculus, Statistics or higher
Con Physics or higher	Biology or higher	Chemistry or higher	Science or elective
<i>*Intro to Law H/Prof Leadership</i>	<i>*Speech & Debate/Legal Research & Writing</i>	<i>* Trial Advocacy H / Criminal Law H</i>	<i>* Contracts H / Const. Law H</i>
Freshman Communications/Health	World History	US History	American Gov (sem)/ Economics (sem)

Sample LMP Four Year Plan for: Student Athlete, Artist or SERP

This plan is for students who want to take extra classes in the above subject areas

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
<i>*English 1 or H</i>	<i>*English 2 or H</i>	<i>*English 3 or AP Lit & Composition</i>	<i>*English 4 or AP Lang & Composition</i>
World Language 1	World Language 2	World Language 3 (recommended)	World Language 4 (recommended)
Algebra 1 or higher	Geometry or higher	Algebra 2 or higher	Pre-calculus, Statistics or higher
Con Physics or higher	Biology or higher	Chemistry or higher	Science or elective
<i>*Intro to Law H/Prof Leadership</i>	<i>*Speech & Debate/Legal Research & Writing</i>	<i>* Trial Advocacy H / Criminal Law H</i>	<i>* Contracts H / Const. Law H</i>
PE Sport Class, Fine Art or SERP	PE Sport Class, Fine Art or SERP	PE Sport Class, Fine Art or SERP	PE Sport Class, Fine or SERP
**Summer School (prior to 9th)	**Online Course	**Online Course	**Online Course
Freshman Communications/Health	World History	US History	American Gov (sem) and Economics (sem)

*All **LMP courses** need to be taken in class

**Extra fees required

Pre-Medical Professional Magnet Program

Project A-Pulse^R

Copyright © 2013 Cappelletti

Sample Four Year Plan

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	PE	Fine Art
*Geometry Honors	*Algebra 2 Trig/Honors or higher	*Pre-Calculus Honors or higher	*Calculus, AP Calculus AB or BC, AP Statistics
*Honors Biology	*Intro to Health Science (sem) AND Medical Ethics (sem)	*Anatomy and Physiology Honors	*AP Chemistry, AP Physics, AP Biology, AP Environmental Science (choose 1)
Algebra I Honors	*Honors Chemistry	*AP Chemistry, AP Physics, AP Biology, AP Environmental Science (choose 1)	*Intro to Neuroscience (sem) and Concepts of Genetics (sem)
Ancient World History	Fine Art	US History	American Gov (sem) / Economics (sem)
**Summer School (prior to 9th)			
Freshman Communications			

Sample PMPMP Four Year Plan for: Student Athlete, Artist or SERP

This plan is for students who want to take extra classes in the above subject areas

Freshmen Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
World Language 1	World Language 2	World Language 3 (recommended)	World Language 4 (recommended)
*Geometry Honors	*Algebra 2 Trig/Honors or higher	*Pre-Calculus Honors or higher	*Calculus, AP Calculus AB or BC, AP Statistics
*Honors Biology	*Intro to Health Science (sem) AND Medical Ethics (sem)	*Anatomy and Physiology Honors	*AP Chemistry, AP Physics, AP Biology, AP Environmental Science (choose 1)
Algebra I Honors	*Honors Chemistry	*AP Chemistry, AP Physics, AP Biology, AP Environmental Sci. (choose 1)	*Intro to Neuroscience (sem) and Concepts of Genetics (sem)
PE Sport Class, Fine Art or Study Skills	PE Sport Class, Fine Art or Study Skills	PE Sport Class, Fine Art or Study Skills	PE Sport Class, Fine Art or Study Skills
**Summer School (prior to 9th)	**Online Course	**Online Course	**Online Course
Freshman Communications	World History	US History	American Gov (sem)/ Economics (sem)

*All **PMPMP courses** need to be taken in class

**Extra fees required

ARTS MAGNET PROGRAM

Sample Four Year Plan

Freshman Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
Algebra 1 or higher	Geometry	Algebra 2	Pre-calculus or Statistics
Conceptual Physics	Biology	Chemistry	PE
**History of the Arts (or 10 th)	World History	US History	American Gov/Economics
World Language 1	World Language 2	<i>Arts Magnet Course</i> (or 12 th)	<i>Arts Magnet Course</i>
<i>Arts Magnet Course</i>	<i>Arts Magnet Course</i>	<i>Arts Magnet Course</i>	<i>Prof. Arts Seminar</i> /Health
*Frosh. Comm. (summer)			

Sample AMP Four Year Plan for: Student Athlete or SERP

Freshman Year	Sophomore Year	Junior Year	Senior Year
Theology 1	Theology 2	Theology 3	Theology 4
English 1	English 2	English 3	English 4
Algebra 1	Geometry	Algebra 2	Pre-calculus or Statistics
	Biology	Chemistry	Science Elective
**History of the Arts (or 10 th)	*World History (online)	*US History (online)	*American Gov/Econ (online)
World Language 1	World Language 2	<i>Arts Magnet Course</i> (or 12 th)	<i>Arts Magnet Course</i>
<i>Arts Magnet Course</i>	<i>Arts Magnet Course</i>	<i>Arts Magnet Course</i>	<i>Prof. Arts Seminar</i> /Health
*PE Sport Class or SERP	*PE Sport Class or SERP	*PE Sport Class or SERP	*PE Sport Class or SERP
*Frosh. Comm. (summer)			

Magnet Pathways

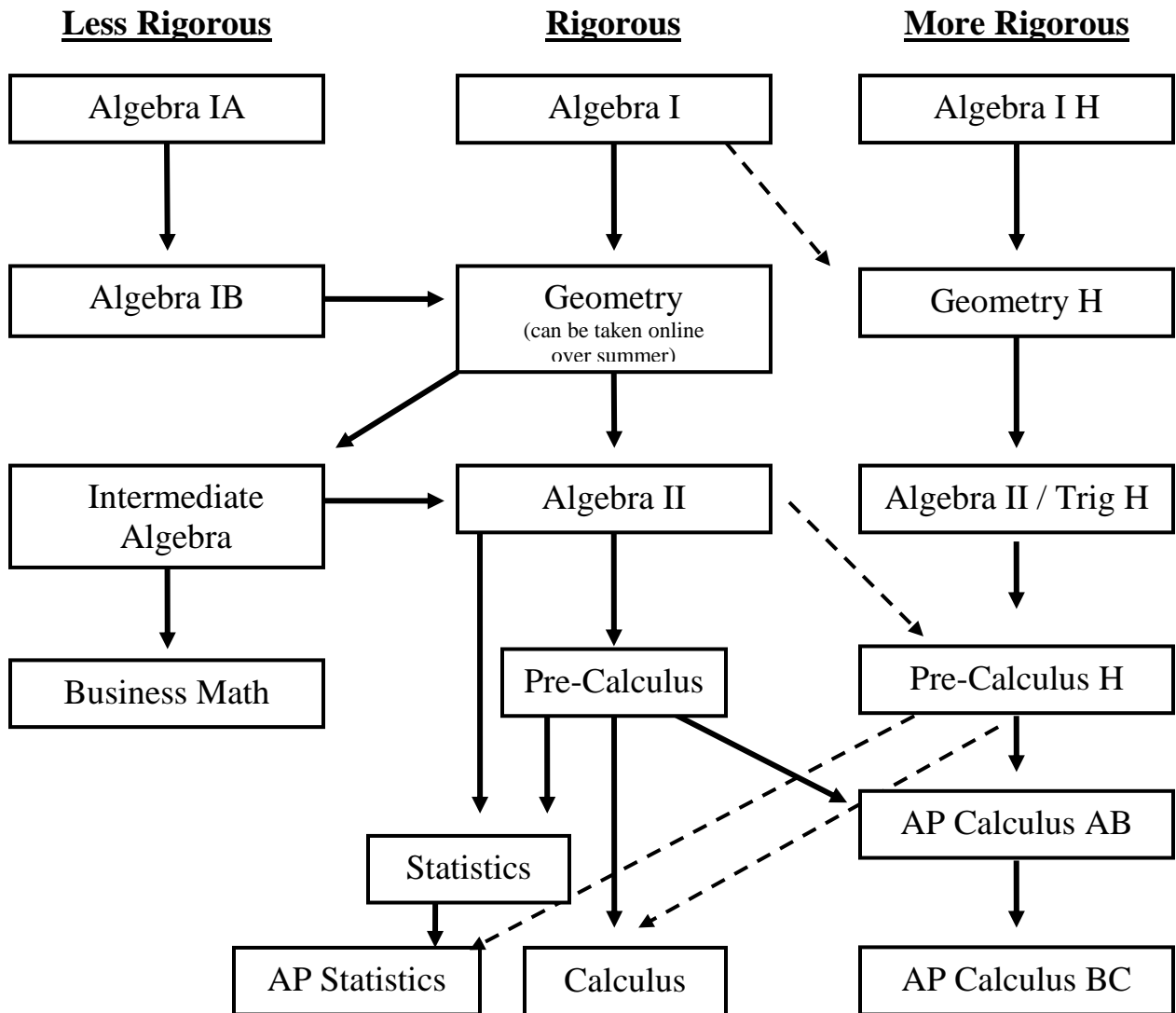
	Freshman Year	Sophomore Year	Junior Year	Senior Year
Music	Adv. Women's Ens. H, Chamber Choir H, Chamber Orchestra H, Wind Ens. H, or Piano Wrkshp. H + History of the Arts H (or 10 th)	Adv. Women's Ens. H, Chamber Choir H, Chamber Orchestra H, Wind Ens. H, or Piano Workshop H	Chamber Choir H, Chamber Orchestra H, Wind Ens. H, or Piano Workshop H + AP Music Theory (or 12 th)	Chamber Choir H, Chamber Orchestra H, Wind Ens. H, or Piano Workshop H + Professional Arts Seminar H
Dance	Dance 2H + History of the Arts H (or 10 th)	Dance 3H	Dance 4H + Adv. Dance Prod. H (or 12 th)	Dance 4H + Professional Arts Seminar H
Theater	Theater 2H + History of the Arts H (or 10 th)	Musical Theater H	Advanced Theater H + Technical Design H (one may be taken 12 th)	Advanced Theater H or Technical Design H + Prof. Arts Seminar H
Drawing & Painting	Drawing & Painting 2H + History of the Arts H (or 10 th)	Adv. Drawing & Painting H	AP Studio Art: Drawing + Adobe Suite H (or 12 th)	AP Studio Art: 2D or AP Art History + Professional Arts Seminar H
Photography	Digital Photo 2H + History of the Arts H (or 10 th)	Graphic Design 1H	Graphic Design 2H, Flash H, or Photojournalism H + AP Photo (or 12 th)	AP Studio Art: 2D, Flash H, Photojournalism H, or AP Art History + Professional Arts Seminar H
Graphic Design	Graphic Design 2H + History of the Arts H (or 10 th)	Digital Photo 1H	Digital Photo 2H, Flash H, or Photojournalism H + AP Studio Art: 2D (or 12 th)	AP Photo, Flash H, Photojournalism H, or AP Art History + Professional Arts Seminar H
Broadcast Journalism	Any honors broadcast course + History of the Arts H (or 10 th)	Any honors broadcast course	Any honors broadcast course + The Lion Report H (or 12 th)	Any honors broadcast course + Professional Arts Seminar H

* Extra fees required

**Exceptional 9th grade students may audition/apply to join the magnet track in 10th grade

JSerra Catholic High School

Math Pathways



- 9th grade students may automatically qualify for math honors through the High School Placement Test or through a math placement exam.

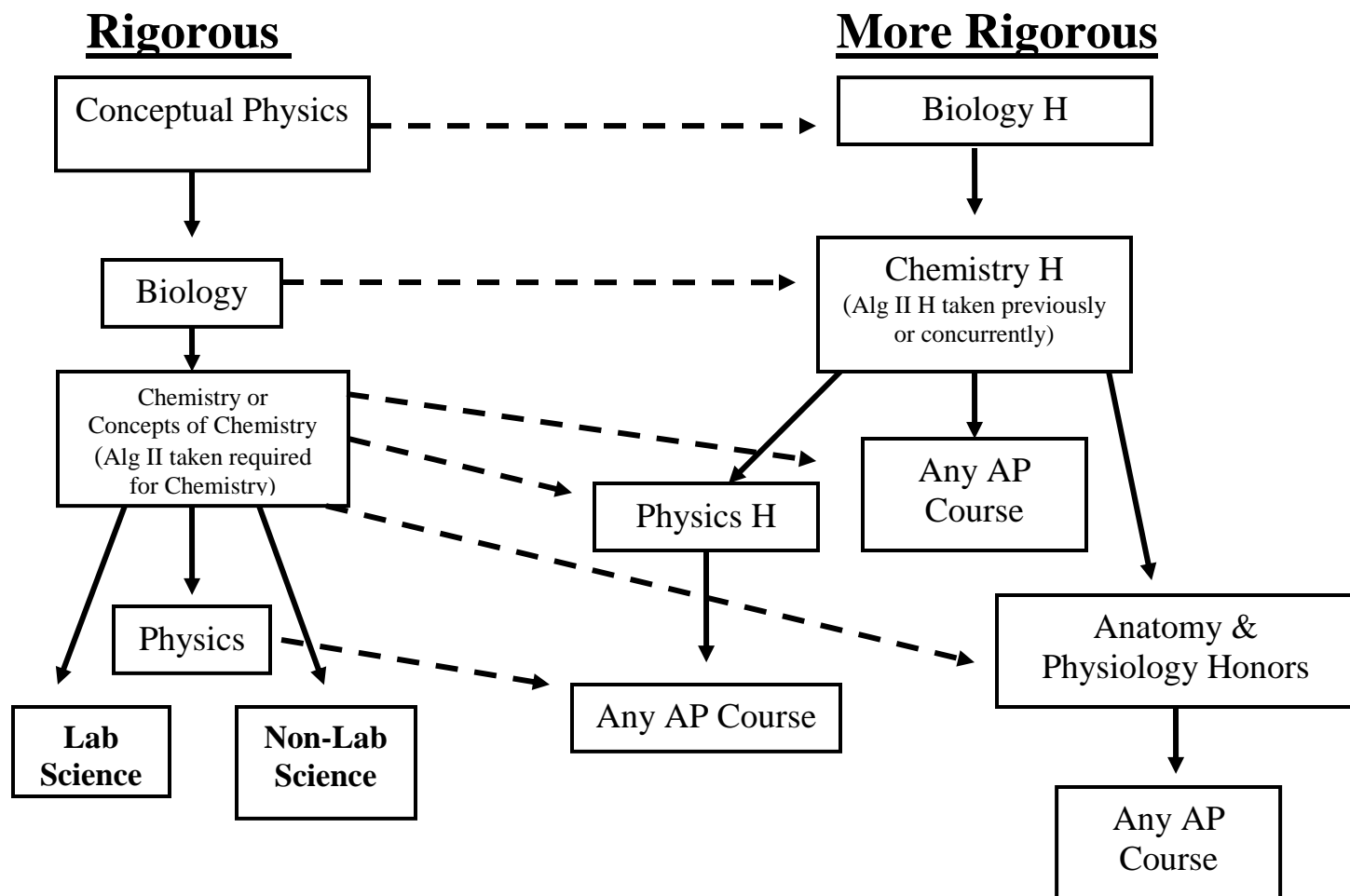
- 10th-12th grade students can move from non-honors to honors classes through a teacher recommendation, receiving a grade in their previous class of an A, as well as pass a math placement exam if offered.

- Students from Algebra II wanting to take Pre-Calculus H must take a Trigonometry course in the summer.

- Summer work is required for all courses Algebra 2 and above

JSerra Catholic High School

Science Pathways



Lab Sciences:

- Anatomy & Physiology (H) (Grades 10-12)
- Concepts of Chemistry (Grades 11-12)
- Marine Biology (Grades 10-12)

AP Courses Offered:

- AP Biology
- AP Chemistry
- AP Physics 1, 2, & C
- AP Environmental Science

Non-Lab Science:

- Astronomy (Year) (Grades 10-12)

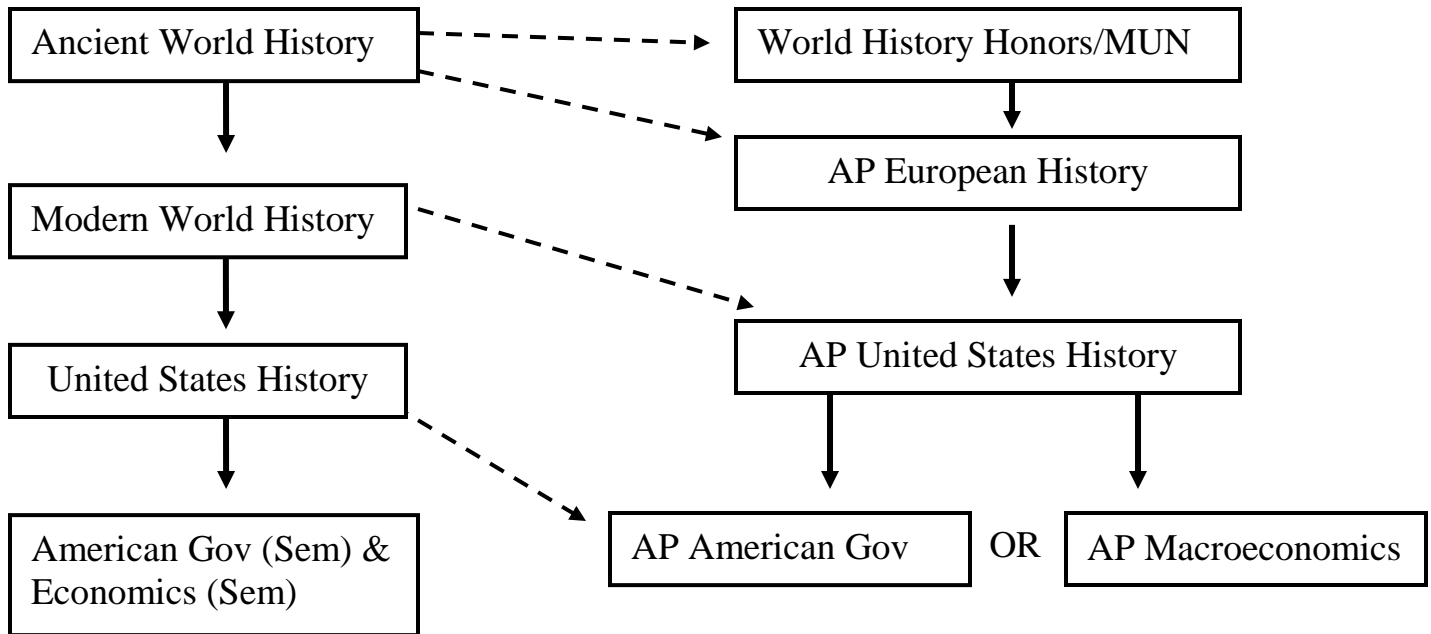
- To move from non-honors to honors classes or AP classes, students must receive an A in both semesters of his/her previous class and must pass a placement exam. Students also must complete summer work for all AP and honors courses.

JSerra Catholic High School

Social Studies Pathways

Rigorous

More Rigorous



Honors:

-World History H/MUN (Grade 9, 10)

AP Courses:

-AP European History (Grade 10)
-AP US History (Grade 11)
-AP American Government (Grade 12)
-AP Macroeconomics (Grade 12)

Other Social Studies Courses:

-Military History (Sem.) (Grades 11-12) -US History through Film (Sem.) (Grades 11-12)
-Psychology (Sem.) (Grades 10-12) -US Foreign Policy (Sem.) (Grades 11-12)
-History of Sports (Sem.) (Grades 10-12) -Environmental History (Sem.) (Grades 11-12)

- To move from non-honors to honors classes students must receive a teacher recommendation and fulfill the required grade and course prerequisites set by the Social Studies Department. Students also must complete summer work for all AP and honors courses, except AP Macroeconomics.

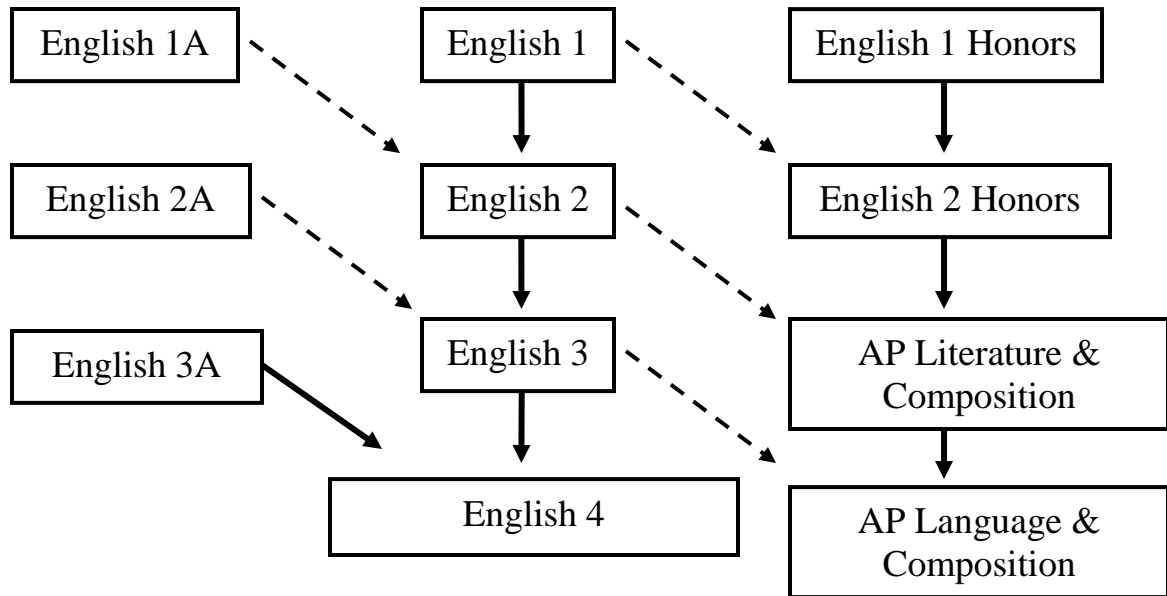
JSerra Catholic High School

English Pathways

Less Rigorous

Rigorous

More Rigorous



Honors:

- English 1 Honors (Grade 9)
- English 2 Honors (Grade 10)

AP Courses:

- AP Literature & Composition (Grade 11)
- AP Language & Composition (Grade 12)

Other English Courses:

- Creative Writing (Sem.) (Grades 10-12)
- Speech and Debate (Sem.) (Grades 10-12)
- Journalism (Year) (Grades 10-12)

- To move from non-honors to honors classes students must receive department recommendation, pass an entrance exam and fulfill the required grade and course prerequisites set by the English Department. Students also must complete summer reading/work for all courses.

Course Descriptions

Business Magnet Program

The mission of the Business Magnet Program is to develop future business leaders who are prepared, knowledgeable and skilled in the global business environment. The program will provide students with an instructional curriculum, co-curricular activities, and opportunities to apply knowledge to hands-on experiences to be successful in college and beyond. The program will incorporate the core values of JSerra including faith, integrity, pursuit of excellence and a commitment to service. Fee is required for each grade level. Fees cover FBLA fees, conferences, competitions, UCI speaker events entry fee and transportation, & various activities and events.

Program Requirements:

- ✓ **9th grade:** Intro to Business (y), \$500
- ✓ **10th grade:** Class of 2020 will take Sales & Marketing (y), \$1000; Classes before 2020 will take Intro to Business (y), \$1000
- ✓ **11th grade (two of the following):** Class of 2020 will take Accounting 1 (s), and Business Communication (s), \$1000; Classes before 2020 will choose between Accounting 1 (s), Sales & Marketing (s), Business Communication (s), and Business Law (s), \$1000
- ✓ **12th grade:** Class of 2020 will take Senior Capstone (s) and Business Law (s), \$1000; Classes before 2020 will take Senior Capstone (s) and one elective from Accounting 1 (s), Sales & Marketing (s), Business Communication (s), and Business Law (s), \$1000

Accounting 1 H – Elective (Semester) 5 credits Grades 11, 12

Prerequisite: Intro to Business

This course will introduce the students to the concepts and skills required for basic Accounting for a service business organized as a proprietorship for the first quarter. The second quarter will teach the students a complete accounting cycle for a merchandising business organized as a corporation. The importance of learning a service business and a merchandise business means the students will understand how to incorporate costs and how to charge sales tax.

Business Communications H - Elective 5 credits

Grade 11, 12

Prerequisite: Intro to Business

Students will study the principals, strategies, and techniques of effective written, oral, and digital business communication. Emphasis is placed on reviewing grammar and successful written messages including e-mails, memos, letters, web/advertising copy writing, and the basic framework of writing a business plan. Additionally, students will

learn productive techniques for business presentations, as well as skills to communicate professionally in an increasingly global, digital workplace.

Business Law Honors – Elective (Semester) 5 credits

Grade 11, 12

Prerequisite: A Junior or Senior level student enrolled in either the Business or Law Magnet Program

This course examines the basics of contract formation and performance, product warranties, product liability, and all in the context of business legal issues, and the ethical considerations in the practice of business law.

Intro to Business – Required (Year) 10 credits

Grades 9, 10, 11, 12

Prerequisite: None

This course will introduce the students to the concepts and skills required for success in today's workplace. Topics covered will include finance, marketing, production, and management which will give the student a foundation of business operations. In order to take them beyond the basics, other topics included will be ethics, economics, career planning, and technology.

Sales and Marketing – Elective (Semester) 5 credits

Grades 10, 11, 12

Prerequisite: Intro to Business

This course will introduce the students to the concepts and skills required for success in today's workplace. Topics covered will include finance, marketing, production, and management which will give the student a foundation of business operations. In order to take them beyond the basics, other topics included will be ethics, economics, career planning, and technology.

Senior Capstone Project – Required (Semester) 5-10 credits

Grade 12

Prerequisites: Intro to Business (can be taken simultaneously if necessary).

The students will have three main responsibilities. They will develop a business plan that will be presented to a panel at the end of the semester. They will also work 2-4 hours as an Intern in a business off campus. The students will work with a professional young adult career counselor to insure their success in college and beyond.

Engineering Magnet Program

Project Lead the Way ©

The JSerra Catholic High School **Engineering Magnet Program** (EMP) begins in the fall of 2013. This 4-year program will prepare students for an engineering curriculum in college and potential future careers in engineering.

In the JSerra EMP students will be exposed to a variety of engineering specializations during their 4-years of enrollment so they are able to make informed decisions whether to enter the engineering field. Students will have gained detailed knowledge of the diverse engineering fields such as aerospace, chemical, industrial, civil, chemical, and electrical engineering.

The JSerra EMP adopts the curriculum of Project Lead the Way (PLTW) a leader in providing rigorous and innovative STEM (science, technology, engineering and math) education. PLTW was launched in 1997 and has been adopted by more than 4,700 middle and high schools in all 50 states. Students who complete the PLTW curriculum program are far more likely to pursue a career in engineering.

The JSerra EMP course sequence will expose students to hands-on, real-world problem-solving. Students in the JSerra EMP classes will learn and apply the design process, acquire strong teamwork and communication proficiency, and develop organizational, critical-thinking, and problem-solving skills.

Program Requirements:

Summer prior to 9th grade: Freshman Communications (s), Health (s)

9th grade: Intro to Engineering Design H (y), Geometry or higher, \$1000

10th grade: Principles of Engineering H (y), Algebra 2 or higher, \$1000

11th grade: Choose one yearlong course: Aerospace Engineering H, Biotechnical Engineering H, Civil Engineering H and Architecture H, Computer Integrated Manufacturing H, Digital Electronics H, \$1000

12th grade: Engineering Design and Development H: Senior Capstone (y), \$1000

JSerra students are required to complete classes in the Fine Arts. It is recommended that Engineering Magnet students consider taking Instrumental courses including Piano and Handbells, Choir, or Drawing and Painting.

Intro. to Engineering Design Honors (IED) (Year) 5 credits Grades 9, 10

Prerequisite: Application required and must be concurrently enrolled in Geometry or higher.

(UC Approved)

Designed for 9th grade students, the major focus of IED is the design process and its application. Through hands-on projects, students apply engineering standards and document their work. Students use industry standard 3D modeling software to help them design solutions to solve proposed problems, document their work using an engineer's notebook, and communicate solutions to peers and members of the professional community.

Principles of Engineering Honors (POE) (Year)

Grades 10, 11

Prerequisite: Introduction to Engineering with B or better

(UC Approved)

Designed for 10th grade students (11th grade students may take this course if they have previously completed the IED course. This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.

Specialization Courses (Honors Designation)

Prerequisites: Completion of POE course with C+ or better and enrollment in the EMP.

Aerospace Engineering (AE) (Year) (UC Approved)

Grades 11, 12

AE explores the evolution of flight, navigation and control, flight fundamentals, aerospace materials, propulsion, space travel, and orbital mechanics. In addition, this course presents alternative applications for aerospace engineering concepts. Students analyze, design, and build aerospace systems. They apply knowledge gained throughout the course in a final presentation about the future of the industry and their professional goals.

Biotechnical Engineering (BE) (Year)

Grades 11, 12

In this course students explore the diverse fields of biotechnology. Hands-on projects engage students in engineering design problems related to biomechanics, cardiovascular engineering, genetic engineering, tissue engineering, biomedical devices, forensics and bioethics. Students, apply biological and engineering concepts to design materials and processes that directly measure, repair, improve and extend living systems.

Civil Engineering and Architecture (CEA) (Year)

Grades 11, 12

Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects.

Computer Integrated Manufacturing (CIM) (Year)

Grades 11, 12

How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? While students discover the answers to these questions, they're learning about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems.

Updated on 4-5-2016

Computer Science Engineering (CSE) (Year)

Grades 11, 12

Prerequisite: Introduction to Engineering Design (IED) and Principals of Engineering (POE), and completion of Algebra II or higher

Computer Science Engineering (CSE) is the PLTW course that covers the College Board's CS Principles framework. Students work in teams to develop computational thinking and problem solving skills. Students will learn Python as their primary advanced language. In addition students will become familiar and solve problems using Scratch, App Inventor (they will be able to write programs for their Android phone or tablet), Net Logo and the Arduino microprocessor language. Contemporary practices will utilize programming tasks performed in student pairs with partner changes between projects. In an effort to simulate real engineering practices, there will be substantial grade penalties for absences of any kind, if the time is not made up before or after school by the absent party during the project interval.

Digital Electronics (DE) (Year)

Grades 11, 12

Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation.

Pre-Law Professional Magnet Program

The purpose of the Pre Law Professional Magnet Program (PLPMP) is to introduce the student to the field of law and help prepare the student for the rigors of law school. The PLPMP will be accomplished by a combination of academic classes and clinical practice. Particular emphasis will be placed on the ethical role lawyers play in society to ensure the rule of law is maintained and to help ensure justice is served when conflicts arise.

JSerra's PLPMP courses are modeled after actual law school courses. The curriculum, texts, and instructional methods are similar to what the student will experience in law school. As such, students will learn how to raise and defend an argument, develop their analytical thinking and reasoning skills, and write legal briefs. In short, students will have a solid understanding of what preparation for a legal career entails.

The PLPMP is a four-year program that focuses on developing the student's written, verbal, and analytical skills. Students who are eligible for the program must demonstrate strong aptitude in these areas to be accepted into the program. Students who complete the rigorous one-of-a-kind four-year program will receive special recognition on their diploma and wear a law chord at their graduation.

Program Requirements:

Summer prior to 9th grade: Freshman Communications (s), Health (s)

9th grade: Intro to Professional Business & Leadership (s), and Introduction to Law Honors (s), \$500: Participate in the mock trial program in Fall and Spring semesters

10th grade: Speech & Debate (s), Legal Research and Writing (s), \$1000: Participate in the mock trial program in the Fall

11th grade: Trial Advocacy Honors (s), Criminal Law Honors (s), \$1000: Participate in the mock trial program in the Fall

12th grade: Contract Law Honors (s), Constitutional Law Honors (s), \$1000: Participate in the mock trial program in the Fall

JSerra students are required to complete classes in the Fine Arts. It is recommended that Law Magnet students consider taking Theater, Choir, or 2-D Design.

Introduction to Law Honors – Required (Semester) 5 credits Grade 9
Prerequisite: Submission of application for law magnet program and school approval of enrollment in the program. Enrollment must be completed prior to the start of the school year in August.

The purpose of this class is to introduce freshmen students to the basic elements of a jury trial, California evidence, United States Constitutional search & seizure & Miranda law, and the mock trial program. This introductory class will form the foundation for the more detailed junior and senior year studies of criminal law, trial advocacy, constitutional law, and contract law. It will also provide students with an understanding of the mock trial competition process which they will participate in during their sophomore, junior, and senior Fall semesters.

Next, freshmen students will be required to attend two seminars which are held on school days and one on a weekend. They are as follows:

Orange County Courthouse tour; Fall term during school hours
Mock trial at Chapman Law School; Fall term on a Saturday morning in December
Law Day seminar; Spring Term during school hours

Legal Research and Writing – Required (Spring) 5 Credits Grade 10
Prerequisite: Introduction to Law Honors

The course introduces students to fundamental legal reasoning, research, and writing skills in the context of objective legal documents, including client letters and memoranda of law. Students will develop their analytical, writing, and research skills in the advocacy context. Students produce litigation documents and are introduced to computer assisted legal research.

Trial Advocacy Honors – Required (Fall) 5 credits Grade 11
Prerequisite: Introduction to Law Honors

This practical hands on course in trial advocacy examines all of the key elements of a jury trial including pretrial motions, jury selection, opening statements, direct examination of witnesses, cross-examination of witnesses, and closing argument. Students will participate in simulated trial activities throughout the semester. Ethics in trial advocacy will be emphasized with the students.

Criminal Law Honors – Required (Spring) 5 credits **Grade 11**
Prerequisite: Trial Advocacy Honors

This course introduces students to the basic components of criminal law, including actus reus and mens rea, causation, attempt crimes, burdens of proof, defenses, mistakes, punishment, the elements of several crimes, such as criminal homicide, conspiracy, coconspirators, and larceny, as well as ethical considerations in the practice of criminal law.

Contract Law Honors – Required (Fall) 5 credits **Grade 12**
Prerequisite: Criminal Law Honors

This course examines the fundamental elements of contract formation and performance including offer, acceptance, consideration, duties and obligations, capacity, defenses, excuses, rights of third parties, and the ethical considerations in the practice of contract law.

Constitutional Law Honors – Required (Spring) 5 credits **Grade 12**
Prerequisite: Contract Law Honors

This course introduces students to the basic components of constitutional law, including free speech, liberty, property and due process, the taking, contract and commerce clauses, equal protection, racial equality, equal rights for the sexes, and the ethical considerations in the practice of constitutional law.

Elective Course: **Grades 11 or 12**

Business Law Honors – Elective (Fall) 5 credits
Prerequisite: A junior or senior level student enrolled in either the Business or Law Magnet program.

This course examines the basics of contract formation and performance, product warranties, product liability, and all in the context of business legal issues, and the ethical considerations in the practice of business law.

Pre-Medical Professional Magnet Program

Project A-Pulse^R
Copyright © 2013 Cappelletti

The newly developed medical magnet project is a four-year program introducing students to health sciences and technology. This program's curriculum is rigorous and mandates students to enroll in double science and math courses compared to the typical high school

science based curriculum. The added science and math courses will emphasize life science application. The curriculum shall include: medical technology, medical terminology, the ethics of health care, and research methods. Classroom instruction will be supplemented with lectures, observed operations, and individual meetings with eminent medical professionals such as: prominent physicians, nurses, Emergency/Operating staff, medical/radiological technicians, CFO, CEO, etc., on specific days at the hospital facility. Students graduating from this rigorous program will have a solid foundation in science and math applicable for future careers in medicine.

Program Requirements:

Summer prior to 9th grade: Freshman Communications (s)

9th grade: Biology Honors, Geometry Honors, Algebra I Honors , \$350

10th grade: Intro to Health Sciences Honors – takes the place of JSerra’s Health requirement (s), Medical Ethics (s), Chemistry H, Algebra 2 Honors, \$1000

11th grade: Anatomy and Physiology Honors, upper division science course (per director’s approval), Pre-Calculus H, \$1000

12th grade: Concepts of Genetics Honors (s), Intro to Neuroscience Honors (s), upper division science course (per director’s approval), Calculus or AP Calculus, \$1000

JSerra students are required to complete classes in the Fine Arts. It is recommended that PMPMP students consider taking Drawing and Painting, Choral, Instrumental, or Dance courses.

Concepts of Genetics Honors (Semester) 5 Credits Grade 12

Prerequisites: Enrollment in the PMPMP and completion of the following courses with a B or better in all semesters: Biology Honors and Chemistry Honors. Anatomy and Physiology Honors and AP Biology is to be taken concurrently or previously to this course; teacher’s approval. Students not enrolled in the PMPMP may petition the class if space is available and have met all other course prerequisites.

This course focuses on the basic concepts of genetics and adds an emphasis on current issues in genetics. It is designed to augment the required core science courses and applicable courses designated for the Pre-medical Professional Magnet Program. The topics of study will be genetic material, the gene as a unit of recombination, mutation, function, and regulation. The course will begin with Mendelian genetics to introduce basic concepts and the history of genetics. Students will be expected to participate in a number of significant labs using Pasco probe and other technology such as gel electrophoresis.

Ethics in Health Care Honors (Semester) 5 Credits Grade 9

Prerequisite: Must be enrolled in the PMPMP and meet all PMPMP course requirements. Biology Honors is to be taken concurrently or previously to this course and students must maintain a “B+” or better. Geometry Honors/Algebra II Honors is to be taken concurrently with this course and maintain a “B+” or better in both semesters.

Ethics in Health Care is a course designed to study ethics as practiced in the health care setting. The case studies and course curriculum is based on Catholic doctrine. This course develops philosophical knowledge centered on ethical awareness, ethical knowledge, and skills. Students will be introduced to several traditional moral theories, and using health care settings examples. This course will progress through a variety of ethical challenges that health professionals face throughout their careers. Topics may include: euthanasia, modern fertility interventions, treatment of impaired newborns, mental illness, use of animals in research, professional ethical codes, scarce resources, genetic engineering, inter-cultural issues, economics (ability to pay) and many other dilemmas that occur when practicing in health care.

Introduction to Health Sciences Honors (Semester) 5 Credits Grade 9

Prerequisite: Concurrent enrollment in Biology Honors and admission into the PMPMP. Students must maintain a “B+” or better in both semesters.

This course is designed for students interested in a career in health care. Students research career path options and learn about a variety of careers in health care. Students receive instruction in the concepts of group dynamics, conflict resolution and negotiation, legal and ethical responsibility, safety, first aid, and standard precautions. Related mathematics and language arts standards are reinforced. Students may complete certifications in first aid and CPR. *This course takes the place of the health requirement.*

This course examines ethical dilemmas in health care and the decision making processes involved in clinical, professional, and organizational ethics. Students will explore the philosophical and faith-based foundations of medical ethics including Catholic moral tradition, socio-cultural influences, professional codes, and organizational and personal ethical norms. Case studies and topics are analyzed to develop competence in moral reflection and ethical decision making with consideration of personal, professional, and societal values. Professional integrity in health care is dependent on acceptance of ethical and legal responsibilities. Students are expected to understand their ethical and legal responsibilities, limitations, and the implications of their actions.

Introduction to Neuroscience Honors (Semester)

Grade 12

Prerequisite: Must be enrolled in the PMPMP.

The Introduction to Neuroscience course begins with the study of nerve cells: their structure, the propagation of nerve impulses and transfer of information between nerve cells, the effect of drugs on this process, and the development of nerve cells into the brain and spinal cord. Another area that will be studied the sensory systems: 1) olfaction 2) hearing 3) gustation 4) vision. There will be in-depth discussions on topics such as how physical energy such as light is converted into neural signals, where these signals travel in the brain, and how they are processed. The course includes an analysis of the control of voluntary movement as well as the neurochemical bases of brain diseases and those systems which control motivation, emotion, learning and memory.

Simulation Labs: Neurons In Action 2: Tutorials and Simulations

John W. Moore (Author), Anne E. Stuart (Author)

Neuron computational simulation lab

Updated on 4-5-2016

Course Objectives:

The medical neuroscience course has the following objectives:

- To provide basic science information needed for courses such as physiology, pathology, physical diagnosis, pharmacology, neurology, and neurosurgery
- To provide information and experiences so that students can diagnose the functional status of the nervous system from the signs and symptoms of the patient.

English Department

Four years required for graduation

AP English Language and Composition (Year) 10 Credits Grade 12

Prerequisite: AP English Literature students must pass the AP English Lit exam with a score of 3 or higher. AP English Lit students who did not pass the AP exam must have earned a percentage of 85% or higher for both semesters of AP English Literature and pass an entrance exam. English III students must have earned a grade of A- or higher in both semesters and pass an entrance exam. Also, students must maintain a grade of B or better at the quarter and semester to remain eligible for the course. *This course requires a summer assignment to be completed by the first day of school.*

This course is designed in accordance with the annual College Board Course Description for Advanced Placement English Language and Composition. It is a yearlong course offered at the 12th grade level designed to mirror a freshman-level college writing course. This course continues practice in analysis of selected challenging works of non-fiction, fiction, poetry, visual aids, and drama. Students will learn to recognize and analyze form, content, and style in these different genres and to master their control of both using and deciphering language, style, and diction in writing. It emphasizes critical thinking, writing about literature, vocabulary development, grammatical accuracy and research techniques. Students will employ their skills in several types of writing: expository, analytical, journaling, letters, personal essays, and persuasion.

The course also serves to provide a survey of literature in which students undertake a chronological study of British Literature in its historical context from the Anglo-Saxon period to the Modernist Movement. The year will be divided into units that focus on close reading, rhetorical analysis essays, argument essays, and synthesis essays in order to prepare for the AP English Language and Composition Exam at the end of the school year. There is a fee of \$100 for AP exam.

AP English Literature and Composition (Year) 10 Credits Grade 11

Prerequisites: English II Honors students must have earned a percentage of 85% or higher for both semesters of English II Honors, and pass an entrance test. English II students must have earned an A- or higher for both semesters of English II and pass an entrance test. Also, students must maintain a grade of B or better at the quarter and semester to remain eligible for the course. *This course requires a summer assignment to be completed by the first day of school.*

(UC Approved)

This year long course sees students studying major literary movements and recurrent themes in American Literature, beginning with Native American and colonial works and progressing to the 20th century. Vocabulary emphasizes words that are most commonly found on college entrance, SAT, and College Board exams. Students will study and be tested on the basics of English grammar as they learn the fundamentals of writing advanced compositions. This course requires extensive reading, and stresses critical thinking and written analysis. Good writing skills are vital. Students must take the AP exam at the end of the course for college credit. There is a fee of \$100 for AP exam.

English I A (Year) 10 Credits

Grade 9

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This year-long course is designed to provide students with a foundation in writing, reading, and critical thinking necessary for continued success in high school and college. The course is intended for students currently enrolled in either the SERP Program or the International Program who need further encouragement in reading, writing, speaking, and language development. The course is intended to strengthen English skills and better prepare students for college prep-level curriculum. The course is literature-based, with a comprehensive writing program covering both semesters. Students will respond in oral and written forms to the novels, short stories, poetry, and essays they read, utilizing a variety of writing and presentation modes. The emphasis in grammar includes sentence and paragraph structures; the emphasis in vocabulary includes Latin and Greek roots as well as a variety of contextual usage.

English I (Year) 10 Credits

Grade 9

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This year long course is an introduction to a variety of literary genres including the short story, poetry, drama, the novel, and mythology. There will be assignments from the Literature book used in class as well as outside novels assigned. Grammar is taught both formally and within the context of writing. Vocabulary instruction includes the study of root word meanings, synonyms, antonyms, analogies, and usage. Words for this study come from the vocabulary text and the literature read. Writing skills taught include the five paragraph essay form, descriptive styles, comparison and contrast, opinion papers, and analysis.

English I Honors (Year) 10 Credits

Grade 9

Prerequisite: Placement is based on passing the High School Placement Test (HSPT). Also, students who do not maintain a B- grade or better at the quarter or semester may be dropped from the course. *This course requires a summer assignment to be completed by the first day of school.*
(UC Approved)

This one year course covers advanced literature including mythology, drama, poetry, the short story and the novel. Writing instruction stresses critical and analytical thinking.

Updated on 4-5-2016

Vocabulary includes the study of classical Greek and Latin roots, synonyms, antonyms, analogies, and usage in preparation for standardized tests. Proficiency in Grammar, reading comprehension, analytical thinking, and writing are vital. Participation in this class does not guarantee acceptance into English II Honors.

English II A (Year) 10 Credits

Grade 10

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This year-long course continues to develop proficiency of the English language through reading comprehension and analysis, writing development, speaking fluency, as well as vocabulary and grammar usage. Students will respond to literature with an emphasis on written analysis and oral presentations using a variety of writing and presentation modes. The course is intended for students currently enrolled in either the SERP Program or the International Program who need further encouragement in reading, writing, speaking, and language development. The course is intended to strengthen English skills and better prepare students for college prep-level curriculum. The course curriculum follows the World and Multi-Cultural literature focus similar to English 2CP, and includes instruction in research methodology and synthesis.

English II (Year) 10 Credits

Grade 10

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This one year course is a thematic approach to literature covering a variety of literature genres including the short story, poetry, drama, and the novel. The readings focus on World and Multi-Cultural Literature from the text as well as outside novels assigned. The study of grammar, composition, and vocabulary follow the same format as the previous year's study and is aimed to prepare students for standardized testing. Grammar continues to be taught both formally and in the context of writing. Composition stresses several rhetorical modes and encourages critical and analytical thinking. The research process and documentation styles are also taught.

English II Honors (Year) 10 Credits

Grade 10

Prerequisite: English I Honors students must have earned a percentage of 85% or higher for both semesters of English I Honors. English I students must have earned an A- or higher for both semesters of English I and pass an entrance exam. Also, students who do not maintain a B- grade or better at the quarter or semester may be dropped from the course. *This course requires a summer assignment to be completed by the first day of school.*
(UC Approved)

This year long course in advanced literature includes ancient and modern drama, the novel, romantic and classical poetry, and short story selections. Writing skills are stressed with an emphasis on descriptive writing, formal essays and the research process. Vocabulary studies include a return to the origins of English words through recognition of Greek and Latin roots. Competency in grammar and a proficiency in reading comprehension and analysis are required. Participation in this class does not guarantee acceptance into AP English III.

English III A (Year) 10 Credits

Grade 11

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This year-long course continues to develop proficiency of the English language by focusing on analysis of novels, prose, and poetry passages to understand the emerging nature of literature born on the American continent. The course is intended for students currently enrolled in either the SERP Program or the International Program who need further encouragement in reading, writing, speaking, and language development. The course is intended to strengthen English skills and better prepare students for college prep-level curriculum. Speaking fluency, as well as vocabulary and grammar usage are key components of this course. Coursework focuses on development of writing through both on-demand and processed papers. The course will also continue to develop research methodology and synthesis according to MLA guidelines.

English III-American Literature (Year) 10 Credits

Grade 11

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This course is the chronological study of American Literature from the early 17th century to the 21st century including: poetry, the short story, essays, drama, and the novel. Students continue their development of the skills necessary for success in college. These skills include: reading comprehension, critical thinking, literary analysis, and writing about literature, essay writing, creative writing, and grammatical accuracy in writing, vocabulary development, research skills and communication skills.

English IV- British Literature (Year) 10 Credits

Grade 12

(UC Approved) This course requires a summer assignment to be completed by the first day of school.

This is a semester long course in which students undertake a chronological study of English Literature in its historical context from Beowulf to the 21st century. This course continues the students' practice in literary analysis of selected works of poetry, fiction and drama. It emphasizes critical thinking, writing about literature, vocabulary development, grammatical accuracy in style and writing and research techniques. It also emphasizes intensive practice in reading, oral presentation and writing under the pressure of time.

Mathematics Department

Three years are required for graduation. Colleges recommend completion of Algebra 2.

Algebra IA (Year) 10 Credits **Grade 9**
(UC Approved)

This is the first year of a two year Algebra I course. Content includes using variables, translating words into symbols, and working with the real number system and its properties. Students will solve equations and word problems as well as proportions to real world problems. Graphing algebraic equations and solving systems of equations will also be studied. Coupled with Algebra IB the following year, a comprehensive program in Algebra I will be completed.

Algebra IB (Year) 10 Credits **Grades 9, 10**
Prerequisite: Successful completion of Algebra IA.
(UC Approved)

This is the second year of a two year Algebra course. Content includes using variables, translating words into symbols, and working with the real number system and its properties. Students will solve linear and quadratic equations and word problems, as well as simplify and factor polynomials. Students will graph linear, quadratic, and exponential equations. Simplifying algebraic fractions and fractional equations will also be studied. Coupled with Algebra IA, a comprehensive program in first-year algebra is completed.

Algebra I (Year) 10 Credits **Grade 9**
(UC Approved)

This course provides a general introduction to the essentials of Algebra. Content includes variables, expressions, properties, working with rational and irrational numbers, and solving equations and inequalities. Polynomials and graphing and factoring are presented, with focus on application where appropriate. This course strengthens the student's logical thought process.

Algebra I Honors (Year) 10 Credits **Grade 9**
Prerequisite: Freshman can place into this class based on their HSPT score.
(UC Approved)

This course replicates the course content of Algebra I but the concepts are studied more in depth. There is an emphasis on word problems, quadratic equations, and other polynomial functions. In addition, conics, rational exponents, and imaginary numbers are introduced. This class moves at a significantly faster pace than Algebra I.

Algebra II (Year) 10 Credits **Grades 10, 11, 12**
Prerequisite: Students currently in Geometry at JSerra take a weekly Algebra review quiz and are required to have an average of 75% over the course of the year to be placed into Algebra 2. Students who earn less than a 75% will be placed into Intermediate

Algebra. If currently enrolled in Intermediate Algebra, students must have a B in both semesters of the course. Summer assignment is required.

(UC Approved)

This course will prepare the students for college and deepen their understanding and increase their skills in working with algebraic concepts learned in Algebra I. Topics of study include linear and quadratic equations, functions, conic sections and properties of rational and irrational numbers. Graphing calculators are used to enhance understanding of algebraic concepts.

Algebra II/ Trigonometry Honors (Year) 10 Credits Grades 10, 11

Prerequisite: A score of 85% or above on weekly quizzes in previous Geometry course. Students currently enrolled in Geometry will be required to take a placement test. Summer assignment is required.

(UC Approved)

This class is an advanced course in Algebra II and Trigonometry that delves into the math concepts in greater depth. Student must be able to compute work with speed and accuracy. Subjects covered include polynomial functions, sequences, series, exponential and logarithmic functions, right triangle trigonometry, and some analytical geometry. Graphing calculators are used in the understanding of algebraic concepts.

AP Calculus AB (Year) 10 Credits Grades 11, 12

Prerequisite: A grade of A in both semesters of Pre-Calculus or an 85% or higher in both semesters of Pre-Calculus Honors; teacher approval. A grade of B or better in both semesters of Calculus with teacher approval. Summer assignment required.

(UC Approved)

This course prepares the students for the AP College Board exam in May. Subjects covered include functions, graphs, limits and continuity, differentiation, and applications of the derivative, definite integrals and their application. The Fundamental Theorem of Calculus is presented. Students are required to take the AP exam at the end of the year for college credit. There is a fee of \$100 for AP exam.

AP Calculus BC (Year) 10 Credits Grade 12

Prerequisite: A grade of at least 85% in both semesters of AP Calculus AB; teacher recommendation. A grade of A in both semesters of Calculus with teacher approval. Summer assignment required.

(UC Approved)

This course prepares the students for the AP College Board exam in May. Coursework includes all of the material from Calculus AB. Additional topics include: planar equations in parametric, polar, and vector forms; series including power series; convergence and divergence; and differential equations. Students are required take the AP exam at the end of the year for college credit. There is a fee of \$100 for AP exam.

AP Statistics (Year) 10 Credits Grades 12

Prerequisites: A grade of A or better in both semesters of Statistics or a grade of B or better in both semesters of Pre-Calculus Honors or concurrent enrollment in Pre-Calculus

Honors, or a grade of A or better in both semesters of Pre-Calculus. Additionally, students will have to take a placement exam to be approved for this course. Summer assignment required. *(UC Approved)*

This is a one year course designed to prepare the students to take and pass the AP Statistics exam in May. The students will be introduced to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns and Statistical Inference. This course is similar to the statistics courses that are typically required in college for social science, health sciences, business, science, engineering, and math majors. Students are required to take the AP exam in May. There is a fee of \$100 for AP exam.

Business Mathematics (Year) 10 Credits

Grades 11, 12

This course teaches students how to use math in their daily and business lives. Course content includes accounting principles, personal finance, and business math such as marketing, purchasing, loan applications, financial and corporate planning, and financial accounting practice.

Calculus (Year) 10 credits

Grades 11, 12

Prerequisite: A grade of 85% or better in both semesters of Pre-Calculus or 75% or better in both semesters of Pre-Calculus Honors and teacher recommendation. Summer assignment required.

(UC Approved)

This is a one year course designed to give students maximum preparation for college Calculus. In addition, to a quick review of Pre-Calculus topics, this course will provide a comprehensive study of limits, continuity, derivatives, related rates, optimization, and other applications of derivatives, as well as an introduction to indefinite, definite and numerical integration. While the topics of the course are similar to the AP Calculus class, the level of depth and the pace of the course differ. Upon completion of this course, students will be prepared to succeed in a Calculus I college class.

Geometry (Year) 10 Credits

Grades 9, 10, 11

Prerequisite: Successful completion of Algebra I or completion of one full year of Algebra 1a and one full year of Algebra 1b. Algebra 1b cannot be taken over the summer. Freshmen can place into course by passing the JSerra math placement exam.

(UC Approved)

This course leads to an understanding of the relationship among points, lines, and planes. Plane figures such as triangles, parallelograms, circles and general polygons will also be explored. Students will develop an understanding of the nature proofs and will gain experience in writing two column proofs.

Geometry Honors (Year) 10 Credits**Grades 9, 10, 11**

Prerequisite: Freshmen can place into course by passing the JSerra math placement exam. For sophomores, a grade of at least B+ in both semesters of Algebra I Honors or an A in both semesters of Algebra I and teacher recommendation are required.

(UC Approved)

This course replicates the content of Geometry, but concepts are studied in greater depth at an accelerated pace, with a greater emphasis on geometric proof and trigonometry. The purpose of this course is to enable students to think logically, and to express complex ideas precisely through problem solving.

Intermediate Algebra (Year) 10 Credits**Grades 10, 11, 12**

Prerequisite: Successful completion of Algebra I and Geometry.

(UC Approved)

Intermediate Algebra is a yearlong course that continues the algebraic concepts learned in Algebra I. This class is designed for the student that needs a slower paced, more detailed presentation of algebra subjects. Some of the information covered is linear and quadratic equations, rational expressions, polynomials, graphing of functions and relations.

Math Analysis (Year) 10 Credits**Grades 10, 11, 12**

Prerequisite: Successful completion of Algebra II with a grade of C or better.

Math Analysis is a pre-calculus course which emphasizes a better understanding of functions and their applications and strengthens students' mathematical reasoning and problem-solving skills. Some of the topics covered include trigonometry, parametric equations, vectors, polar coordinates, complex numbers, matrices, polynomial functions, rational functions, exponential functions, logarithmic functions, sequences, series, and limits.

Pre-Calculus (Year) 10 Credits**Grades 11, 12**

Prerequisite: A grade of 85% or better in both semesters of Algebra II or 75% in both semesters of Algebra II Honors; teacher approval. Summer assignment required.

(UC Approved)

This course gives students a solid foundation for the study of calculus. This course is designed to follow Geometry in preparing the student for Calculus. The math subjects covered include algebraic, exponential, logarithmic, and trigonometric functions, and selected functions from analytical Geometry. This course will prepare the student for college level Calculus.

Pre-Calculus Honors (Year) 10 Credits**Grades 11, 12**

Prerequisite: A grade of B or better in both semesters of Algebra II Honors or a grade of at least an (90.0%) A- in both semesters of Algebra II and the completion of a Trigonometry enrichment course during the summer. Students who have taken Algebra II must also take the summer enrichment Trig course. Students must have approval from Honors Pre-Calculus Teacher. A completed Chapter P Summer Assignment is due on 1st class meeting followed with a quiz on the assignment topics.

This course replicates the course content of Pre-Calculus, but the concepts are studied in greater depth and at a faster pace. This course gives college bound students a good foundation for Calculus, and in seeing math as a logical science and to apply this problem solving in many different disciplines.

Statistics (Year) 10 Credits**Grades 11, 12**

Prerequisite: A grade of C+ or better in both semesters of Algebra II or a grade of C or better in both semesters of Pre-Calculus; teacher approval.

(UC Approved)

Students learn the major concepts and tools for collecting, analyzing and drawing conclusion from data. The students will observe patterns and departure of patterns, decide what and how to measure, produce models using probability and simulation, and confirm models. They will complete projects involving hands on gathering and analysis of real world data. Appropriate technology, including manipulatives, calculators and computers will be used.

Physical Education Department

Two years of physical education and one-half year of health are required for graduation.

Conditioning and Fitness (Semester/Year) 5-10 Credits**Grades 10, 11, 12**

This physical education course is designed for the students who wish to tone and strengthen their bodies. Areas covered in this class are Yoga, Pilates, Stretching Exercises, Aerobics and light weight Circuit Training. Nutrition and healthy lifestyles will also be covered in this class. A uniform will be required to participate in this class.

Dance I (Year) 10 Credits**Grades 9, 10, 11, 12**

Prerequisite: Students must have taken a full year of Introduction to Dance or must audition in person or by video; teacher approval is also required.

(UC Approved)

This fine arts/ PE course is designed for the student who wants to expand their knowledge of various styles of dance. The class will focus on jazz, modern, ballet, musical theater dance, creating choreography, and dance as art through emotional expression. Artistic expression will be emphasized through the use of choreographic projects. Discussions will also take place regarding dance history. The students will be

evaluated on their participation, classwork, homework, and participation in a performance at the end of each semester. There is a fee of \$100 for this course.

Course goals: Dance I students will improve and expand and improve their abilities in all dance techniques. Artistic expression will be explored through opportunities for self-choreography.

***Dance II (Year) 10 Credits**

Grades 9, 10, 11, 12

Prerequisite: Completion of Dance I or approval of instructor.
(UC Approved)

Dance II will focus on dance performance in all dance genres: Jazz, modern, contemporary dance, musical theater, ballet, and liturgical dance. Dance II will also enable students to choreograph group pieces for themselves and for their peers. The students will be evaluated on their daily participation, classwork, homework, and participation in numerous performances throughout the semester as well as a performance at the end of each semester. There is a fee of \$100 for this course.

Course Goals: Dance II students will become confident performers, displaying intermediate dance technique, emotional/artistic expression in performance, and professional work habits in the context of performance.

***Dance III (Year) 10 Credits**

Grades 11, 12

Prerequisite: Completion of Dance II or approval of instructor.
(UC Approved)

This Fine Arts/PE course is for the experienced dancer and audition is required for entry into this class. Dancers in this course are expected to work at an advanced dance level in both artistic and technical aspects of dance. This group will anchor all dance performances and will be included in collaborative performances with the choral and instrumental music departments. All performances are required and graded. Dancers will also be given opportunities to discover dance in their community by attending local performances and meeting industry professionals. There is a fee of \$100 for this course.

Course Goals: Dance three students will be able to hone their artistic, performance skills while being expected to perform at a high level of technical ability.

***Dance IV Honors (Year) 10 Credits**

Grades 11, 12

Prerequisite: Completion of Dance III or approval of instructor.
(UC Approved)

This Fine Arts/PE course is for the experienced dancer and audition is required for entry into this class. Dancers in this course are expected to work at an advanced dance level in both artistic and technical aspects of dance. This class will also include a writing element which will include the study of dance current events, history, and an extended research paper will be assigned. Two text books will be required for this course. This group, with Dance 3, will anchor all dance performances and will be included in collaborative performances with the choral and instrumental music departments. All performances are

required and graded. Dancers will also be given opportunities to discover dance in their community by attending local performances and meeting industry professionals. Dancers in Dance IV will be expected to fulfill an internship requirement by acting as an assistant to an instructor at a local dance studio. There is a fee of \$100 for this course.

Course Goals: To train the most well- rounded dancer in both technical and academic aspects of dance. Additionally, pedagogy will be introduced in order to prepare dancers for careers in dance instruction.

Physical Education (Semester/Year) 5-10 Credits Grades 9, 10, 11, 12

In this course, students are given an opportunity to gain knowledge, learn skills, and participate in a variety of team and individual sports. Some of these sports include volleyball, basketball, flag-football, soccer, and paddle tennis. Emphasis is not only on the activity rules and skills, but also on social development and sportsmanship. Students are also introduced to and practice a variety of individual fitness assessments. Some of these fitness assessments include running the mile, and performing push-ups, sit-ups, pull-ups, and the sit and reach. This course is designed to teach students the importance of life long fitness and how to apply the skills needed to their individual life styles. The class may be repeated for credit.

Physical Education for the Athlete (Sem./Year) 5-10 Credits Grades 9, 10, 11, 12

This course is a physical education elective course for students who wish to participate on a JSerra athletic team. Coaches for the different athletic JSerra teams help create individualized programs for students who desire to be on their prospective teams. These students will practice and train for their sport with fellow teammates throughout this course. Students must receive approval from the coach in order to sign up for the class. The class may be repeated for credit.

Yoga (Semester/Year) 5-10 Credits Grades 9, 10, 11, 12

This course is designed for students who want to tone and strengthen their bodies through the study of yoga. Students will learn breathing techniques, relaxation, and strengthening poses. Nutrition and healthy lifestyles will also be covered. Pilates movements will be introduced about halfway through the first quarter. Students will gain strength and flexibility through the use of various poses and breathing techniques. Students will learn stress management and relaxation exercises. A uniform will be required to participate in this class.

Theology Department

Four years are required for graduation. Transfer students are exempt from taking a Theology class the years they were not at JSerra. Additionally, all transfer students will be placed in regular Theology courses upon their arrival to JSerra. Should they wish to petition into an honors course they must receive approval from the department chair.

Theology I - Foundations (Year) 10 Credits**Grade 9**

Prerequisites – Students will be placed into Theology 1 Foundations if they have not had prior Catholic instruction.

Semester I***The Revelation of Jesus Christ in Scripture***

This course will give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible they will come to encounter the living Word of God, Jesus Christ. In the course they will learn about the Bible, authored by God through Inspiration, and its value to people throughout the world. They will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally. This course provides a basis and understanding essential to further theological studies. Showing how Scripture is the inspired Word of God and how natural revelation and reason complement Divine Revelation, this course will explore what Catholics believe about God, why they believe it and why such belief is reasonable.

Semester II***Who Is Jesus Christ?***

This course will introduce students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who he is, the students will also learn who he calls them to be. This course will explore the mystery of the Blessed Trinity – one God in three Persons – as revealed in Scripture and Tradition. It presents details about the Person of Jesus Christ as the fulfillment of Revelation, the role of the Holy Spirit in the Christian life, and how we can know the Father through the Son.

Theology I (Year) 10 Credits**Grade 9**

Prerequisite: Placement will be based on department placement exam.

Semester I***The Revelation of Jesus Christ in Scripture***

This course will provide students with a solid knowledge and understanding of the Sacred Scriptures as they encounter the living Word of God, Jesus Christ. The class requires critical thinking, good listening skills and application of high order thinking skills, as well as, strong reading and writing skills.

Semester II***Who Is Jesus Christ?***

This course will introduce students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. The student will be challenged to do extensive writing requiring application of high order thinking skills.

Theology II (Year) 10 Credits**Grade 10*****Semester I***

The Mission of Jesus Christ (The Paschal Mystery)

The purpose of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn that for all eternity, God has planned for us to share eternal happiness with him, which is accomplished through the redemption Christ won for us. Students will learn that they share in this redemption only in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails. This course will examine God's plan of redemption, explaining the need for redemption after the Fall of Adam and Eve, showing the various ways God promised redemption throughout the Scriptures, and finally looking at the redeeming act of Christ's Passion, Death, and Resurrection as the realization of those promises.

Semester II

Jesus Christ's Mission Continues in the Church

The purpose of this course is to help the students understand that in and through the Church they encounter the living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will learn not so much about events in the life of the Church but about the sacred nature of the Church. This course presents the Church – one, holy, catholic and apostolic – as the continuation of Christ's Redemption. Examining the Church as the Mystical Body of Christ, it studies the foundation of the Church, her mission, and her attributes. It examines the communion of saints and the role of the Blessed Virgin Mary.

Theology II Honors (Year) 10 Credits Grade 10

Prerequisite: A grade of A or better in both semesters of Religion I or an A- or better in both semesters of Religion I Foundations. All students must receive teacher approval.

Semester I

The Mission of Jesus Christ (The Paschal Mystery)

Through this academically challenging course the student will study the concept of eternity and will see that God has planned for us to share eternal happiness with him. This course will provide the students with the opportunity to do substantial writing and requires high analytical and communication skills.

Semester II

Jesus Christ's Mission Continues in the Church

The purpose of this course is to help the students understand that in and through the Church they encounter the living Jesus Christ. Through this academically challenging course they will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This course will provide the students with the opportunity to do substantial research and writing.

Theology III (Year) 10 Credits
Grade 11

Semester I

Sacraments as Privileged Encounters with Jesus Christ

The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life. This course examines the Seven Sacraments as signs and instruments entrusted to the Church by which God conveys his grace to the faithful. It explores each sacrament in its place in the economy of salvation, exploring its origin, celebration, and benefits. It also contains a chapter on the liturgy and sacramentals.

Semester II

Life in Jesus Christ

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples. This course focuses on the intellectual and moral development necessary to living a life joined to Christ. It provides students with the formation necessary, with God's grace, to imitate Christ in their lives, make correct moral decisions, and spread the Kingdom of God on earth. It presents moral theology as a subject not only to be studied but, essentially, to be lived.

Theology III Honors (Year) 10 Credits

Grade 11

Prerequisite: A grade of B or better in both semesters of their previous honors Religion course or an A in both semesters of their previous regular Religion course. All students must receive teacher approval.

Semester I

Sacraments as Privileged Encounters with Jesus Christ

Demanding great critical thinking skills as well as a high level of reading comprehension this course will take an in-depth look at each of the seven sacraments/This course will provide the students with the opportunity to understand that they can encounter Christ today in a full and real way in and through the sacraments, and especially through the Eucharist It explores each sacrament in its place in the economy of salvation, exploring its origin, celebration, and benefits. It also contains a chapter on the liturgy and sacramentals. This course presents the student with the opportunity to do substantial writing and collaboration.

Semester II

Life in Jesus Christ

Utilizing many outside resources as well as the textbook, the purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples. This course focuses on the intellectual and moral development necessary to living a life joined to Christ. The student will be challenged with concepts

and material which require higher thinking skills, reading, and verbal and written communication.

Theology IV (Semester) 5 Credits

Grade 12

Responding to the Call of Jesus Christ

The purpose of this course is to help students discern the vocations of life: how Christ calls us to live. In this course, students learn the purpose and call of our human sexuality using the teachings of Blessed John Paul II and Scriptural exegesis. The course is structured around married life, single life, priestly life, and consecrated life. Students should learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

Theology IV Honors (Semester) 5 Credits

Grade 12

Responding to the Call of Jesus Christ

Prerequisite: A grade of B or better in both semesters of their previous honors religion course or an A in both semesters of their previous regular religion course. All students must receive teacher approval.

This course will examine many original Church documents and events to help students understand the vocations of life: how Christ calls us to live. In this course, students learn the purpose and call of our human sexuality using the teachings of Blessed John Paul II and Scriptural exegesis. The students will be expected to apply this knowledge and to critically analyze our modern culture. The course is structured around married life, single life, priestly life, and consecrated life. Students should learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community. The students will be challenged with concepts and material which require higher thinking skills, reading, and verbal and written communication.

Introduction to Catholic Principles (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: International students needing introduction to the concept of God.

This course is designed for the international student who is not familiar with the concept of God in general and of Catholic Christianity in particular. Through the use of different media, storytelling, discussions and reading the student will gain knowledge of basic Christian principles. They will be introduced to the mystery of the Trinity, Salvation History, and how the work of Jesus continues through the Holy Spirit in the Church today.

THEOLOGY ELECTIVES

Since Theology IV is only a semester long, each student may choose one elective to fulfill the 4 year requirement of religion classes for graduation. If in Theology IV Honors, students must also be in History of the Catholic Church Honors.

History of the Catholic Church Honors (Semester) 5 Credits

Grade 12

Prerequisite: A's in both semesters of previous Religion course or B's or better in both semesters of previous honors' Religion course.

Church History is a semester course which looks at the history and structures of the Catholic Church as it studies the life of the saints. Beginning with Christ's institution of the Church and the appointment of the Apostles, the course rapidly moves through the different eras of the Church until the present day. Using this timeline as a guide, each of the key councils of the Church is studied, focusing on the teachings and dogmas of the Church as they emerged and were declared. Saints from each of the eras are studied. Along with this, the course will look at numerous styles and devotions of prayer that have developed over time.

Living as a Disciple of Jesus Christ (Semester) 5 Credits Grade 12
(Social Justice)

This course is a one semester Religion IV elective. The purpose of this course is to help students understand that they were born into a community in which they should participate. The students will be made aware of the Church's teachings on most of the major sociopolitical issues of our time through the study of the Church's encyclicals, emphasis on global solidarity, the option for the poor, and the dignity of the human person. This class will provide a framework for the students to begin to come to terms with and form opinions about the major sociopolitical issues of our time, as well as a solid foundation with which they will be able to make educated judgments about future issues.

Comparative Theology (Semester) 5 Credits Grade 12
(UC Approved)

The purpose of this course is to compare and contrast the teachings of major world religions and to give students the ability to reason through their own answers to such questions. Using basic components of critical thinking, such as Aristotle's philosophy of rhetoric, students will debate and discuss the spiritual truths of Catholic teachings and how they compare with other faiths. Using a detailed analysis of natural law, questions such as right and wrong, objective truth, morality, rival concepts of God, virtue, and human nature will be explored in the context of the major views/religions of today, including: Judaism, Islam, the Orthodox Church, Protestant denominations, Hinduism, Buddhism, cults, witchcraft, and atheism. The class will be focused mainly on discussions, debates, and presentations. An express goal of the course is to assist students in understanding the different faiths of the world as well as developing a respect for their beliefs and traditions.

Science Department

Three years are required for graduation (two must be a lab science). Biology is a requirement for graduation.

Anatomy and Physiology (Year) 10 Credits Grades 10, 11, 12
Prerequisite: A grade of B or better in both semesters of Biology or Biology Honors; teacher approval.
(UC Approved)

This course is a year long elective science course. Emphasis is placed on the two main themes of homeostasis and pathology of the human body functions. Topics include organization of the human body, support and movement, control systems, and maintenance of the body. Lab work is a part of this curriculum to enhance the understanding of human anatomy and physiology.

Anatomy and Physiology Honors (Year) 10 Credits Grades 11, 12

Prerequisite: A grade of “A” (92.0%) in both semesters of Biology and Chemistry or a “B+” (88.0% or higher) in both semesters of Biology Honors and/or Chemistry Honors and Anatomy and Physiology Honors teacher approval. All students enrolled in the PMPMP are required to take this course and therefore MUST meet prerequisites.

This course is designed for those students who are either enrolled in the Pre-Medical Professional Program or considering a career in the medical field. Anatomy and Physiology Honors is a lecture/laboratory course using a college textbook. Students will engage in actual case studies, investigations, and hands-on activities for a minimum of 50% of the instructional time. This allows students to develop conceptual understanding and research/laboratory skills necessary in today’s medical profession. Focus will be at the micro and macro levels reviewing cellular functions along with the biochemical processes that are involved, tissue interactions, organ systems, and the interaction of all the systems as they relate to the human organism. In addition, students will examine the areas of pathology, study of disease, associated with the organ or system of study. *Full participation in the hands-on lab assignments is mandatory. Students must be willing to dissect a cat, sheep heart, sheep eye, and cow brain.* Students will practice medical scenarios using a Human Body Simulator.

*PMPMP course requirement

AP Biology (Year) 10 Credits Grades 10, 11, 12

Prerequisites: A minimum of B+ (88.0%) or better in both semesters of Biology Honors; a grade of A (92.0%) or better in Chemistry; Must pass an AP placement test and complete a required summer assignment with an acceptable passing grade as well as AP Biology teacher approval. All AP students who complete this class are required to take the college level AP Biology exam prepared by the College Entrance Examination Board. *(UC Approved)*

This college level course prepares the students for the AP Biology College Board exam in May. This course covers a vast amount of advanced biological material, and therefore demands a lot of time and work on the part of the student. In addition to the thorough use of a college biology text book, students will write several brief papers on scientific articles. The themes throughout the course are the cellular basis of life, continuity and diversity, evolution, technology and society issues are explored. Laboratory experiences use college level techniques. Two hours of homework is expected nightly. Some after school labs may be required. There is a fee of \$100 for AP exam.

**Fulfills one year of UC system lab science requirement

AP Chemistry (Year) 10 Credits**Grades 11, 12**

Prerequisites: A grade of 88% (B+) or better in both semesters of Chemistry Honors; Pre-Calculus or Pre-Calculus Honors is to be taken concurrently or previously to this course. Students must have approval from the AP Chemistry Teacher and must pass the placement test given during the 4th quarter. A completed AP Chemistry Summer Assignment is due on 1st class meeting followed by a quiz on the assignment topics.

(UC Approved)

This college level Chemistry course is designed to prepare the students to take and pass the AP Chemistry exam in May. Students will undertake a thorough study of a college textbook, undertake numerous advanced laboratory experiments, prepare written lab reports and write brief summary papers on scientific articles. The course of study will include Inorganic Chemistry, Organic Chemistry, Environmental Chemistry and Biochemistry. Lab work will be of a college technique level and there is the possibility of after school labs. Two hours of nightly homework is to be expected. Students are required to take the AP exam in May for college credit. There is a fee of \$100 for AP exam.

*Fulfills one year of JSerra lab science requirement

**Fulfills one year of UC system lab science requirement

AP Environmental Science (Year) 10 Credits**Grades 11, 12**

Prerequisite: A minimum of A in both semesters of Biology or B+ in both semesters of Biology Honors. A minimum grade of A in both semesters of Chemistry or B+ in both semesters of Chemistry Honors. Students must pass the placement test given during the 4th quarter. A completed APES Summer Assignment is due on first class meeting.

(UC Approved)

AP Environmental Science is an interdisciplinary science that includes a strong laboratory and field investigation component. Students will be introduced to the concepts, and methodologies required to; understand the inter-relationships of the natural world, to identify and analyze environmental problems, both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing these problems. In this course we will examine the Atmosphere, Water & Soil Resources/Use, Ecosystems, Population Biology, Agriculture, Forestry, Rangelands, Land Use, Mining, Fishing, Global Economics, Energy, Pollution, and Global Changes. There is a fee of \$100 for AP exam.

**Fulfills one year of UC system lab science requirement

AP Physics 1 (Year) 10 Credits**Grades 11, 12**

Prerequisite: A minimum of A (93%) in both semesters of Physics, or a minimum grade of A (93%) in both semesters of Chemistry or B+ (88%) in both semesters of Chemistry Honors. Concurrent enrollment or previous completion of Pre-Calculus honors or a higher mathematics course. There will be a placement test for AP physics; all students wishing to study AP physics must take the test on the date advertised, following the placement test, subject to teacher's approval, a list of successful students will be posted. A completed summer assignment covering several chapters is due on the first class day.

(UC Approved)

The Advanced Placement Physics 1 course is designed to be the equivalent to a college course in algebra physics, usually taken during the 1st semester of freshman college year. Students are expected to attain a depth of understanding of: Newtonian Mechanics (including rotational dynamics and angular momentum), Work, energy, power, mechanical waves, sound and introduction to electric circuits.

The student will participate in a significant number of laboratory investigations during the course. The labs develop skills of experimentation, observation, analysis, and use of lab equipment. Problem solving emphasizes mathematical and analytical skills as applied to physical laws and concepts. Students will use algebra extensively and some trig in this course. Students must take the Advanced Placement Exam in the year the course is taken. There is a fee of \$100 for AP exam.

****Fulfills one year of UC system lab science requirement**

AP Physics 2 (year) 10 Credits

Grades 11, 12

Prerequisites: A grade of 80.0 % (B-) or better in both semesters of AP Physics 1 or AP Physics C (or at least a grade 3 in AP physics 1 or AP Physics C Exam)

A grade of A in both semesters of Algebra II or B or better in both semesters of Algebra II Honors; Concurrent enrollment or previous completion of Pre-Calculus; teacher's approval. A summer assignment covering several chapters is due on the first class day.

(UC Approval Pending)

The Advanced Placement Physics 2 course is designed to be the equivalent to a college course in algebra physics, usually taken during the 2nd semester of freshman college year. Students are expected to attain a depth of understanding of: fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics.

The student will participate in a significant number of laboratory investigations during the course. The labs develop skills of experimentation, observation, analysis, and use of lab equipment. Problem solving emphasizes mathematical and analytical skills as applied to physical laws and concepts. Students will use algebra extensively and some trig in this course. Students must take the Advanced Placement Exam in the year the course is taken. There is a lab fee for this course.

****Fulfills one year of UC system lab science requirement**

AP Physics C - Mechanics (Year) 10 Credits

Grades 11, 12

Prerequisites: Student must be concurrently enrolled in AP Calculus or Calculus or have previously completed one of them. A minimum of A (93%) in both semesters of Physics, or a minimum grade of A (93%) in both semesters of Chemistry or B+ (88%) in both semesters of Chemistry Honors. A summer assignment covering several chapters will be collected on the first day of class.

(UC Approved)

The Advanced Placement Physics course is designed to be equivalent to the calculus-based introductory physics course usually taken during the freshman college year. Upon completion of this course, students will be able to understand the concepts of Newtonian Mechanics and solve problems in the following areas: Kinematics, Newton's Laws of

Motion, Circular Motion and Rotation, Work Energy and Power, Linear Momentum and Collisions, Universal Gravitation, and Oscillations and Mechanical Waves. This course emphasizes learning physics through demonstrations, problem solving exercises with dimensional analysis, and peer exercises with hands-on laboratory experiments on physical phenomena. Students must take the Advanced Placement exam in May. There is a fee of \$100 for AP exam.

****Fulfills one year of UC system lab science requirement**

Astronomy (Year) 10 Credits
(UC Approved for G requirement)

Grades 10, 11, 12

This course is designed to explore the origins of the universe, galaxies, stars, black holes, pulsars, quasars, and the Big Bang. It will explore the origins of our solar system, the planets, comets, and asteroids. Included will be evening observations with telescopes, a visit to an observatory, and a planetarium.

Biology (Year) 10 Credits

Grades 9, 10

Prerequisite: Incoming 9th graders will be placed into Biology based on the results of the Science portion of the High School Placement Test.
(UC Approved)

In this year long course the student is introduced to subjects that include the nature of living things, bio systems, ecosystems, microbiology, biology of plants and animals, human biology, and ecology. The students learn how to perform a lab using deductive reasoning and the scientific procedure which is collecting and analyzing data, and to draw conclusions from the results obtained. Laboratory work will constitute a large part of this class. There is a lab fee of \$50 for this course.

****Fulfills one year of UC system lab science requirement**

Biology Honors (Year) 10 Credits

Grades 9, 10

Prerequisite: A grade of A in both semesters of Conceptual Physics or Earth Science **and** successful passing of a placement test. Incoming 9th graders must pass the Science department exam.
(UC Approved)

Students will study the same material covered in Biology, but in greater depth and at a faster pace. Emphasis is placed on critical thinking and problem solving using the scientific method in the lab. Other areas covered in this class will include the process of science, the inter relatedness of science, technology, and society, and the place of ethics in science. Laboratory work and writing will constitute a large part of this class. There is a lab fee of \$50 for this course.

****Fulfills one year of UC system lab science requirement**

Chemistry (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: Algebra II is to be taken concurrently or previously to this course.
(UC Approved)

The student is introduced to chemistry through the study of matter and energy and continues with elements and compounds and different types of reactions. Other topics covered in this class include molecular formulas, molar relationships, bonding, the geometry of molecules, types and properties of solutions, thermodynamics and reaction rates. Laboratory experiments, including computer labs will reinforce the main concepts and are an integral part of the class. There is a lab fee of \$50 for this course.

****Fulfills one year of UC system lab science requirement**

Chemistry Honors (Year) 10 Credits **Grades 10, 11, 12**

Prerequisite: A grade of 88.0% (B+) or better in both semesters of Biology Honors or an A in both semesters of Biology and concurrent enrollment in Algebra II Honors. Previous completion of Algebra II with an 85% (B) or better also permitted. A completed Chapter 1 Summer Assignment is due on 1st class meeting followed with a quiz on the assignment topics. Teacher approval required.

(UC Approved)

Topics covered in this class are similar to those studied in the regular Chemistry course, but in greater depth and at a faster pace. The course will be more mathematically oriented than the regular Chemistry course. Emphasis is placed on chemical calculation and deductive reasoning. This course also emphasizes naming inorganic chemical compounds, writing balanced chemical equations and reaction stoichiometry. Lab investigations are of a more sophisticated nature than in regular Chemistry. There is a lab fee of \$50 for this course.

****Fulfills one year of UC system lab science requirement**

Concepts of Chemistry (Year) 10 Credits **Grades 10, 11, 12**

Prerequisite: Successful completion of Geometry; teacher approval.

(UC Approved)

Students in this course will learn about the structure and composition of matter. In addition, laboratory experiences will strengthen problem-solving skills and teach basic lab techniques. The student is introduced to chemistry through the study of matter and energy and continues with elements and compounds and different types of reactions. Other topics covered in this class include molecular formulas, molar relationships, bonding, the geometry of molecules, types and properties of solutions. It provides a broad exposure to chemistry for college-bound, non-science majors. The course will be less mathematically oriented than the College Preparatory Chemistry course.

****Fulfills one year of UC system lab science requirement**

Conceptual Physics (Year) 10 Credits **Grades 9**

(UC Approved for G requirement)

This is an introductory course to Physical Science dealing with important concepts of physics, chemistry, and some mathematics. Additionally, students learn how to collect and record data, to graph and interpret graphs. The concepts of matter and energy are studied in connection to such subjects as kinetic theory, wave motion, and atomic

structure. Emphasis is on the scientific method, critical thinking skills, and laboratory skills necessary to become successful in other science courses.

Marine Biology (Year) 10 Credits

Grades 10, 11, 12

Prerequisites: A grade of C or better in both semesters of Biology.
(UC Approved)

This is a year long biology course that give students an indepth look at the physical, chemical, and geographical characteristics of the world's oceans. Students will investigate the structure, functions, behaviors, adaptations and classifications of a variety of plant and animals that live in the marine environment. Students will learn how energy flows and matter cycles through the Earth's ocean system. They will gain an understanding of the many ways in which humans interact with the world's oceans: human use and impact on the marine environment, and the influence of the ocean on the human experience. Laboratory activites will include dissection, experimentation, data collection, and data analysis that develop scientific investigation and scientific thinking skills. *Off campus assignments are required each quarter.*

****Fulfills one year of UC system lab science requirement**

Physics (Year) 10 Credits

Grades 11, 12

Prerequisites: A grade of B or better in all semesters of Algebra II and Chemistry.
(UC Approved)

This course examines the science of matter and energy, and is the foundation to all other sciences. The course is mathematical in nature and requires mastery of algebra and basic trigonometry. Subject matter covered includes the conservation of energy, linear, rotational, and wave motion, heat, electricity, magnetism, light, optical instruments, relativity, and nuclear physics. Problem solving techniques will include written work, laboratory experiments, and computer based models. Critical thinking, analysis, and mathematical skills are important in this course.

****Fulfills one year of UC system lab science requirement**

Social Studies Department

Three years are required for graduation. World History, US History and American Government/Economics are required for graduation.

American Government (Semester) 5 Credits

Grade 12

(UC Approved)

Students in grade twelve pursue a deeper understanding of the institutions of American government. They compare systems of government in the world today and analyze the history and changing interpretations of the Constitution, the Bill of Rights, and the current state of the legislative, executive, and judiciary branches of government. An emphasis is placed on analyzing the relationship among federal, state, and local governments, with particular attention paid to important historical documents such as the

Federalist Papers. These standards represent the culmination of civic literacy as students prepare to vote, participate in community activities, and assume the responsibilities of citizenship.

Ancient World History (Year) 10 Credits
(UC Approved)

Grade 9

This is a freshman level World History class that studies the development of civilization through the mid 19th century. It correlates the study of ancient cultures such as Rome, Greece, Egypt, the Middle East, and the Far East with current problems being experienced in the world. An in-depth analysis of religion, geography, art, and political institutions provides students with insights, respect and ultimately an enhanced appreciation for different cultures and their attributes. In-depth critical thinking skills are focused upon and developed through the extensive use of primary resources, supplementary materials, slides, and power points. As a result, students develop a basic understanding of culture, institutions, and the nature of humankind in the context of world history.

AP American Government (Year) 10 Credits

Grade 12

Prerequisite: A grade of A in both semesters of previous social studies course or a B in previous honors or AP social studies course. Students must have earned an A in both semesters of previous English course or a B in previous AP English. Students must complete a required summer assignment with an acceptable passing grade.

Teacher approval required. All AP students who complete these classes are required to take college grade examinations prepared by the College Entrance Examination Board. This course also requires a summer assignment to be completed by the first day of school.
(UC Approved)

AP American Government and Politics is a year-long, college-level survey course designed for the academically accelerated senior. Upon completion of this class, students will have a firm grasp on the theory, organization, politics, function, and problems of US government. The bulk of instruction in this class is lecture based, though students are expected to engage in regular classroom discussion. This course includes substantial reading and writing components. In the writing assignments, emphasis is placed on the student's critical thinking skills. Ultimately, students will be prepared to take the AP College Board exam at the end of the year in May. Course will include a fundamental economic component in order to satisfy graduation requirements. There is a fee of \$100 for AP exam.

AP European History (Year) 10 Credits

Grade 10

Prerequisite: A grade of A in social studies course if taken freshman year. Students must have earned an A in both semesters of previous English course or a B in previous English Honors course. Students must possess an overall GPA of 3.5 or above. Students must pass an AP pre-test and complete a required summer assignment with an acceptable passing grade. All AP students who complete these classes are required to take college grade examinations prepared by the College Entrance Examination Board. This course also requires a summer assignment to be completed by the first day of school.

(UC Approved)

This college level course in European History prepares the students to take the AP European exam in May. The chronological scope of the course ranges from the Renaissance to the recent past and covers political, cultural, economic and social themes in the history of modern Europe. Students will do research, write papers, and evaluate key historical figures and literature. This class emphasizes both critical thinking and analysis and requires substantially more individual planning and effort with daily assessments. Students are expected to maintain a B average to remain in the class. There is a fee of \$100 for AP exam.

AP Macroeconomics (Year) 10 Credits

Grade 12

Prerequisite: A grade of A in both semesters of previous social studies course or a B in previous honors or AP social studies course. Students must have earned an A in both semesters of Algebra II. Teacher approval required. All AP students who complete these classes are required to take college grade examinations prepared by the College Entrance Examination Board. This course also requires a summer assignment to be completed by the first day of school.

(UC Approved)

This course will study the theory and operation of the economy as a whole, with special emphasis placed on government attempts to achieve domestic and international economic goals through the use of monetary and fiscal policies. Emphasis is placed on the broad overall performance (macro-analysis) of the economy with concentration in such areas as aggregate supply and demand, business cycle fluctuations, money and banking, income, employment, inflation, output, economic stability and growth, fiscal and monetary policy, and international trade and finance. Students will take an abbreviated U.S. Government component in order to satisfy graduation requirements. There is a fee of \$100 for AP exam.

AP US History (Year) 10 Credits

Grade 11

Prerequisite: A grade of A in both semesters of previous social studies course or a B in previous honors or AP social studies course. Students must have earned an A in both semesters of previous English course or a B in previous English Honors. Students must pass an AP pre-test. Teacher approval required. All AP students who complete these classes are required to take college grade examinations prepared by the College Entrance Examination Board. This course also requires a summer assignment to be completed by the first day of school.

(UC Approved)

This is a survey course of American history with an emphasis on the political, social, diplomatic, economic, and intellectual history of the United States. It will ultimately prepare the student for successful passing of the AP US History exam. It is offered as a course that is taught an advanced level, challenging the students to think critically about the important figures, periods, and events of American history as well as their underlying forces. Extensive reading and writing are major components of the course. There is a fee of \$100 for AP exam.

Economics (Semester) 5 Credits

Grade 12

Updated on 4-5-2016

(UC Approved)

Economics will provide students with a practical and comprehensive framework of the nation's economy and how it works. Students will explore the fundamental economic concepts of scarcity, opportunity cost and trade-offs, productivity and economic systems. The student will also be exposed to microeconomic, macroeconomic, and international economic concepts.

Military History (Semester) 5 Credits

Grades 11, 12

(UC Approval pending)

Military History is a course designed to provide the student with a comprehensive survey of the history, principles, effects, practices, and the profession of armed conflict. Students will use skills in cooperative learning, project development, and excellent standards of technical reading, writing, research, decision-making and public speaking as they study the processes and principles of warfare in the context of the complexities of modern day foreign policy. Students will develop an awareness of the awful realities of war through eyewitness accounts, oral histories, film video, pictures and literature. They will also apply knowledge and skills in tactics and strategy in the context of historical situations, and through the use of computer simulations, to learn the lessons of military history in relationship to today's unpredictable global environment.

Psychology (Semester) 5 Credits

Grades 10, 11, 12

(UC Approved)

This semester course will provide the student with an introduction to the concepts, theories and research findings of modern psychology. This survey course will also address the biological bases of behavior, sensory and perceptual processing, learning and memory, human growth and development, social behavior and normal and abnormal behavior.

US History (Year) 10 Credits

Grade 11

(UC Approved)

US History is a required course. This survey American history class begins with a review of the colonial period, Civil War, Reconstruction to the present. The course will explore the interactions of people, ideas, innovations, and institutions in the development of American history. Particular emphasis will be place on the forces that brought about the Civil War and the political, economic and social development during and after Reconstruction. The course will examine domestic and foreign conflicts that shaped the lives of Americans today. Students will analyze how the United States has influenced international affairs, especially since the end of World War I and II. Students will have daily reading assignments and should expect to write numerous essays throughout the course.

World History (Year) 10 Credits
(UC Approved)

Grade 10

World History is a yearlong recommended course that begins with the development of democratic ideas, continues to the French Revolution, and ends with the fall of Communism in the former Soviet Union. Students will focus on the influences of the Greeks, Romans, and the monotheistic religions, Renaissance, Reformation and Enlightenment in the development of democratic ideas. They will trace the development of the nation state, formation of political and economic systems, technological innovations, and cultures around the world. Students will investigate the forces that have shaped world history, including the role of ideas versus ideologies. In-depth critical thinking skills will focus on and develop through the extensive use of primary resources, supplementary materials, slides, and power points. As a result, students develop a basic understanding of culture, institutions, and the nature of humankind in the context of world history.

World History Honors/MUN (Year) 10 Credits

Grades 9, 10

Prerequisite: A grade of B or better in both semesters of previous English course. Must be concurrently enrolled in English 1, English 1 H, English 2, or English 2H.
(UC Approved)

The course of study in this class is the same as regular World History, but it is more in depth and presented at a faster pace. The writings of historians are studied; outside and primary sources are beyond the text. Students in this class will also be required to participate in the MUN program on campus and attend offsite MUN conferences as representatives of Jsera Catholic High School. Students will be required to do extensive writing and research as preparation for MUN conferences. Students in this course will be required, as part of their grade, to attend several MUN conferences throughout the school year. There is a conference fee of \$130 for this course.

Fine Arts Department

One year is required for graduation. Most classes will have a lab fee requirement.

VISUAL ARTS

3-D Art (Year) 10 credits

Grades 9, 10, 11, 12

This is a yearlong course that will provide students an introduction to the elements and principles of art and a wide variety of three-dimensional art-making techniques. 3-D Art is a primary vehicle for thinking, seeing, and communicating in the third dimension. This will open the intellectual gateway to creating in the third dimension using a variety of materials including wood, tile, plaster, wire, gels, jewelry metals, stones, finding and terra cotta as the course progresses. Course includes sculpting from direct observation and existing images. Studies include illusions of space and shape via figure and form analysis. Course also includes: the study of jewelry making techniques such as piercing

Updated on 4-5-2016

metal, repoussé techniques and wire wrap techniques. Instructor will present references to historical and contemporary 3-D and sculptural practices from many traditions. Students will create a body of work that illustrates their skills as emerging artists.

***Advanced Drawing & Painting (Year) 10 credits Grades 10, 11, 12**

Prerequisites: A grade of B+ in all semesters of Drawing & Painting I and Drawing & Painting II.

This course is designed to give the advanced art student a more specific overview of academic art training including graphite, charcoal and oil techniques, using the elements and principles of design in the process. The students will explore these techniques on a higher level and the subject matters will include, master copies, site-size techniques, the figure, still life and portraiture. Students will continue to be provided with the common core of instruction of the elements and techniques of painting and its related vocabulary. Focus will be on the use of opaque materials and techniques. There is a materials fee of \$250 for this course.

AP Art History (Year) 10 Credits Grades 10, 11, 12

Prerequisite: Students must have earned a grade of A- or better in both semesters of their previous History and English courses; teacher approval and summer assignment required. *(UC Approved)*

This is a year-long course that prepares the student for the AP College Board exam in May. Students review the art history from eras beginning at pre-historic man to the 20th century. Students will be expected to do heavy reading on the subject matter, learn and identify slides, learn how to critique and analyze art work explored during the course of the year, and do a research paper pertaining to one of the art history eras.

***AP Studio Art (Year) 10 Credits Grades 11, 12**

Prerequisite: Completion of two out of three of the following courses: Drawing & Painting 1, Drawing & Painting 2, Advanced Drawing & Painting, with a grade of A- or better each semester. Teacher approval and summer assignments are required. *(UC Approved)*

AP Studio Art is intended for students who are seriously interested in the practical experience of art. Through the creation of up to 28 pieces of art over the course of the year, students will submit a portfolio to the College Board for evaluation in May in either 2-Dimensional Design or Drawing. The portfolio requires the student to show a fundamental competence and range of understanding of visual concerns and methods in the three areas: Concentration, Breadth and Quality. Breadth consists of twelve works that show the student's depth of experience with a variety of media, subjects and approaches. Quality will represent five of the student's best work, and Concentration consists of twelve works that explore a theme chosen by the student. Students will experience a broad exploration of artistic concepts and media use. There is a materials fee of \$250 for this course.

***AP Studio Art - Photography (Year) 10 Credits Grades 11, 12**

Prerequisite: Completion of two out of three of the following courses with an A- or

better each semester: Digital Photo I, Digital Photo 2, Computer Graphic Design. Teacher approval and summer assignments are required. *(UC Approved)*

Advanced placement photography addresses the theory and practical application of photography as a visual art at an advanced level. Students explore image making in the photographic and art studios, on location, and in the computer lab, producing a portfolio of up to 28 professional quality images for submission to the College Board for evaluation in May. The portfolio is submitted under the Two-Dimensional Design category in which students must demonstrate technical skill and an understanding of the principles of design in three areas: Breadth, Concentration and Quality.

***Broadcast Journalism “News” (Year) 10 Credits** **Grades 9, 10, 11, 12**
Prerequisite: Instructor Approval. Enrollment is limited.

Working in one or two-person teams under deadline pressure, students will report, photograph, write, and edit packages for television news. During the course of the semester, students will be assigned to cover a variety of news stories including spot news, political news, business news, and light features. Students will be assigned a beat to cover. Some of the stories will air on the Daily “Lion Report.” There is an additional fee of \$250 for this course.

***Broadcast Sports and Entertainment (Year) 10 Credits** **Grades 10, 11, 12**
Prerequisite: Instructor Approval. Enrollment is limited.

Working in one or two-person teams under deadline pressure, students will report, photograph, write, and edit packages for television sports and entertainment. During the course of the semester, students will be assigned to cover a variety of sports and entertainment stories including JSerra Lions sporting events and special performances by the band, choir and theater department. Students will be assigned a beat to cover. Some of the stories will air on the Daily “Lion Report.” There is an additional fee of \$250 for this course.

Computer Flash Animation (Year) 10 Credits **Grades 9, 10, 11, 12**
(UC Approved)

Flash Animation is a year-long digital art class introducing students to both web design (1st Semester) and cartoon animation (2nd Semester). Utilizing Adobe Flash CS5 students will design a functioning web site, complete with action scripting (user interface), motion and sound. Students will also create a three-minute cartoon in conjunction with elementary story boarding. As a backdrop we will explore basic design elements (line, shape and space) as well as design principles (balance and emphasis). Mastery of the Mac operating system will further enhance the students’ grasp of technology in the world of graphic arts.

Computer Graphic Design (Year) 10 Credits **Grades 9, 10, 11, 12**
(UC Approved)

Graphic Design is a year-long digital art class providing students a hands-on, working knowledge of a career in graphic design. Students will explore the role of the artist as a visual communicator--one who seeks bold simplicity of form. Utilizing two powerful software programs (Adobe Illustrator CS5 and Adobe Photoshop CS5), students will create vector-based (line) illustrations, business documents (logos, ads, brochures, etc.), and pixel-based photo manipulation. We will explore basic design elements (line, shape and space) as well as design principles (balance and emphasis). Mastery of the Mac operating system will further enhance the students' grasp of technology in the world of graphic design.

Computer Graphic Design II (Year) 10 Credits**Grades 10, 11, 12****Prerequisite:** Successful completion of Computer Graphic Design

Graphic Design II, the logical continuation of Graphic Design I, continues to provide students a hands-on, working understanding of a career in digital graphic design within the MacIntosh environment. As an extension of Graphic Design I, we will continue to explore the role of the artist as a mass communicator — one who seeks **BOLD SIMPLICITY** of form. Utilizing the powerful software programs, Adobe Illustrator CS6, and Adobe Photoshop CS6, and Adobe InDesign CS6 the student will create original vector-based (line) illustrations, pixel-based photographic enhancements, both aimed toward final assembly within a digital desktop publishing program. With dynamic composition as a goal, we will focus on the five elements of design: line, color, shape, space and texture...as well three significant design principles: balance, emphasis and unity. Each student will be treated as a working graphic designer under the guidance of an art director (teacher), with projects reflecting authentic design campaigns.

Digital Photography I (Year) 10 Credits**Grades 10, 11, 12***(UC Approved)*

This year long course explores the digital photographic process. Course topics include: digital camera operation, camera manipulation, preproduction and postproduction techniques, image manipulation and restoration, and ethical issues surrounding digital manipulation. Students will gain an understanding in the element and principle of design, composition, black and white tonal scale, and color theory in relation to the photographic process. Using Adobe Photoshop, students will further explore combining digital techniques with historic and alternative photographic processes for greater artistic expression. Students will be required to compile a portfolio of work each semester evaluation. Students must possess a digital camera to take this course.

Digital Photography II (Year) 10 Credits**Grades 10, 11, 12****Prerequisite:** A grade of B or better in both semesters of Digital Photo I; teacher approval.*(UC Approved)*

Digital Photography II is an intermediate photography class for students with a working knowledge of digital photography and the creation of digital prints using Photoshop computer software. This year long course is designed to continue to build student knowledge, further skill levels and to encourage the student to develop and explore learned digital camera and Photoshop techniques. The student will utilize these techniques to develop advanced artistic problem solving skills and to convert digital images into high quality photographs and artwork. Students must also possess a digital camera to take this course.

Drawing & Painting I (Year) 10 Credits**Grades 9, 10, 11, 12**

Updated on 4-5-2016

(UC Approved)

Drawing and Painting is a year-long course that introduces students to the elements and principles of design, and how to implement those elements and principles in the creation of dynamic compositions using a variety of materials. The students will explore line, value, texture, shape, and color. Materials used will include pencil, charcoal, pen and ink, pastel, colored pencil, and a variety of paints including watercolor, acrylic and oil. Students will compile a portfolio of work by the end of the year. There is a materials fee of \$200 for this course.

***Drawing & Painting II (Year) 10 Credits** **Grades 10, 11, 12**

Prerequisite: A grade of B or better in both semesters of Drawing & Painting I or a similar year-long art course; teacher approval.

(UC Approved)

Drawing and Painting 2 is a year-long course, which continues the exploration and applications of the elements and principles of design. Students will create art projects that problem solve in a more complex manner. Students will work in oil, acrylic and watercolor paints, explore the human anatomy, and work in a more independent manner than in Drawing and Painting 1. Students will compile a portfolio by the end of the semester. There is a materials fee of \$250 for this course.

Film Making I (Year) 10 Credits **Grades 9, 10, 11, 12**

Prerequisite: Teacher approval. Enrollment is limited.

(UC Approved)

This exciting class is an introduction to “Film” production and the art of storytelling. Each student will learn the techniques of film making from script to screen. Students will get the opportunity to write, shoot and edit a series of exploratory film exercises. The primary emphasis is on telling a story visually, employing basic cinematography, lighting, editing, and sound recording. The object of the class at the end of each semester is to produce a 10 to 15 minute film. The goal for the class is to enter their film in local film festivals. There is an additional fee of \$250 for this course.

***Film Making II: Lion Report (Year) 10 Credits** **Grades 10, 11, 12**

Prerequisite: Students must have taken Broadcast Journalism, Introduction to Television & Internet, or Film Making I and earned a B+ or better in each semester. In addition, each prospective student’s acceptance will be based on a personal one on one interview and video sample review. Enrollment is limited.

(UC Approved)

“The Lion Report” class will give the elite students selected the opportunity to produce the Lion Report that is broadcast to the entire school on a daily basis. Students will be required to produce the daily 5-7 minute broadcast that is based on current events, happenings, news, sports and features that are occurring at JSerra High School. The students will get the opportunity to produce the broadcast utilizing the JSerra Lions State

of the Art Television Studio. Class is limited to 20 students. There is an additional fee of \$250 for this course.

Intro. to Telev. & Internet Broadcasting (Year) 10 Credits Grades 9, 10, 11, 12
Enrollment is limited.

An introduction to the skills used in television production for broadcast and the internet. Using a lecture/lab format, this course provides a comprehensive overview of the medium and provides each student with hands-on experience in television studio and field production techniques. Students will learn all the basic elements and techniques of production and postproduction for broadcast and the internet. Students will work in small production groups to learn the collaborative aspects of television & internet broadcasting. This class will serve as the foundation for the upper level classes of the department. There is an additional fee of \$250 for this course.

***Photojournalism/Yearbook (Year) 10 Credits Grades 10, 11, 12**
Prerequisite: Completion of either Graphic Design, Digital Photo or Middle School Yearbook; Teacher recommendation required.
(UC Approved)

Photojournalism/Yearbook combines graphic design, photography and journalism in the design and production of the JSerra yearbook, The Legacy. We employ three software programs: Adobe InDesign, Adobe Illustrator and Adobe Photoshop. Given unlimited creative license, students are encouraged to take ownership of the book that will capture their peers' high school years. Our pages cover everything from Spirit Week to Homecoming to JSerra's own Eucharistic Procession.

PERFORMING ARTS

***Advanced Theatre (Year) 10 Credits Grades 10, 11, 12**
Prerequisites: Completion of Theatre II and teacher approval through an audition.

This course is designed to enable the student to explore a particular theatrical form in more detail and in depth. The class emphasizes production, performance, stage technique, voice, stage design, costuming properties, and theater history. The course also emphasizes polishing talent, building confidence for professional or apprentice auditions, and gaining experience in public performances.

***Advanced Women's Ensemble (Year) 10 Credits Grades 9, 10, 11, 12**
Prerequisite: Audition required and teacher approval.
(UC Approved)

This ensemble is created specifically for the cultivation and exploration of the female vocal instrument and its use in the performance of sophisticated solo and choral literature. Each student will master concepts in choral styles and languages. This group performs at many adjudicated festivals, competitions and Mass throughout the year.

***AP Music Theory (Year) 10 Credits Grades 11, 12**
Prerequisite: 2+ years of participation in Music Department choral or instrumental ensembles or instructor approval

Co-requisite: Students must simultaneously be enrolled in an intermediate or advanced Music Department performance course
(UC Approved)

This advanced level music course is open to choral or instrumental students who have participated for at least two years in intermediate or advanced level ensembles. Additionally, students must be concurrently enrolled in another Music Department performance course. The AP Music Theory course corresponds to two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Musicianship skills including dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the learning process. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are emphasized.

***Chamber Choir Honors (Year) 10 Credits** **Grades 9, 10, 11, 12**
Prerequisite: Audition required and teacher approval.
(UC Approved)

This class is designed for students who wish to be challenged vocally, musically and intellectually. As the premier vocal ensemble at JSerra Catholic High School, students will be held to the highest standards of musicianship and professionalism, and will perform competitively. The choral literature performed is of the same level as most universities and is drawn from the early Renaissance to Contemporary music, including liturgical praise and worship. Languages in which the students will be expected to sing include Italian, German, French, Russian, Japanese and English.

***Chamber Orchestra (Year) 10 Credits** **Grades 9, 10, 11, 12**
Prerequisite: Ability to read music and 2+ years of experience playing a woodwind or brass instrument OR co-enroll in Instrument Tutorial.
(UC Approved)

This intermediate/advanced level instrumental music course is open to students who read music and have at least two years of experience playing a string instrument (violin, viola, cello, or double bass). Advanced pianists may join by audition. Motivated beginners may enroll if they co-enroll in Instrument Tutorial. In this course, students further develop their musical skills through the rehearsal and performance of music written for string and full orchestra. The course also includes topics and projects in music history and culture, theory and analysis, critical listening, improvising, composing and arranging, and real world and career applications. Students are expected to attend rehearsals outside of the school day and participate in music festivals, concerts, and special events. The String Orchestra frequently combines with other instrumental and choral music ensembles for special concerts or events. Though there are a limited number of instruments the school can loan, students are generally expected to provide their own instrument. Students are encouraged to reenroll in Chamber Orchestra multiple times.

Concert Choir (Year) 10 Credits
(UC Approved)

Grades 9, 10, 11, 12

This is the ideal class to learn how to sing! This is a non-auditioned ensemble that will introduce basic to intermediate singing techniques. Posture, breath support, vowel production, tone color, and style will be introduced and developed. Music Theory and sight reading will be introduced as music is explored through many languages, cultures and styles. As an intro-level performance class students in this class are required to participate, as a group, in the Fall and Christmas concerts as well as the Pop Concert and Farewell Concert. Other performances opportunities will be discussed together as a group.

Dance I (Year) 10 Credits
Prerequisite: None.
(UC Approved)

Grades 9, 10, 11, 12

This fine arts/ PE course is designed for the student who wants to expand their knowledge of various styles of dance. The class will focus on jazz, modern, ballet, musical theater dance, creating choreography, and dance as art through emotional expression. Artistic expression will be emphasized through the use of choreographic projects. Discussions will also take place regarding dance history. The students will be evaluated on their participation, classwork, homework, and participation in a performance at the end of each semester.

Course goals: Dance I students will improve and expand and improve their abilities in all dance techniques. Artistic expression will be explored through opportunities for self-choreography

***Dance II (Year) 10 Credits**

Grades 9, 10, 11, 12

Prerequisite: Completion of Dance I or approval of instructor.
(UC Approved)

Dance II will focus on dance performance in all dance genres: Jazz, modern, contemporary dance, musical theater, ballet, and liturgical dance. Dance II will also enable students to choreograph group pieces for themselves and for their peers. The students will be evaluated on their daily participation, classwork, homework, and participation in numerous performances throughout the semester as well as a performance at the end of each semester.

Course Goals: Dance II students will become confident performers, displaying intermediate dance technique, emotional/artistic expression in performance, and professional work habits in the context of performance.

***Dance III (Year) 10 Credits**

Grades 11, 12

Prerequisite: Completion of Dance II or approval of instructor.
(UC Approved)

This Fine Arts/PE course is for the experienced dancer and audition is required for entry into this class. Dancers in this course are expected to work at an advanced dance level in both artistic and technical aspects of dance. This group will anchor all dance performances and will be included in collaborative performances with the choral and instrumental music departments. All performances are required and graded. Dancers will also be given opportunities to discover dance in their community by attending local performances and meeting industry professionals.

Course Goals: Dance three students will be able to hone their artistic, performance skills while being expected to perform at a high level of technical ability.

***Dance IV Honors (Year) 10 Credits**

Grades 11, 12

Prerequisite: Completion of Dance III or approval of instructor.
(UC Approved)

This Fine Arts/PE course is for the experienced dancer and audition is required for entry into this class. Dancers in this course are expected to work at an advanced dance level in both artistic and technical aspects of dance. This class will also include a writing element which will include the study of dance current events, history, and an extended research paper will be assigned. Two text books will be required for this course. This group, with Dance 3, will anchor all dance performances and will be included in collaborative performances with the choral and instrumental music departments. All performances are required and graded. Dancers will also be given opportunities to discover dance in their community by attending local performances and meeting industry professionals. Dancers in Dance IV will be expected to fulfill an internship requirement by acting as an assistant to an instructor at a local dance studio.

Course Goals: To train the most well- rounded dancer in both technical and academic aspects of dance. Additionally, pedagogy will be introduced in order to prepare dancers for careers in dance instruction.

Advanced Dance Production (Year) 10 Credits

Grades 11, 12

Prerequisite: Arts Magnet Program student or approval of instructor.

Co-requisite: Dance 4

(UC Approved)

Advanced Dance Production is a fine arts course for the student dancer who desires to pursue a career in professional dance production. These students aspire to be teachers, choreographers and directors. In this course the students will be guided through producing two dance productions, full-length dance concerts, within the length of an academic year. Responsibilities of the student will include but not be limited to: writing a budget, reserving facilities for concerts, designing all press materials (press releases, posters, tickets, programs), establishing a running order for each production, and organizing volunteers for each event. Students in this course will also have to choreograph alone, not in a collaborative sense, works for fellow dancers, design costumes, learn basic stage lighting skills and learn rudimentary sound design and sound engineering for each concert. The responsibilities of the artistic versus the executive director in a non-profit, performance company context, grant writing and fund raising, will also be studied and discussed.

Comedy Sportz (Year) 5 Credits**Grades 9, 10, 11, 12**

Prerequisite: Audition and consent of instructor

Comedy Sportz is a year-long intensive study of the art of theatrical improvisation. This class meets every Friday from 3:00-5:00pm with extra required performances and competitions.

Guitar (Beginning) (Year) 10 Credits**Grades 9, 10, 11, 12**

Prerequisite: None.

(UC Approved)

This beginning level instrumental music course is open to students with no previous experience on the guitar or those who have dabbled a bit on the instrument but need more solid footing in the basics. Students will learn to play open and barre chords, strum and fingerpick, read tablature and standard notation on the guitar, and play and improvise melodies. Projects include individual performance, ensemble or band playing, song analysis, cover arranging, and song writing. Each student is expected to provide his or her own acoustic-electric guitar.

Guitar Workshop (Year) 10 Credits**Grades 9, 10, 11, 12***(UC Approved)*

Prerequisite: Prerequisites: Completion of the beginning Guitar course or at least two years of previous experience playing guitar and the ability to freely switch between at least 15 open chords, play at least two barre chord shapes, play simple fingerpicking patterns, and read tablature.

This intermediate/advanced level instrumental music course is open to students who have completed the beginning Guitar course or have significant experience with the instrument (see prerequisites below). Students in Guitar Workshop will continue to develop their technique on the instrument through repertoire-oriented instruction. Projects include individual performance, ensemble or band playing, song analysis, cover arranging, and song writing. Each student is expected to provide his or her own acoustic-electric guitar. Students may reenroll in Guitar Workshop multiple times.

Handbell Ensemble –(Year)**Grades 9, 10, 11, 12****Prerequisite:** None. This class requires a minimum enrollment.

A fun, intro level music performance course for those that want to learn about music. This course provides the skills of learning to read music, coordination of musical performance, dexterity and ensemble musicianship through the use of 5-octaves of Handbells. Exploration of the art form in a variety of musical styles including pop and classical as well as the liturgical use of Handbells. 3-4 performances per year with the possibility of a tour.

Instrument Tutorial**(Sem/Year) 5 Credits****Grades 9, 10, 11, 12**

Prerequisite: None.

Co-Requisite: Wind Ensemble (woodwinds, brass, or percussion) or Chamber Orchestra (strings)

Instrument Tutorial is designed for students who are new to instrumental music (must enroll for two semesters) or students who already play an instrument and want to learn another (may enroll for one semester). Instrument choices include woodwinds (flute, clarinet, oboe, bassoon, saxophone), brasses (trumpet, French horn, trombone, baritone, tuba), percussion (snare drum, bass drum, timpani, xylophone, etc), and strings (violin, viola, cello, bass). Students will learn the basic techniques of the instrument they choose and, if needed, the basics of reading music notation. Instruments will be provided for students who need them. This class meets from 7:30-7:55am on Monday, Tuesday, Thursday, and Friday mornings. Instrument Tutorial may be taken multiple times by students interested in learning multiple instruments.

***Musical Theatre (Year) 10 Credits** **Grades 10, 11, 12**
Prerequisite: Completion of Theatre I or II. Audition required.

This year long class delves into the history and performance of musical theatre. This class is a survey of the influential artists who produce, write, direct, and perform on America's musical stages from the 1860's to today. Students will also perform concurrently with the musical theatre styles that are analyzed in the units of study.

Beginning Piano (Year) 10 Credits **Grades 9, 10, 11, 12**
Prerequisite: None.
(UC Approval Pending)

This beginning level instrumental music course is open to all students with or without previous experience playing the piano. Note reading, music theory and beginning level piano skills will be taught.

***Piano Workshop (Year) 10 Credits** **Grades 9, 10, 11, 12**
Prerequisite: Completion of the Beginning Piano course or the ability to play pieces equivalent to J.S. Bach's Anna Magdalena Notebook, Clementi's Sonatinas (Opus 36), or Burgmuller's 25 Progressive Pieces for the Piano (Opus 100) and play triads and scales in C, G, D, A, E, B, F, Bb, Eb, Ab, and Db major. Must be willing to practice a minimum of 45 minutes to 1 hour per day.
(UC Approval Pending)

Advanced students may use this class to develop their skills further. Students will have in class performance opportunities including a recital each semester.

***Rock Band (Year) 5 Credits** **Grades 9, 10, 11, 12**
Prerequisite: Audition and consent of instructor

Rock Band is open by audition to students who play guitar, bass, piano, drum set, horns (i.e. trumpet, saxophone, trombone, etc), or sing (other instruments may be considered on a case by case basis). Rock Band rehearses and performs covers and arrangements of popular music from a wide range of genres in an ensemble rock band setting. Required

Updated on 4-5-2016

performances include home football games, department concerts, and other special events. The class meets after school from 2:45-3:45pm on Tuesdays and 2:30-3:45pm on Thursdays. Rock Band may be taken multiple times.

Technical Design (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: The completion of Theatre I or II.

This year long course enables the students to learn the facets of technical theatre. The class emphasizes costume design, set design, lighting design, makeup design and stage management. Students will not only learn the technicalities of the design fields, but learn the hands on application of the study.

Theatre I (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: None

(UC Approved)

This is a year long course that is designed to introduce the student to the fundamentals of theater and acting. Students will delve into the history and various aspects of theater and will explore improvisation, character development, stage combat, monologues and scene work, and visualization. Students will study a variety of acting styles, play writers, and musical theater performances. Students will participate in one production by the end of the year. An outside commitment of a few hours over three days is all that is required.

Theatre II (Year) 10 Credits

Grades 10, 11, 12

Prerequisites: Theater I and audition.

(UC Approved)

Theater II is a year long course designed for those students who have successfully completed the Theater I course. Theater II continues to emphasize acting styles and broadens knowledge of directional techniques. This course further provides the student with the opportunity to develop the actor/director/character relationship by writing and performing in a one-act play. The dramatization of this one-act play, with all production aspects, will be emphasized. Various theater techniques will also be emphasized, including improvisation, memorization, preparation, blocking, articulation, and stage presence. An introduction of theater history and acting styles will be discussed.

***Wind Ensemble (Year) 10 Credits**

Grades 9, 10, 11, 12

Prerequisite: Ability to read music and 2+ years of experience playing a woodwind or brass instrument OR co-enroll in Instrument Tutorial.

(UC Approved)

This intermediate/advanced level instrumental music course is open to students who read music and have at least two years of experience playing a woodwind (flute, clarinet, oboe, bassoon, or saxophone) or brass instrument (trumpet, French horn, trombone, baritone, or tuba). Advanced guitarists, bassists, pianists, and percussionists may join by audition. Motivated beginners may enroll if they co-enroll in Instrument Tutorial. In this course, students further develop their musical skills through the rehearsal and

performance of music written for wind ensemble, concert band, and pep band. The course also includes topics and projects in music history and culture, theory and analysis, critical listening, improvising, composing and arranging, and real world and career applications. Students are expected to attend rehearsals outside of the school day and participate in music festivals, concerts, and special events. The Wind Ensemble frequently combines with other instrumental and choral music ensembles for special concerts or events. Though there are a limited number of instruments the school can loan, students are generally expected to provide their own instrument. Students are encouraged to reenroll in Wind Ensemble multiple times.

****A student must audition or provide a portfolio for review.***

World Language Department

Two years of the same language are required for graduation.

American Sign Language I (Year) 10 Credits
(UC Approved)

Grades 9, 10, 11

American Sign Language 1 introduces students to the language and culture of the Deaf community. This course will provide conversational signing skills and knowledge of ASL grammar. Deaf culture will be taught through textbooks, Deaf visitors, and Deaf community events. Expressive and receptive signing skills are practiced through dialogues, projects, and presentations.

American Sign Language II (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: Successful completion of American Sign Language 1 with a grade of C or better; teacher approval.

(UC Approved)

American Sign Language 2 expands on students' expressive and receptive signing skills. This course will provide a more in depth knowledge of ASL grammar. Lessons are primarily taught in ASL and will include a more extensive study of Deaf culture.

American Sign Language III (Year) 10 Credits

Grades 11, 12

Prerequisite: A grade of C or better in both semesters of ASL II; teacher approval.

(UC Approved)

American Sign Language III focuses on further developing all skills. The primary emphasis is on the student's active communication in ASL. The class includes grammar and culture information.

American Sign Language IV (Year) 10 Credits

Grade 12

Prerequisite: A grade of C or better in both semesters of ASL III; teacher approval.

(UC Approval pending)

American Sign Language IV continues reviewing, expanding, and perfecting expressive skill, structure, and vocabulary for the purpose of active communication.

AP French Language (Year) 10 Credits

Grades 11, 12

Prerequisite: A grade of A in both semesters of French III or B in both semesters of French III Honors; teacher approval.

(UC Approval Pending)

AP French language is a review of grammar as well as idiomatic structures of language that permit greater freedom of expression. French history and civilization continue to be emphasized through reading selections of French literature. Communication skills are stressed through original compositions and discussions based on readings. This class prepares the student for the AP French Language exam in May. There is a fee of \$100 for AP exam.

French I (Year) 10 Credits

Grades 9, 10, 11

(UC Approved)

This is an introductory course to the French language. Elementary grammar principles and basic vocabulary will be studied. Emphasis will be on the development of reading, writing, listening and speaking skills. An introduction to the French culture will be offered.

French II (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: Successful completion of French I with a grade of C or better; teacher approval.

(UC Approved)

This course is a continuation of the study of grammar principles and vocabulary. Increased emphasis will be placed on the development of communicative competence in both the spoken and written language with a continued study of the French culture.

French II Honors (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: A grade of B or better in both semesters of French I Honors or an A in both semesters of French I. Departmental approval required.

(UC Approval Pending)

This course is a continuation of the study of grammar principles and vocabulary from French I. French II Honors is for students who have completed French I and have tested at a higher level or recommended by the teacher. Increased emphasis will be placed on the development of communicative competence in both the spoken and written language with a continued study of the French culture.

French III (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: A grade of C or better in both semesters of French II; teacher approval.

(UC Approved)

French III is a review of all basic grammar principles and an introduction to more sophisticated structures. This course continues the development of oral and written communication skills, and students begin the study of short literary selections. French civilization forms the basis of cultural study.

French III Honors (Year) 10 Credits **Grades 10, 11, 12**

Prerequisite: A grade of B or better in both semesters of French II Honors or an A in both semesters of French II. Departmental approval required.

(UC Approval Pending)

French III Honors is an intense course that continues the study of advanced French grammar while developing increased student mastery of the spoken language. The class emphasizes reading, discussion and critical analysis of French literary works. Students will write original compositions. French civilization and history form the basis of cultural study.

French IV (Year) 10 Credits **Grades 11, 12**

Prerequisite: A grade of B or better in both semesters of French III; teacher approval.

(UC Approved)

This course is a review of all basic principles and an introduction to more advanced grammar structures. There is a strong emphasis on listening and speaking skills and the ability to communicate in everyday situations. The students will continue to increase their vocabulary and develop an awareness of various aspects of the French culture.

AP Latin Language (Year) 10 Credits **Grades 11, 12**

(UC Approved)

Prerequisite: B+ or above in Latin III/III Honors or by teacher recommendation.

Students will improve their fluency in reading Latin through daily vocabulary preparation, in-class sight-reading (Vergil and Caesar as well as other authors), and nightly passage preparation. Regular review of grammatical forms and uses will further assist in increasing reading fluency. Significant sections of both works will be read in English as well, which, when combined with historical lectures and additional assigned essays of literary criticism, will help the student develop a sense of the historical and literary context of the works. During class discussions and in writing essays concerning major themes, historical relevance, and literary technique, students will come to appreciate the authors' mastery of prose and poetry, as well as to understand the politics and culture of the ancient Roman world. Accuracy and speed in translation will be expected of the AP candidate, as well as the concise communication of ideas in critical analysis.

Latin I (Year) 10 Credits **Grades 9, 10, 11**

(UC Approved)

The course is designed to help students develop the ability to understand the fundamental principles of English and Latin grammar. It will also aid the student to recognize and understand English words derived from the Latin background of Western Civilization. Additionally, the course will explore the Roman contribution to Western culture and literature.

Latin II (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: Successful completion of Latin I with a grade of C or better; teacher approval.

(UC Approved)

The course is designed primarily to enable the student to read Latin prose and literary works of the Classical era. There will be a review of first year morphology and syntax. New points of morphology and syntax will be covered so that the student will be ready to read Caesar and Cicero in a students' version. Approximately one quarter will be spent reading Caesar and Cicero. A method of translation will be employed which is based on a syntactical analysis of the Latin sentence. Students will also learn basic vocabulary to enable them to read other authors more easily.

Latin II Honors (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: A grade of B or better in both semesters of Latin I Honors or an A in both semesters of Latin I. Departmental approval required.

(UC Approved)

The course is designed to continue with the study of Classical Latin from the first year but with a quicker pace in mind. There will be a short review of first year morphology and syntax, with new grammatical concepts explained to prepare the student for reading a student's version of Vergil, Cicero or Caesar in the second semester. Students will learn the subtle differences in translation methods required for different authors using the same syntactical analysis of the Latin sentence introduced in the first year of study. Each student will prepare and present a Power Point project in both semesters on a topic selected in cooperation with the teacher. The topic will focus on a key author or historical figure from Roman history, or on some aspect of the Latin language.

Latin III (Year) 10 Credits

Grades 11, 12

Prerequisite: A grade of C or better in both semesters of Latin II; teacher approval.

(UC Approved)

Latin III begins the study of Latin poetry. Since it is a departure from the prose style to which students have become accustomed, all students begin on a level playing ground. However, the building blocks from Latin I & II such as grammar, syntax and a basic working vocabulary are assumed as students master the concept of meter (dactylic hexameter), its purpose in the Latin language, cadence, rhythm, and the history of its origin. Several famous poets are studied, but the primary focus is Vergil's *Aeneid*. Students will read selections from a variety of poets including Ovid, Vergil, Martial, Catullus and Horace.

Latin III Honors (Year) 10 Credits**Grades 11, 12**

Prerequisite: A grade of A or B in both semesters of Latin II Honors or an A in both semesters of Latin II.; Departmental approval required.

(UC Approved)

Latin III Honors continues the study of Latin poetry and prose which began in Latin II Honors. The building blocks from such as grammar, syntax and an intermediate-level vocabulary are assumed as students master the concepts of meter and literary devices. Vergil's *Aeneid* is a primary focus. Students will also read a wide selection of other poets and writers of prose including Cicero, Julius Caesar, Ovid, Martial, Catullus and Horace. Each student will prepare and present a Power Point project in both semesters on a topic selected in cooperation with the teacher. The topic will focus on a key author or historical figure from Roman history, or on some aspect of the Latin language.

Mandarin Chinese I (Year) 10 Credits**Grades 9, 10, 11, 12**

(UC Approved)

Mandarin I is an elementary course which introduces students to the fundamentals of Chinese language and culture. This course uses Pinyin system and simplified Chinese. The goals are to help students develop basic listening, speaking, reading and writing skills in Chinese and to understand the customs and life of modern China. Area of focus is the pronunciation with accurate tones. After the first year of Mandarin Chinese, students are expected to carry basic conversation, recognize over 150 Chinese characters, read short texts and write sentences. Cultural activities such as songs and festivals provide each student with opportunities to enhance language and cultural learning.

Mandarin Chinese II (Year) 10 Credits**Grades 9, 10, 11, 12**

Prerequisite: Must have successfully completed Mandarin I. Incoming 9th grade students must successfully pass placement exam to take this class.

Mandarin II is a continuation of Mandarin I. Students will continue to build knowledge of Chinese language and culture. The objectives are for students to further develop listening, speaking, reading and writing skills in Chinese. Students will refine the tones and pronunciation, increase their vocabulary, and produce sentences with various grammatical structures. Students will be more fluent in daily conversation and be able to read short essays. This course will integrate technology to facilitate better learning experiences. Cultural activities including legends and food will be emphasized to enhance students' understanding.

Mandarin Chinese III (Year) 10 Credits**Grades 10, 11, 12**

Prerequisite: A grade of C or better in both semesters of Mandarin II; teacher approval.

(UC Approved)

Mandarin III is a continuation of Mandarin II with an emphasis on interpersonal and presentational communication. The course will review basic grammar and key sentence patterns taught in previous levels. Areas of focus include the expansion of vocabulary, idiomatic expressions and grammatical structure to further develop language skills in

listening, speaking, reading and writing. Upon completion of this level, students will be able to talk about weather, dining, transportation and sports in Chinese. Through a variety of media and hands on activity, students will also explore culture, geography and history of China.

Mandarin Chinese IV (Year) 10 Credits **Grades 11, 12**

Prerequisite: A grade of B or better in both semesters of Mandarin III; teacher approval.
(UC Approved)

Mandarin IV is a continuation of Mandarin III for students who wish to pursue their personal or academic interest in Mandarin Chinese. The goal of this course is to encourage language acquisition through controlled immersion environment. Rigorous practice of spoken and written Chinese will be conducted. Upon completion of this level, students will be able to make travel arrangements, socialize with friends, and discuss school life in Chinese. Further study of Chinese culture will emphasize on bringing students cross-cultural awareness and perspective.

Mandarin Chinese V Honors (Year) 10 Credits **Grade 12**

Prerequisite: A grade of A in both semesters of Mandarin IV; teacher approval.

Mandarin V Honors is a fifth-year level course for students who have taken at least four years of Chinese. This course is conducted mainly in Chinese to help students polish their language skills in reading, writing, speaking and listening so they can express ideas with accuracy and fluency. This course has a high emphasis on cultural topics and current issues in Chinese society. Students in the class will also be prepared for the College Board's Advanced Placement examination, which they may choose to take as an option at the end of the second semester.

AP Spanish Language (Year) 10 Credits **Grades 11, 12**

Prerequisite: A grade of A in both semesters of Spanish III or a B in both semesters of Spanish III Honors; Placement test and departmental approval required. A completed summer assignment is due the first day of class.
(UC Approved)

AP Spanish IV is a review of the Spanish language as well as the idiomatic structures of language that permit greater freedom of expression. This course prepares the student for the AP Spanish Language exam in May. This course is designed to have the student use this second language for active communication. There is a fee of \$100 for AP exam.

Spanish I (Year) 10 Credits **Grades 9, 10, 11**
(UC Approved)

This year long course is an introductory course to the Spanish language, in order to develop communication through listening, speaking and reading the language. Elementary language principles and basic vocabulary will be studied. An overview of the

culture of Spanish speaking countries will be introduced. The course consists of dialogue, reading and written exercises, tests and oral presentations.

Spanish II (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: Must have successfully completed Spanish I or the equivalent or test into the class.

(UC Approved)

This course is a continuation of the study of basic grammar principles and vocabulary. Increased emphasis will be placed on the communicative competence in both the spoken and written language. The course consists of guided conversations, readings, exercises and tests. The study of the culture of Spanish speaking countries will continue.

Spanish II Honors (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: A grade of B or better in both semesters of Spanish I Honors or an A in both semesters of Spanish I. Departmental approval required.

(UC Approved)

This year long course is a continuation of Spanish I Honors material as stated in the Spanish II course description. However, this honors class moves at an accelerated pace, and the students have higher standards in speaking and writing the language. Students will also be given outside sources for reading and writing.

Spanish III (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: A grade of C or better in both semesters of Spanish II; teacher approval.

(UC Approved)

Spanish III is the review of all basic grammar principles and an introduction to more sophisticated structures. This course continues the development of oral and written communication skills, and the students are introduced to short literary selections. A thematic approach to the Spanish and Latin American cultures is included. This course is designed to allow students to enter into and participate in the Hispanic culture.

Spanish III Honors (Year) 10 Credits

Grades 10, 11, 12

Prerequisite: A grade of B or better in both semesters of Spanish II Honors or an A in both semesters of Spanish II. Departmental approval required.

(UC Approved)

Spanish III Honors is an intense course which continues the study of advanced Spanish grammar, while developing increased student mastery of the spoken language. The class emphasizes reading, discussion, and critical analysis of Spanish literary works. Students will write original compositions, while exploring the history and civilization of Latin America from the basis of cultural study.

Spanish IV (Year) 10 Credits**Grades 11, 12**

Prerequisite: A grade of C or better in both semesters of Spanish III; teacher approval.
(UC Approved)

This course is a review of all the basic principles and an introduction to more advanced grammar structures. There is a strong emphasis on listening and speaking skills and the ability to communicate in everyday situations. The students will continue to increase their vocabulary and develop an awareness of various aspects of Hispanic cultures. The reading selections, which are pieces of Spanish literature, will be the basis of original compositions and analysis. Students will work toward increased fluency and self-confidence in writing and speaking Spanish.

Elective Classes**AP Computer Science (Year) 10 Credits****Grades 10, 11, 12**

Prerequisite: Successful completion of Geometry or concurrently enrolled in Geometry H. A minimum enrollment is required for this class.
(UC Approved)

This course is designed in accordance with the annual College Board Course Description for Advanced Placement Computer Science. It is a yearlong course that prepares students for the AP Computer Science Exam in May. There is a fee of \$100 for AP exam.

ASG Leadership (Year) 10 Credits**Grades 9, 10, 11, 12**

Prerequisite: Must be an elected ASB or class officer or commissioner or obtain teacher approval.

This is a year long course designed to empower the elected officers and commissioners for the coming year. Students in this class will be encouraged to attend leadership camp during the summer months. Class time will be spent in planning, organizing and implementing school activities and maintaining an activities calendar.

Creative Writing (Semester) 5 Credits**Grades 10, 11, 12***(UC Approved)*

Creative Writing is a semester long course open to students interested in exploring writing as an art form. The course builds on composition skills, plot structure, methods of characterizations, development of setting and theme, journal writing, cluster techniques, free writing and development of voice. Students will participate in individual writing exercises, brainstorming sessions, and peer and critique groups. The course includes the study of contemporary poets and fiction writers.

Freshman Communications (Semester) 5 credits**Grade 9**

This introductory, freshman-level course equips students with the requisite skills to be successful in high school. This course is broken into three components: introduction to JSerra, grammar and writing, and logic and critical thinking. The JSerra component

Updated on 4-5-2016

includes JSerra history, computer and Bistro registration, basic computer skills, review of dress code, the plagiarism and honesty policy, email correspondence, and study skills guidance. The grammar and writing component covers the building blocks of strong written correspondence and argument: dependent and independent clauses, comma use, pronoun-antecedent agreement, and correct modifier usage. Students compose analogous, causation, and persuasive essays. The logic and critical thinking component covers those skills necessary for structuring clear and convincing arguments: premises and conclusions, consistency, using reliable sources, analogies, causes, correlations, and oral arguments.

Health (Semester) 5 Credits

Grades 9, 10, 11, 12

This semester course is a requirement for graduation. The course covers a vast array of health related topics including personal health, family and social health, individual growth and development, communicable and chronic diseases, consumer and community health nutrition, alcohol, tobacco and drug abuse, environmental health, and injury prevention and safety. Students will gain knowledge in these areas through the use of a text, reading materials, lectures, research papers, and technology integrated instruction.

Introduction to Computer Science (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: Successful completion of Geometry or concurrently enrolled in Geometry H.

(UC Approved)

Introduction to Computer Science is a starting point for those students who are interested in computer programming and have successfully completed Geometry. This class will focus on the science of designing computer programs using an object oriented style. The course will develop these skills using Java as a means for learning programming. The types of problems solved by means of programming will vary (ie. Math, Science, Finance, Graphics) and a major project is due at the end of spring semester.

Journalism/School Newspaper (Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: Overall GPA of 3.0 and teacher approval.

(UC Approved)

Journalism/School Newspaper provides the student a hands-on experience in planning, writing, editing, and producing the monthly JSerra school newspaper. This course is a one year course focusing on how to effectively communicate with the greater JSerra community. The class emphasizes logical thinking, interviewing skills, accurate and concise journalistic composition, editorial writing, original photography, and layout. The newspaper will be produced digitally on the computer via Macintosh, utilizing a variety of software programs, and output as both an electronic file and as a traditional printed piece.

Literature of the Sea (Semester) 5 Credits

Grades 11, 12

This is a semester-long elective course open to juniors and seniors. The Sea inspires adventure; undeniably mysterious and forbidding, calling out to explorers seeking the

compelling forces of the soul. 'Literature of the Sea' highlights past and current works of authors such as J.London, J.Steinbeck, and H.Melville to create connections to the sea and modern society. We will visit Dana Point for an overnight excursion on the 17th century operational ship, the Spirit of Dana Point. Student work includes a website of poetry and creative writing complete with accompanied media.

Psychology (Semester) 5 Credits
(UC Approved)

Grades 10, 11, 12

This semester course will provide the student with an introduction to the concepts, theories and research findings of modern psychology. This survey course will also address the biological bases of behavior, sensory and perceptual processing, learning and memory, human growth and development, social behavior and normal and abnormal behavior.

Speech and Debate (Semester) 5 Credits
(UC Approved)

Grades 9, 10, 11, 12

Speech deals with the communication process as a whole in our daily lives through group discussion, and public speaking. Students will learn how to conduct interviews and group discussions. Students will learn how to prepare and deliver informal, argumentative and persuasive speeches, as well as speeches for occasions such as commemoration, dedications, awards presentations and acceptances. Students will practice giving memorial speeches as well as humorous speeches and dramatic monologues intended for entertainment. Students will also write and perform radio and TV public service announcements, editorials, commercials and newscasts.

Study Skills (Semester/Year) 10 Credits

Grades 9, 10, 11, 12

Prerequisite: Must have a psycho-educational evaluation on file and enrolled in the SERP program.

This program is designed for students who have been identified through private testing or school district testing as needing specific accommodations in their educational endeavors. Students can receive a maximum of 20 credits of Study Skills that can be used towards their elective graduation requirements. The grade for this class is factored into the student's total GPA, but not the student's academic GPA. There is a fee of \$900 per semester.