# **Summer 2014 MES Pre-requisite Descriptions**

These are undergraduate courses offered at Evergreen this summer that will count toward our pre-requisite requirements. All are worth four credits. Course descriptions and times are subject to change. Please go to <a href="http://www.evergreen.edu/catalog/2013-14/summer.htm">http://www.evergreen.edu/catalog/2013-14/summer.htm</a> for more information.

### **STATISTICS**

**Statistics 1 -- Alvin Josephy:** The goal of this class will be to involve the student in exploring how Statistics is used to explain natural phenomena, promote public policy, and tell us things about the world that we can never know without it. Offered 6-10p Tue/Thu (July 29 – August 28).

Statistics and Research Design, Introduction -- Ralph Murphy: This class covers key statistical concepts at the conceptual and computational level with an emphasis on how statistics is used in research in natural and social sciences. Descriptive and inferential statistical tests are covered including scales of data, measures of central tendency, normal distributions, probability, chi square, correlation and linear regression, tests of hypothesis, and Type I and Type II errors. Students will develop a clear understanding of introductory statistics and the ability to correctly interpret findings in journals, newspapers, and books. Offered 6-10p Mon/Wed (Jun. 24 - Jul. 24)

Statistics for Social Sciences -- Wenhong Wang: This class will put statistics into context. We will cover basic sociological concepts and theories and introduce students to basic statistics. Focus will be placed on real life scenarios and sense-making practices. Besides workshops and lectures, we will conduct social experiments and field work to get our feet wet in social scientific research. Offered 9a-12:30p Tue/Thu (July 29 – August 28).

#### SOCIAL SCIENCE

Climate Change and Sustainability in the Fiji Islands (MES course – please look online)

**Energy Policy -- Laurance Geri:** Cheap energy from fossil fuels has been essential to the US political economy and social system. But concern about climate change is forcing a global rethinking of energy systems and the public policies governing the energy sector. This course will provide an introduction to the many dimensions of energy, including sources, technologies, energy markets, and the economic, social, national security and environmental implications of energy use. We will examine how public policy is crafted in the energy sector in the U.S., other countries, and at the global level, with a focus on policies that hasten the adoption of renewable energy. Offered Jun 27-29, Jul 12-13 & 25, 6-10p Fri, 8:30-4:30 Sat/Sun.

## Global Water (MES course – please look online)

Human Geography: Cultural Interactions with the Physical Landscape – Michael Vavrus: The course encompasses human, political, cultural, social, and economic aspects of geography. Central guiding questions we will be addressing in this course: How have human beings transformed the planet Earth? What are the changing relations humans have with the planet? How have map makers represented (or misrepresented) the Earth's surface and the ways in which people actually live? How have human societies adapted themselves to the natural environment? How have relations of power affected people's use of the environment? Concepts include locations of people; the difference in places of human habitats; relationships within places of human habitats; patterns and effects of movement of humans, products, and information; and how regions form and change. Offered on campus June 26, July 24 & 31, & Aug 21 and online July 3, 10, & 17, Aug 7, 14, & 28.

Immigration Law and History of the U.S. Southern Border -- Arleen Sandifer: Most people do not realize that the notion of the United States as a "white" majority nation is largely a construction of law. In this course, we examine how our understanding of immigration history and law changes if we shift our view from Ellis Island in New York's harbor to the U.S. southern border. We'll examine the current landscape of immigration law and policy and restrictionist and immigrant-rights movements. We'll critically analyze how concepts of race are embedded in immigration law and policy and how those embedded concepts drive the current debates on immigration reform. Students will build some basic legal skills through reading and researching important cases and laws. We'll look at the historical context within which immigration issues relating to the southern U.S. border have arisen and continue to be defined. We will examine current controversies about immigration, immigrant workers, labor movements, and the varied ways communities respond to the most recent immigration boom. Offered Tue - Thu 5:30 pm - 8 pm, June 24 – July 24.

Research Design and Qualitative Methods (MES course, please look online)

# **NATURAL SCIENCE**

The Art and Science of Entomology -- Emilie Bess: From parasites to pollinators, insects have shaped human society from the beginning. This course explores our intimate relationships with the bugs that we rely on and the bugs that we fear, the central role that insects play in our biosphere, and the unique adaptations that have led to their unparalleled diversity. This class introduces students to insect diversity and ecology, field techniques, and specimen preservation. Each full-day session includes outdoor field work. We learn to draw insects, emphasizing the importance of careful observation of morphology and behavior as learning tools. We also discuss the influence of insects on pop culture and modern society. Graphic arts, such as graphic story telling (e.g. comics), design of insect costumes, and other visual learning tools are integrated into student projects. Offered Sat, 10a – 6p (August 2 – August 30).