GEOL 196: TOPICS – THE FUTURE OF FOOD  
Spring 2016 Syllabus

Class hours:  Tues 2-3:15 pm, Escalante 302 – Remainder of course material is online

Instructor:  Dr. Gigi Richard  
Professor of Geology, Dept. of Physical and Environmental Science

Office hours:  Mon 2-3p, Tue 3:30-4:30p, Wed 10a-12p, Th 11a-12p, Wubben 223C  
or at other times by appointment

Office/phone:  Wubben 223C / 970.248.1689
E-mail:  grichard@coloradomesa.edu

Course Description:
The Future of Food is an introductory-level science course that emphasizes the challenges facing food systems in the 21st century, and issues of sustainability for agriculture and other food production activities as well as the challenges posed by food insecurity and modern diets to human health and well-being.

Student learning objectives:
Upon completion of this course, students should be able to:
1. Analyze the land, biological, energy and water resources and climatic conditions in relation to food production systems.
2. Analyze how human food systems significantly alter earth’s ecosystems, landscapes, surface processes, atmosphere and waterways.
3. Evaluate scenarios for the future of food considering resilience in the context of climate change, human population growth and socio-economic, cultural and policy factors.

Essential Learning Goals:
This course is designed to help students meet the following objectives for essential learning at CMU:
– Demonstrate investigative and analytical thinking skills to solve problems.
– Select and use appropriate information or techniques in an academic project.

Class Format: The Future of Food is a blended or hybrid course, meaning that a portion of the course material is found online and we will only meet one day per week in person. You must be comfortable working in CMU’s course management system (CMS), which is called D2L. The weekly in-person class session is referred to as a “lab” session. During the lab session, you will be actively participating in exercises and activities, many of which will involve group work. Outside of class, you will be expected to read articles, watch videos and complete assignments to be prepared to actively participate in the weekly lab session.

The course developers have worked hard to make this the most effective and convenient educational experience possible. The Internet may still be a novel learning environment for you, but in one sense it is no different from a traditional college class: how much and how well you learn is ultimately up to you. You will succeed if you are diligent about keeping up with the class schedule and if you take advantage of opportunities to communicate with your instructor as well as with your fellow students.
**Expectation:** In general at CMU, you should expect to spend a minimum of THREE hours per week working on a course for every credit hour. That totals to NINE hours per week for a three-credit course. The *Future of Food* is a blended or hybrid course, so you will only have 75 minutes in class. That means, you should expect to spend a **minimum of seven hours and 45 minutes** outside of class per week. Your workload may be more or less depending on your study habits.

**Required Course Materials:**
The course relies heavily on readings provided online through our course website, and selected readings. The reading assignments for each module are listed in the course schedule below. Additional citations for further reading are also provided in each module.

**Assignments:**
This course will rely on a variety of methods to assess and evaluate student learning, including:

- **Formative Assessments** will be completed as you read the materials and will be due on Sunday before the weekly lab meeting.
- **Summative Assessments** will be completed in the weekly lab meeting and will be due at the following weekly lab meeting.
- **Capstone activity** will be introduced in the Orientation and at the end of the first section (Module 2).
- **Weekly Quizzes** will cover course material for the week's module and will be taken in D2L and due on Thursday after the weekly lab meeting.
- **Weekly Blogs** will enable you to think about what you have learned (see Course Blogs in Orientation) and will be due on Thursday after the weekly lab meeting.

It is important that your work be submitted in the proper format to the appropriate Drop Box or Discussion Forum and by the designated due date. We strongly advise that you not wait until the last minute to complete these assignments—give yourself time to ask questions, think things over, and chat with others. You’ll learn more, do better...and be happier!

**Due dates for all assignments are posted online. Please make sure you are aware of the weekly deadlines.**

**Grading:** The final grade will be calculated with the following components and weights:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Formative Assessments in Web Modules</td>
<td>15%</td>
</tr>
<tr>
<td>Summative Assessments in Web Modules (written and oral assignments, discussion)</td>
<td>25%</td>
</tr>
<tr>
<td>Weekly Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Capstone Activity</td>
<td>25%</td>
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<tr>
<td>Blogs</td>
<td>10%</td>
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<tr>
<td>Class Participation</td>
<td>10%</td>
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Letter grades will be assigned using the standard scale: A 90-100%; B 80-89%; C 70-79%; D 60-69%; F< 60%

**Bonus Credit:** There will be bonus credit of 2% for taking the two surveys at the beginning of the course (the Pre-GLE and SERC surveys) and the end of the course (the Post-GLE and SERC surveys - a total of four surveys). The surveys do take time and thought. To receive this credit, you must answer all questions, including providing thoughtful answers to the post course essay questions. There is no partial credit given; you must complete all four surveys. To receive this credit, you must also submit a signed consent letter in the course dropbox.

**Assessments:** Late assessments will not be accepted and you will receive a zero.
Weekly Quizzes: Quizzes will be available in D2L.

Late/Missed Class Policy

Class meetings and activities constitute an important part of the class - they are the forum in which you apply concepts from the web modules to relevant questions of water behavior, availability, quality, and societal impacts. Unless specifically approved by the instructors in advance, there will not be opportunities to make up missed in-class activities, discussions, or assignments.

How to succeed in this class: In this class you will take an active part in the learning process. In some ways, this will make the course more challenging. However, I hope this approach will make the course more fun and interesting. Because of the interactive nature of the course, attendance and participation will be necessary for you to completely achieve the course goals.

A successful student will do the following:

- Silence their cell phones when they enter class and put cell phones away.
- Attend class **promptly** and **regularly**. Changes to the schedule and/or assignments may be announced in class. It is your responsibility to keep informed.
- Be prepared, alert and ready to **take notes and participate in group activities** in class. Preparation includes reading the assigned material and completing the formative assessments.
- Speak up in class. Ask questions, make comments! Call me, email me, come to office hours or raise your hand in class!
- Respect your classmates and keep an open mind to what others have to say. Class discussions will be a more productive exchange of ideas if everyone feels comfortable speaking and knows that their classmates respect what they have to say.
- Complete the assigned reading before class and be prepared to demonstrate your understanding of the material or to present questions on the material that you don't understand.

D2L Course Site: Lecture materials, reading assignments and quizzes will be on D2L. To access D2L, go to MAVzone and login using your assigned username and password. Click on the D2L icon in the center of your MAVzone page. Once in D2L, select GEOL 196 from your **Select a course...** menu. If you have problems getting this far, please contact the CMU help desk (248-2111, helpdesk@coloradomesa.edu, or go to the computer lab in the library).
**Academic accommodation for students with disabilities:** In coordination with Educational Access Services, reasonable accommodations will be provided for qualified students with disabilities. Students must register with the EAS office to receive assistance. Please meet with the instructor the first week of class for information and/or contact Dana VandeBurgt, the Coordinator of Educational Access Services, directly by phone at 248-1801, or in person in Houston Hall, Suite 108.

**Academic Integrity:** Students will be held to a high standard of academic integrity and as such are expected to “do their own work” in accordance with the Colorado Mesa University Academic Policies Guide, [http://www.coloradomesa.edu/academics/policies.html](http://www.coloradomesa.edu/academics/policies.html), statement on Academic Integrity. Representing someone else’s work as your own, that is, without proper citation or acknowledgement is considered plagiarism. In other words, it is not acceptable to copy a classmate’s work, or anyone else’s work from the web, a book, magazine, newspaper, journal, etc. A report will be filed with the Vice President of Academic Affairs for any confirmed case of plagiarism.

**Tutorial Learning Center (TLC) in HH 113:** The TLC is a **FREE** academic service for all Colorado Mesa University students. Tutors are available on a walk-in basis for many courses. Do you have a quick question? Do you need homework clarification or feedback on a paper? Are you reviewing for a test? Help is available at the TLC!

At the main campus, go to Houston Hall 113 to meet with one of the friendly peer tutors. They are open on Monday through Thursday from 8am-6pm, Fridays from 8am-5pm and Sundays from 1pm-6pm. Tutoring at branch campuses and distance tutoring is also available. Check out the website for schedules and locations at [www.coloradomesa.edu/tutoring](http://www.coloradomesa.edu/tutoring) or call 248-1392 with any questions.

**Tomlinson Library:** CMU’s professional reference librarians support students with their research, including finding print and electronic resources, evaluating sources, and citing them. **24/7 chat support from librarians is available via the library homepage and/or you can email your questions to** [libref@coloradomesa.edu](mailto:libref@coloradomesa.edu).

The Reference Desk is on the first floor of Tomlinson Library. Reference Desk hours: Monday-Thursday 8am-9pm; Friday 8am-5pm; Saturday 10am-5pm; and Sunday 1pm-9pm. You can also reach a librarian by calling 970.248.1860.
Course Schedule:
Below you will find a summary of the course schedule and the summative assessment and capstone assignment due dates. A detailed schedule is available in the online course syllabus and deadlines are indicated in D2L. This course is sixteen weeks in length including spring break, with an orientation week preceding the official start of the course and your final presentations during finals week. There are 12 weeks of material each involving a lab meeting. Modules are one week long. Since much of your work will be done in groups, lab meeting attendance is mandatory. You will lose credit for any absence.

Weekly schedule and assignment deadlines:

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<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
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<tbody>
<tr>
<td>Formative Assessment DUE</td>
<td></td>
<td>Class “Lab” Meeting 2-3:15pm (Escalante 302)</td>
<td>Summative assessment from previous week DUE</td>
<td>Quizzes and Blogs DUE</td>
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### Week | Tuesday | Assignments Due
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1 | 1/19 Course orientation and overview |  
2 | 1/26 Module 1: Introduction: Food, Environment and Society |  
3 | 2/2 Module 2: Geographic and Historical Context | Module 1 Summative Assessment
4 | 2/9 Module 3: Nutrients | Module 2 Summative Assessment
5 | 2/16 Module 4: Food and Water | Module 3 Summative Assessment and Capstone Stage 1
6 | 2/23 Module 5: Agroecosystems | Module 4 Summative Assessment
7 | 3/1 Module 6: Food and Climate Change | Module 5 Summative Assessment
8 | 3/8 Capstone Stage 2 | Module 6 Summative Assessment Capstone Stage 2
9 | 3/15 – SPRING BREAK – NO CLASS |  
10 | 3/22 Module 7: Agroecosystems: Soils and a Systems Approach to Soil Quality |  
11 | 3/29 Module 8: Food Systems | Module 7 Summative Assessment
12 | 4/5 Module 9: Human-Environment Interactions | Module 8 Summative Assessment
13 | 4/12 Capstone Stage 3 | Module 9 Summative Assessment
14 | 4/19 Module 10: Agroecology: Pests and Insect and Pest Management | Capstone Stage 3
15 | 4/26 Module 11: Diet and Nutrition Issues | Module 10 Summative Assessment
16 | 5/3 Module 12: Capstone Project | Module 11 Summative Assessment Capstone Stage 4
17 | 5/10 Final Presentations 1-2:50 pm | Capstone Stage 5 – Final group presentations and individual assessments