

# **2018-2019 – Summer Catalog**

## **THEOLOGY DEPARTMENT [100]**

### **CHRISTIAN RELATIONSHIPS [147]**

Credit: 0.50

Prerequisites: Rising senior status

Description: The emphasis in this course is to pursue the meaning of the commandment "love one another" and to more fully understand the theological belief that "God is Love." Our humanness, centered on our call to love as Christ loved, is understood through our relationship to self, to others and to God. Main topics examined in this course include: self-awareness and understandings needed for human growth and maturity; recognition and exploration of the ways in which humanity may need to achieve that self-awareness and understanding, in order to live in the world as called by the Catholic Church; friendship and the physical, psychological and social differences in being male or female in a relationship, as well as the societal structures which help and hinder those differences; forms and functions of love and the totality of human sexuality as a way of being fully human in this world; the ideal and viability of the family in contemporary society; vocations as the envisioned experience of Catholic Church for living in the world and working towards building the Kingdom of God. The units that explore these themes are: The Self, Friendship, Love and Sexuality, Family, "Father".

### **INTER-RELIGIOUS DIALOGUE [167]**

Credit: 0.50

Prerequisites: Rising senior status

Description: There are two options available for this course: one that involves in-class only experiences and another that involves field trips.

In-Class Format: The purpose of this course is to help the students understand the manner in which the Catholic Church relates to non-Catholic Christians as well as to other religions of the world. The course is intended to help students to recognize the ways in which important spiritual truths can also be found in non-Catholic Christian churches and ecclesial communities as well as in non-Christian religions.

Field Trip Format Description: The purpose of this course is to augment classroom learning with immersion & experiential learning through visits to religious sites and direct dialogue with members of different religions throughout our own communities. Combining traditional classroom study with experiential site visits will help the students understand the manner in which the Catholic Church relates to non-Catholic Christians as well as to other religions of the world. The course is intended to help students recognize the ways in which important spiritual truths can also be found in non-Catholic Christian churches and ecclesial communities as well as in non-Christian religions. This section is limited to 13 students.

## **SOCIAL STUDIES DEPARTMENT [500]**

## **RHETORIC AND CIVICS [519]**

Credit: 0.50

Prerequisites: Incoming freshman or transfer status.

Description: Rhetoric and Civics is a semester course designed to foster critical thinking. The course will focus on introducing students to the prevalence of argument in modern society (i.e. relationships, politics, law, media), the argument process, and the creations of argument. The course will introduce students to types of evidence, reasoning devices, research skills, organizational skills, and critical analysis. The course will use diverse methods to practice and develop these skills including argumentative essays, presentations, and debates.

## **GOVERNMENT [538]**

Credit: 0.50

Prerequisites: Rising senior status

Description: This one semester course in Government introduces students to the structure and function of the American governmental system along with the nature of American politics. An investigation of the Constitution and its development opens the way to focus on how various governmental officials achieve and wield power. Campaigning and elections, policy making, and the media's role in politics are given explicit attention. How the three branches of the national government work together through balance of power and the checks and balances system, how the Congress makes law, the President executes law and the courts review law are all investigated thoroughly to enlighten students about the American government's responsibility to citizens and their own social and civic responsibility.

## **GOVERNMENT CLOSE UP TRIP TO DC [539]**

Credit: 0.50

Prerequisites: Rising senior status

Description: This three week accelerated Summer Government course introduces students to the structure and function of the American governmental system along with the nature of American politics. During Week One and Two students meet in the classroom at Jesuit and investigate the Constitution, how the three branches of the national government operate and work together, campaigning, elections, and policy making. Week Three students travel to Washington DC as members of the Close Up flagship High School Program. Visit [www.closeup.org](http://www.closeup.org) to become more familiar with this one-of-a-kind opportunity for students to experience their government in action. This accelerated Summer Session course requires students to integrate and apply knowledge gained from the synthesis of text readings, ancillary readings, class and travel experiences and independent initiative. Additional tuition and fees required.

Number of students is limited.

## **ECONOMICS [548]**

Credit: 0.50

Prerequisites: Rising senior status

Description: This one semester course is taken in the senior year. Through lecture, discussion, research project, evaluative activities and diagnostics, and student presentations, students demonstrate mastery of essential economic concepts such as the

operation of markets, national income, and money and banking. Special consideration is given to an extension of socio-economic issues and social justice issues.

## **PSYCHOLOGY [571]**

Credit: 0.50

Prerequisites: Rising senior status

Description: This one semester elective course will teach students to apply approaches such as the cognitive, behavioral, biological, psychoanalytic, and humanistic theories to examine people and their responses to the world. Students will also examine topics such as motivation, emotion, theories of learning, definitions of abnormality, psychological disorders, and approaches to treatment. Additional areas to be covered include social psychology, group dynamics, conformity, theories of personality, and career opportunities in the field of psychology.

# **MATHEMATICS DEPARTMENT [600]**

## **PRECALCULUS [668]**

Credit: No Credit is awarded – this is a preparatory bridge for AP AB Calculus.

Prerequisites: Rising seniors with at least 90% in Honors Algebra 2 or 95% in Algebra 2 and teacher recommendation.

Description: The main objective of this accelerated course is to bridge the gap between Honors Algebra II and AP AB Calculus. The course emphasizes the analysis of algebraic, exponential, logarithmic, and trigonometric functions and their application. The course also prepares students for advanced reasoning and problem solving required in the AP Calculus course. Mastery of course material (determined by teacher and final assessment score) places the student in AP AB Calculus for their senior year.

# **SCIENCE DEPARTMENT [700]**

## **ASTRONOMY [742]**

Credit: .50

Prerequisites: Completion of Physics

The course will be 3 weeks in the classroom at Jesuit with optional nighttime labs. The course will cover: Celestial Mechanics in our solar system (how and why planetary bodies move the way they do/ Keplers Laws, etc.). Optics (How telescopes work). Waves (How data is gathered through the use of radiation and wave propagation). A survey of stars and galaxies: a look at the life and death cycles of stars/ black holes/ neutron stars/ pulsars, etc. Basic ideas of cosmology and the life of the universe.

*Summer only course*

## **MICROBIOLOGY**

Credit: .50

Prerequisites: Completion of Biology and Chemistry (Class of 2020 and 2021)

This course is a hands on laboratory-based class that covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. The course is taught through a case study of a patient who is about to face surgery and the microbiological tests he undergoes to prepare.

*Summer only course*

## **MARINE BIOLOGY [752]**

Credit: 0.50

Prerequisites: Students must have successfully completed regular or honors chemistry before participating in this course.

Description: In partnership with peers in Hawaii, students will engage in discussions about research techniques and validity, human impacts on coral reefs and marine ecosystems, fish identification and anatomy, and the application of science. This course is hands-on and will include research projects, video diaries, blog submissions, and group activities. It will incorporate content and understandings from previous science experiences. This summer-only course will take place on the Jesuit Dallas campus and Big Island, Hawaii. Additional tuition and fees required.

Number of students is limited.

# **COMPUTER SCIENCE DEPARTMENT [800]**

## **PROGRAMMING 2 [843]**

Credit: 0.50

Prerequisites: Introduction to Programming

Description: This course affords students an opportunity to use skills acquired in Introduction to Programming to create an interactive application. Graphical User Interface (GUI) development is combined with principles of object oriented design in order to develop programmatic solutions to problems. The course culminates with a project where students design and develop a functioning application.

# **FINE ARTS DEPARTMENT [900]**

## **CERAMICS - THROWING [921]**

Credit: 0.50

Description: This course focuses on pottery making by mainly use of the potter's wheel. Potters, sculptors, hand builders and all handmade ceramic artisans learn these basic techniques to work with clay. It includes pinch, coil, slab, extrusions, sculptural as well as wheel throwing and trimming methods to working with clay. Basic surface decoration, glazing and firing techniques and kiln operation are covered. Focus is to experience different techniques and to become competent and knowledgeable of different ways to work with clay; competence comes with practice.

### **ART SURVEY [931]**

Credit: 0.50

Description: Students in this summer-only course will discover the visual elements of art through in-class exercises and field trips to local professional arts establishments. The course culminates in a comprehensive project in which students imitate the artistic exercises of advertising, architecture, theater, or gallery management.

### **MUSIC APPRECIATION [951]**

Credit: 0.50

Prerequisites: Sophomore, Junior, or Senior Status. Director Approval.

Description: This is a basic survey of music including listening skills and history. Styles of music to be covered include Baroque, Classical, Romantic and Post-Romantic.