

## Fall 2015 ISEM 301 Great Issues Seminars – Synopsis/Descriptions

### **Sections 1 and 2 - Feeding 9 Billion People by 2050** - Larry Makus (College of Agricultural and Life Sciences)

Much has been written about the 9 billion people issue, but the primary focus has been on the capability of agriculture to produce sufficient food to feed that number. Although agricultural productivity is as important component of addressing this issue, there are other relevant issues that need to be addressed that extend well beyond the productive capacity and methods used by the agricultural sector. These other issues include:

1. Economics related to income distribution and the necessary capital that is needed to enhance productive capacity and infrastructure development in key world regions.
2. Political environments that enhance conflict and instability in food production.
3. Government policies that discourage domestic production, restrict trade, and create other perverse incentives.
4. Sociological issues impacting the cultural willingness to adopt change.
5. Environmental impacts and other negative externalities resulting from of a planet supporting 9 billion people.

All of these factors are connected to the feeding 9 billion dilemma, and none have easy answers. The purpose of this course is to provide students with a broader understanding of this issue, develop the realization that we are facing a global challenge that impacts each of us as a global citizen, and recognize that effective solutions must be comprehensive and require a multidisciplinary approach. The initial part of the course (first two weeks) will focus on a basic understanding of the current extent of world hunger and malnutrition, and then on the productive capacity of agricultural to expand production as population increases. Both are extensive and broad issues, but a basic understanding of the challenge is required to appreciate and recognize this problem. The next five weeks will focus on the issues listed above to develop a better appreciation of the complexity of this global challenge, and suggest potential solutions. No solutions are flawless, and all are controversial. The intent is to provide a critical examination of the issue and alternative solutions, and develop an appreciation of the trade-offs involved. The final class period will involve looking at our role as global citizens to better understand and contribute to a positive outcome. “Why does it matter to me” is the final question that needs to be addressed.

### **Sections 3, 4 and 5 (Honors) - “Future of Agriculture: Promise or Peril” – Erik Anderson** (College of Agricultural and Life Sciences)

Modern agriculture has achieved remarkable gains in productivity and efficiency through the application of science and technology. But not all agricultural developments have been perceived favorably by the public. Some agricultural practices have been linked to environmental problems while others have raised concerns about possible harmful effects on human health. Future agricultural systems hold great promise for meeting global needs for food, fiber, and fuel. The innovations also bring additional potential threats to the world. This seminar will explore key advances in agriculture and will offer a critical examination of the associated economic, ecological, ethical, and human health challenges that may result from emerging agricultural systems. Topics will include the globalization of food and fiber, the use of genetically

modified organisms, environmental impacts, and human health effects of agriculture and food systems.

### **Section 6 – “Building Literacy Communities” – Margaret Vaughn (College of Education)**

In this seminar, students will engage in discussions of how to build literacy communities, analyze depictions of people of non-dominant cultures/ gender/ racial/ socioeconomic levels in print and non-print media including children’s picture books and young adult novels, and engage in service learning literacy projects in the community. Students will examine and reflect upon their own beliefs/perceptions regarding people from non-dominant cultures, learn tools by which to use children’s picture books and young adult novels as a means to engage in building literacy communities in schools, with peers, and in the communities so as to be culturally responsive and aware of the many underrepresented groups that makes up such a large percentage of our diverse world.

### **Section 7 Teaching to Learn: Money Skills – Karin Hatheway-Dial and Karen Richel (College of Business and Economics, and the College of Agricultural and Life Sciences)**

Society is strengthened when its citizens are financially literate. Understanding personal bookkeeping, budgeting and financial strategy can bolster society’s citizens on both a personal and professional level. This class will help direct a face-to-face simulation called “That’s Life” by playing the vendor part of the live simulation and selling day to day goods and services to participants. The participants are inmates from a local correctional facility. Both students and volunteers who have participated in the “That’s Life” Simulation often say that the simulation has left an indelible mark for life. The main objective of this course is for students to learn and teach personal budgeting to others (adult and juvenile offenders). Students through learning to take ownership of their own personal finances will be able relate their own financial circumstances to other cultural populations.

### **Section 8 – “Inspiring Lives of Scientists” – George Newcombe (College of Natural Resources)**

The life stories of great scientists and scholars are inspiring in part because their remarkable insights are often rejected or ignored when first proposed. Their life stories are about persistence and courage in the face of opposition, as much as they are about particular discoveries. Three of the six subjects of this course were central to the development of evolutionary theory (Charles Darwin), genetics (Gregor Mendel), and microbiology and medicine (Louis Pasteur) in the 19<sup>th</sup> century. Two (Alice Kober and Michael Ventris) were scholars who, by 1952, had largely deciphered Linear B, an unknown script of an unknown language discovered earlier in the century in Crete. The last scientist and scholar whom we will discuss is Barbara McClintock, the winner of the Nobel Prize in Physiology or Medicine in 1983 for her work in genetics. Faced with considerable antagonism each of these six remarkable individuals found their way.

### **Section 9 - “Politics and Economic Policy” – Jon Miller (College of Business and Economics)**

Many of the great issues of the day involve economics and politics, e.g., the deficit and the debt, taxes, equality and inequality, entitlements, immigration, protectionism, and money and financial markets, among many others. In this course, we examine the disciplinary interplay of

economics and politics in the creation and implementation of economic policy. We discuss the views of stylized Liberals and Conservatives, learn about the political and economic components of great economic policy issues, and try to identify where our own political views lie on a Liberal - Conservative continuum.

**Sections 10 and 11 – “Global Leadership Talent Needed” - Jan Rauk (College of Business and Economics)**

In this seminar we will explore today’s workplace “megatrends” that influence global market trends. In so doing, we will learn about different styles and types of Global Leadership, and why they are essential for success in business community today. As we look at global leadership, we will review the ten top behaviors that global leaders should possess including: cultural self-awareness, invite the unexpected, results through relationships, frame-shifting, expand ownership, develop future leaders, adapt and add value, core value/ flexibility, influence across boundaries, and third-way solutions. Students will be presented with multi-disciplinary perspective and be expected to attend “international” events sponsored and presented on campus.

**Section 14 – “Alcohol and Drug Prevention” – Brian Dulin and Paul Gathercoal (College of Education)**

This seminar will provide an overview of the history of alcohol related issues on college campuses and research leading up to prevention and intervention efforts on college campuses across the nation. We will review what programs and strategies are supported by research to reduce alcohol related harm among college students. Students will gain an understanding of the Peer Educator model and be trained to deliver brief educational workshops for college students designed to reduce alcohol related harm. Students who successfully complete this seminar will be invited to enroll in EDCI 402 *Practicum* (1 cr) the following semester, and practice teach educational workshops designed to reduce alcohol related harm across the University of Idaho campus and to interested external organizations.

**Sections 15, 16 and 17 – “Environments of Aging” – Minyoung Seo Ceruti (College of Art and Architecture)**

Long-term care organization in many countries is experiencing current and future trends of flexibility and adaptability, especially in relation to the quality of care to accommodate changing needs over time. The continuum of care seeks the search for ideal environments (e.g., social, physical, and organizational) that support age-related changes in the individual, maintain heterogeneity of older adults, and provide some low-cost care. Students will understand the increased need for flexibility and its implications for associated disciplines. Also students in this interdisciplinary course will be exploring innovations about the question, “when old and frail persons in our society have to be removed from where they want to reside until the end of their life, how you would create supportive environments for the most vulnerable people?”

**Section 18 – Discover, Invention and Society – Eric Aston** (College of Engineering)

Human history is punctuated with many and diverse technological advancements, as well as radically destructive events and eras, that helped to establish civilizations and catalyze change in societies. The class will consider the impacts of various inventions from an engineering and scientific perspective. Topics will include, but not be limited to, weapons and water (purification and delivery); farming, fermentation, and food processing; mining and metallurgy; machines, engines, and electricity; petroleum and “plastics,” drugs and surgeries; sand-to-semiconductors; writing media from stone to flexible screens; etc. Students will also contribute ideas for discussions on particular technologies and their impact on society. The common theme will be a multidisciplinary understanding of how technological developments spread and of the scientific reasons for why they were and/or are so formative to civilization.

**Section 20 – “Climate, Carbon and Forests” – Luigi Boschetti** (College of Natural Resources)

This multidisciplinary seminar will discuss the role of forests in the context of climate change policy. Through a combination of lectures, readings, discussions and student presentations, the students will be exposed to some of the main scientific, social and political issues involved in managing and preserving the forests of our planet. The definition of a carbon policy in response to a changing climate is likely to be among the greatest challenges of the next decades, requiring that all citizens - not only scientists and policy makers – engage critically in the public discourse.