

# *Great River School 2009-2010 Course Guide ~ Semester 2*

## *A3 (11<sup>th</sup> & 12<sup>th</sup> Grade)*

### **\*\*\*CORE CLASSES\*\*\***

**(Students will be placed into core classes, as they are required)**

#### **Mathematics – Michael Flood**

**IB Mathematics SL I:** During the first year of Mathematics SL, we will start with patterns, studying sequences and series. We then work on modeling real world situations with functions, looking at linear, quadratic, power, logarithmic, and trigonometric functions and the types of situations they model. We revisit matrix algebra and close out the year studying probability.

**IB Mathematics SL II:** During the second year of Mathematics SL, we look deeper into statistics, study 2-D and 3-d vectors, and begin a study of calculus, learning about integration and derivation.

**IB Math Studies:** This Two year IB course utilizes the basic concepts and connections present in Algebra and Geometry and takes them a step further. In addition to reviewing some of the more interesting points of these two courses, Math Studies delves into Probability and Statistics, Trigonometry, and eventually the beginnings of Calculus. This course is not as intense as the SL course, but still allows for clarity of some difficult concepts.

#### **Science – Sheila Sullivan**

**IB Environmental Systems and Society I & II:** This is a two-year SL course that is interdisciplinary between science and social studies. The first year of the course focuses primarily on the biological and cultural dynamics of environmental systems. The second year is focused primarily on the physical science and political aspects of environmental systems. This division is not strict, but reflects some general trends in the material. This course is a new offering in the IB curriculum with the first teaching beginning September 2008 and first examinations being held in May 2010.

#### **Social Studies – Melanie Nafziger-Peterson and Nelson Inz**

**IB Twentieth Century World History HL:** Twentieth Century World History is an engaging, challenging history course that involves the investigation of historical events as well as the development of historical inquiry skills such as the gathering, sorting and evaluation of historical evidence, recognizing and understanding historical processes and their relationships to human experience, and organizing and expressing historical ideas and information.

Our major areas of focus in this world history course are the Arab-Israeli conflict from 1945-1979; the evolution of democratic states, and their challenges and responses; and the origins and development of authoritarian and single party states in the Twentieth Century. Our investigation of the Arab-Israeli conflict will include consideration of the role of outside powers in the conflict either as promoters of tension or mediators in attempts to lessen tensions in the region, the study of the political, economic and social issues behind the dispute and the specific causes and consequences of the military clashes, and the nature and extent of social and economic developments within the disputed territory of Palestine/Israel and their impact on the populations.

Guide: Melanie

**IB History of Americas HL:** In History of the Americas we will investigate the history of North and South America, from European conquest to the civil rights movements of the mid-Twentieth Century. We will learn how to ‘create’ history as a dynamic story of complex individuals and will regularly consider multiple perspectives and points of view. Students will analyze historical events and their political, social and cultural effects on society and will hone their critical thinking and analytical skills through daily readings and assignments, class discussions, essay writing, and group collaboration. Throughout the year we will experiment with how to formulate significant questions about the past; how to resolve conflicting interpretations; how to

recognize values and the part they play in shaping historical understanding; and how to draw conclusions from imperfect evidence. Some of the topics we will study include colonization, slavery in the Americas, wars of independence and revolution, evolution of new governments, the Mexican Revolution, Canadian history, the Great Depression around the world, United States foreign policy in Latin America, and an array of civil rights movements. We will learn in many ways both independently and in groups including using role plays, debates, art, student-led lessons, discussions, essay writing, tests, note taking, films, guest speakers, and field trips, when possible. Guide: Nelson

### **English – Andrea Christensen**

**IB English HL I:** This is a year long, college preparatory course that will attempt to provide parallels to the content presented in the IB History classes as much as possible. First semester will focus on novels that touch on the issues of colonialism and slavery, and may include titles such as *Their Eyes Were Watching God*, by Zora Neale Hurston and *Things Fall Apart*, by Chinua Achebe. Second semester will focus on how the history of the Americas connects with Shakespeare's *Othello*, selections from American poets such as Langston Hughes and Emily Dickenson, and may include Steinbeck's *Of Mice and Men*.

**IB English HL II:** This is a writing-intensive course that focuses on literature analysis. The course will start with world literature and end with a drama genre study. World literature studied includes "The House of the Spirits," "A Day in the Life of Ivan Denisovich," and "Houseboy." Drama studied includes, "Death of a Salesman," "The Iceman Cometh," "A Streetcar Named Desire," and "A Doll's House." Major assessments will include two prepared world literature papers and two timed essay exams on the genre study.

## **A3 (11<sup>th</sup> & 12<sup>th</sup> Grade) Electives**

### **\* \* FULL YEAR ELECTIVES \* \***

**IB Music:** Offers the opportunity to study music as an academic discipline. Over the course of a year (or two years), students will learn the essentials of theory and music history, and apply a specialized vocabulary to the analysis of music from around the world. Students will compose, complete listening, and analyze scores. Seniors planning to test in IB music in a single year should complete an online theory course during the summer. Information is available from Caroline. Guide: Caroline Miesle

**IB Visual Art:** IB Visual Art is an advanced course in which the process is equal to the product. Emphasis is placed on the history, research, and production of studio work. We will explore sculpture, drawing, painting, ceramics, photography and mixed media work. The courses link the core elements of art concepts, criticism and analysis, acquisition of technical skills, and the relationship of art to social, cultural and historical context. Our focus will be on the development and in-depth use of the sketchbook. You will maintain a research workbook detailing your ideas, observations, interests, plans, problems, successes and critiques. Guide: Sam O'Brien

**IB Spanish SL I & II:** The Spanish IB course is designed for students with aspirations above and beyond the typical student. They will accomplish a higher competence level in foreign language. Also, they will have the tremendous opportunity to explore a different culture throughout the International Spanish speaking community. Language, as part of culture, is continually changing and plays an essential role in the community. Through the learning process of this course, the student will be aware of these changes and will know how to react in different situations. Guide: Enrique Garita

**Intermediate Spanish:** This course aims to develop and expand proficiency in four areas of Spanish language skills: speaking, listening, reading and writing, through a review of grammar, mastering new and more complex grammar concepts and tenses, vocabulary-building exercises, culturally relevant dialogues, and readings regarding Hispanic civilization. The emphasis of the course is on communication, and you will have ample opportunities to interact in Spanish on a variety of topics. Guide: Enrique Garita

**Chemistry:** With the astounding variety of life we have around us, it is amazing to know that only 92 naturally occurring elements make up all the substances of our world. Chemistry is about studying these elements, their combinations and what happens when they interact. Unraveling mysteries, predicting outcomes, creating solutions and solving puzzles are all part of the study of chemistry. Guide: Sheila Sullivan

**Concert Choir:** Is open to women in grades 10-12 and men with changed voices in all grades upon completion of an application. Anyone who enjoys singing and would like to learn or improve music skills in an ensemble setting is welcome, regardless of level or ability. The majority of class time will be spent learning a wide variety of music and preparing for concerts, but students will also have the opportunity to learn and perform a solo/small ensemble piece each semester. Guide: Caroline Miesle

## \* \* SEMESTER 2 ELECTIVES \* \*

**Shakespearean Literature:** The course will cover the history of Elizabethan theater and Shakespeare's world, as well as a deep analysis of several important works. Written work will include research, literary and character analysis in papers four to five pages in length. Memorization and scene work will round out the course and your grade! Guide: Mary Gantenbein

**Theater of Social Change:** This class explores theater as an essential social art, a tool for social change, a channel for personal transformation, and a means of artistic liberation. It explores the connection between the performer's life (marked by gender, ethnicity, age, and nationality...etc) and the larger community. Readings and exercises in the nature and function of performance. This class draws heavily from "Theater for Social Change," by Augusto Boal. Original group-constructed performed final project. Guide: Nelson Inz

**MCA Math Prep:** Need help prepping/passing the 11th grade MCA mathematics test? This is the class for you. I will help you gain competency in the content areas you need to pass. Passing the MCA test is a graduation requirement and the goal of this class is to for every student who takes it to pass on the next try. General topics will be covered, but instruction is individualized. Guide: Zach Schlutz

**Scientific Discoveries and Biographies:** *"If I have seen further it is only by standing on the shoulders of giants."* Sir Isaac Newton

No one acts alone in great scientific discovery but rather, one builds on the ideas of others. In this semester long course students will hear stories of the lives of scientists and the cultural context in which they began their scientific careers. As a micro teaching venture, students will investigate the path of a scientific discovery and that of the individuals involved. Students will also work in small groups to come up with an original invention of their own. Guide: Shelia Sullivan

**Advanced Recording Arts:** Advanced Recording Arts is a hand-on class designed to give students a recording studio experience. We will study important groundbreaking recordings and many related topics including the history of recording, acoustics, and microphone choice and placement. Students will experience every part of the recording process from choosing the music, arranging, rehearsing, planning the recording, engineering, and mixing. The class will also be responsible for recording school events as needed. The goal of the class is to create a high-quality CD of their music. Guide: Zack Scott

**Musicianship II:** Musicianship II students continue to study and develop the skills introduced in Musicianship I including ear training, arranging, practice techniques, effective rehearsal strategies, performance, and music theory (scales, inversions, chord voicing, notation). Students will also write original compositions in any style for any instruments. Students are welcome to play any of the available instruments (guitar, bass, keyboards, drums) or may bring their own. All students are encouraged to participate in performances throughout the semester (i.e. Coffee House, Spring Concert). Guide: Zack Scott

**Sculpture:** In this class, we'll make things that live in three dimensions. This will include how to draw three-dimensional forms, how to use wire, plaster, metal, wood, and clay to make the forms that your imagination dreams up. We'll study artists that use sculpture to express their ideas, and we'll make at least one permanent installation at the school to beautify the campus of Great River. There will be two research assignments; a 3-5 page paper on an artist, and a presentation on a style of art - come prepared and excited to learn about 3d art and expression! Guide: Sam O'Brien

**Theory of Knowledge I (Required in junior year for IB Diploma):** This is an introductory course that is based in questions of philosophy and epistemology. Course readings and discussions encourage critical thinking about knowledge itself to help students make sense of what they encounter in the world. Students will attempt to answer questions about the nature of knowers, areas of knowledge, and ways of knowing. The class centers on seminar discussion and written reflection in addition to an oral assessment. This class is open to all high school students. Guide: Andrea Christensen

**Health and Fitness:** In this health class we will cover a variety of topics relevant to the students' lives. We will hold group discussions, lectures, and provide time for individual work, which will promote personal growth and development. We will build on health topics by using the media, statistics, Internet, and guest speakers, and piggyback this with the students' firsthand knowledge and experiences. We will also develop a Personal Fitness Plan so the students can track and monitor their progress. 75% of the class time will be designated to our health topics, and the other 25% will be the real life application of these health and fitness topics. Here we try to develop lifetime activities and habits to help the students determine what works best for them on an individual basis. With limited space available we will be utilizing our surrounding areas by going on health walks, playing games outside, and using health promoting videos such as Pilates and Tae Bo. The main focus of this class is to engage the students and set them on the path to living a healthy lifestyle. Guide: Aaron Shackle

**Idea Lab:** Bring your ideas to life. In the Idea Lab, you will work with your hands and your mind, learning to take a dream and build the reality. Part design, part engineering, part construction, part presentation, you'll work in a variety of mediums to explore design, engineering, and production. For interviewed and accepted teacher assistants only at the A3 level. Guide: Michael Flood

**Macintosh Service/Technology:** The Macintosh Service Occupation is a one-semester class familiarizing students with software and hardware associated with Macintosh computers in general, and Great River School's computer system. The Occupation will include a unit on Mac OS X and the software aspect of Macintosh as well as a piece on hardware and the different terms used for servicing and replacing parts. The goal of the occupation is to prepare students for 2 certification tests: one on hardware and the other on software. Once both of these tests have been passed, the student will receive an embossed Apple Certified Macintosh Technician certificate in the mail, gain access to Apple Service Source full of service guides and technician resources and be half way to the certification level required to be a technician or other repair assistant at the Apple Store as well as have the ability to take apart or service any Apple product without voiding the warranty. Guide: Kate Diehn

**News & Yearbook:** This course will focus on documenting the year at Great River through a newspaper or online journal and a yearbook. Emphasis will be on both design/layout and writing. Students will develop a vision of what they want in a newspaper and yearbook, work out a plan to accomplish that vision, and execute it. Guide: Kate Diehn

**IB Writing Support:** This course is intended to be a teacher-facilitated support hour for those students struggling with IB writing issues. It is centered on English, but support for History writing will also be offered. This is a chance for students to work on their writing projects in the presence of an IB writing instructor who can help to clarify expectations and build writing skills on an individual basis. The course involves a daily check-in followed by structured work time. This course does not involve assignments or a letter grade—just SUPPORT. Guide: Andrea Christensen