

GENERAL INFORMATION

Time and Place: Th 4-5:30 pm, York 3010
Instructor: Dr. Stephen Mayfield, 858-822-7743 smayfield@ucsd.edu
Office Hours: BONNER 2150C, M 4:00 pm or by appt

ALL CLASS INFORMATION WILL BE POSTED ON WEBCT

Check WebCT frequently for announcements, syllabus updates, and grades. Please check WebCT announcements before emailing the professor to see your question is already answered elsewhere.

CLASS CONTENT

The purpose of this course is to provide students with an interdisciplinary exposure to the new biology-based industry of biofuels. A series of outstanding speakers has been assembled to cover diverse topics related to biofuels.

WHAT IS EXPECTED OF YOU

Because this is a seminar course, in which the material is delivered exclusively through lectures, *attendance is mandatory*. Only one unexcused absence is permitted without affecting your grade. Attendance will be taken at each class meeting, you need to sign up BEFORE the lecture starts.

Listen attentively to the speakers and ask questions! This course provides you with exceptional access to leaders in the field of biofuels—use the opportunity to learn as much as you can!

COURSE PROJECT

You will select one figure (one main point) from a slide from one of the first 6 lectures. You must research the information presented in that figure and come up with a modification of the figure based on the information from your research. Perform a literature search to find *three primary publications* (research articles) that contain information supporting the figure or perhaps disputing the figure, and cite them appropriately. A news item from the web and wikipedia are NOT primary publications (although they often cite primary publications) and are not a suitable article, and a URL is not a citation.

A first draft of this project will be due during week 7 of the course, where you will be required to email the figure you have chosen, your 3 primary references and a short statement (2 or 3 sentences) on whether they agree or disagree with the original figure. I will give you feedback in week 8, and the final project will be submitted during week 9 and will include the modified slide, your 3 references and a written explanation of the modifications.

UCSD POLICY ON INTEGRITY OF SCHOLARSHIP

You are expected to read and abide by the UCSD POLICY ON INTEGRITY OF SCHOLARSHIP. Breach of policy will result in a failing grade.
<http://www-senate.ucsd.edu/manual/appendices/app2.htm>

GRADING POLICY

For an A: Perfect attendance (one unexcused absence allowed), completion of an initial draft and final project with suitable citations, and submission of a completed course survey at the final class, A-, B+, B, C, D, or F grades will be assigned for performance below that which is expected for an A, depending on the performance level.

Schedule:

Advanced Topics in Biofuels: Thursday, 4:00pm-5:30pm, York Hall 3010

Date	Topic	Speaker
September 29	Introduction and Algal Biofuels	Stephen Mayfield, Department of Molecular Biology, UCSD
October 6	The Politics and Policy of Bioenergy	Tim Zenk, VP Corporate Affairs Sapphire Energy
October 13	Cyanobacteria as Producers of Biofuels	Susan Golden Department of Molecular Biology, UCSD
October 20	Metabolic Engineering of green algae	Mike Burkart, Chemistry Department UCSD
October 27	Deep sequencing of algae for biofuel	Sabeeha Merchant Department of Biochemistry, UCLA
November 3	Jatropha Biofuels Commercialization	Eric Mathur SG Biofuels
November 10	Engineering Aspects of Algal Biofuels	Alex Aravanis VP of Engineering, Sapphire Energy
November 17	Aquatic Ecology of Algal Biofuels	Jon Shurin Department of Ecology, UCSD
November 24	No Class	Thanksgiving
December 1	Cellulosic Ethanol	Joel Krebs, Research Manager BP biofuels