CHAPMAN UNIVERSITY University Honors Program One University Drive Orange, CA 92866



COURSE SYLLABUS-

Course Number: HON 376

Course Title: Sustainability in an Unsustainably Structured World

Credits: 3

Instructor: Zoltan C. Mester, Ph. D.

Prerequisites: Formal acceptance in the University Honors Program or consent of the instructor and

Director of Honors

Honors students adding an Honors course beyond the cap and for non-Honors students adding an Honors course should check eligibility with Professor Peter

Carmichaels.

Catalog Description:

The students will be introduced to the fundamentals of sustainability including historic background, population trends, pollution control laws and regulations, carbon footprints, climate change impacts, ozone depletion, elements of life cycle assessments, and evaluating issues associated with fossil fuels and green energy/renewable energy sources. (Offered as needed) 3 credits.

Learning Outcomes

Course Learning Outcomes

By the end of the course the students will have a solid foundation of:

- 1. Sustainable development history, scientific, technological and societal attributes and impacts, to sharpen their ability to critically analyze and synthesize a broad range of issues;
- 2. Fundamental environmental laws;
- 3. Carbon footprints and water footprints;
- 4. Streamlined Life Cycle Assessments (SLCA);
- 5. Environmental challenges: Acid rain, climate change, ozone depletion, waste management issues

Honors Program Learning Outcomes:

Upon completing a course in the University Honors Program students will have:

- a. Obtained a starting point for integrative exploration of the development of cultures and intellectual achievements through a variety of disciplinary and interdisciplinary perspectives;
- b. Sharpened their ability to critically analyze and synthesize a broad range of knowledge through the study of primary texts and through engagement in active learning with fellow students, faculty, and texts (broadly understood);
- c. Understood how to apply more integrative and interdisciplinary forms of understanding in the advancement of knowledge and in addressing complex challenges shaping the world;
- d. Developed effective communication skills, specifically in the areas of written and oral exposition and analysis.
- e. Developed positive interpersonal skills for problem solving and conflict resolution through conducting team research projects.

Course Content

- Earth's population trend, income and wealth distributions, social mobility, diminishing resources;
- Overview of sustainable development: conservation, preservation, ecological footprint and biocapacity.
- Domestic and global waste management and sustainability policies, laws and regulations;
- Waste management in action; landfills, incineration, reuse, recycling and source reduction;
- Sustainability in action: efficiency, carbon and water footprints through case studies;
- Cradle-to-grave sustainable development: Streamlined Life Cycle Assessment fundamentals;
- Sustainable development and societal impact; acid rain, stratospheric ozone depletion, climate change, and carbon sequestration;

Required Text

Environmental Science-Toward a Sustainable Future; 12Ed (R. C. Wright and D. F. Boorse)

ISBN-1-:0-321-81153-4

ISBN-13: 978-0-321-81153-0

Merchants of Doubt (Naomi Oreskes, Erik M. Conway)

ISBN: 978-1-60819-394-3

Instructional Strategies

The course will be conducted in the Socratic spirit by asking questions and guiding the students for discovering the solutions. The course will include a lively combination of lectures using case studies including many from personal professional work, class discussions, and video presentations. It is critical that the students take notes because not all of the materials are included in the text books.

Methods of Evaluation

The final grades will be earned from:

Homework assignments (20%)

1 midterm exam (30%)

1 final **comprehensive** exam (50%)

Active class participation and positive attitude during the semester will bump up your final grade if otherwise you are on borderline.

Course Requirements

- 1. The students are encouraged to attend each class;
- 2. The students are strongly urged to take lecture notes because parts of the material will not be included in the text book:
- 3. During classes all non-course related electronic devices must be turned off;
- 4. During classes no food consumption is allowed;
- 5. Students are required to conduct themselves with respect and dignity toward each other and the instructor:
- 6. Students are encouraged to participate actively in the class by asking relevant questions and making reasoned comments related to the topics;
- 7. Class assignments are to be completed on time as required by the instructor. Late submittals will not be accepted.

Chapman University Students with Disabilities Policy

In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that might affect their ability to perform in this class are encouraged to contact the Office of Disability Services. If you will need to utilize your approved accommodations in this class, please follow the proper notification procedure for informing your professor(s). This notification process must occur more than a week before any accommodation can be utilized. Please contact Disability Services at (714) 516-4520 or (www.chapman.edu/students/student-health-services/disability-services) if you have questions regarding this procedure, or for information and to make an appointment to discuss and/or request potential accommodations based on documentation of your disability. Once formal approval of your need for an accommodation has been granted, you are encouraged to talk with your professor(s) about your accommodation options. The granting of any accommodation will not be retroactive and cannot jeopardize the academic standards or integrity of the course.

Chapman University's Academic Integrity Policy:

"Chapman University is a community of scholars that emphasizes the mutual responsibility of all members to seek knowledge honestly and in good faith. Students are responsible for doing their own work and academic dishonesty of any kind will be subject to sanction by the instructor/administrator and referral to the university Academic Integrity Committee, which may impose additional sanctions including expulsion. Please see the full description of Chapman University's policy on Academic Integrity at www.chapman.edu/academics/academicintegrity/index.aspx."

Chapman University's Equity and Diversity Policy

"Chapman University is committed to ensuring equality and valuing diversity. Students and professors are reminded to show respect at all times as outlined in Chapman's Harassment and Discrimination Policy. Please see the full description of this policy at http://www.chapman.edu/faculty-staff/human-resources/eoo.aspx. Any violations of this policy should be discussed with the professor, the dean of students and/or otherwise reported in accordance with this policy."

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