

# BIOL 3040 PLANTS AND CIVILIZATION: FALL 2017

**INSTRUCTOR:** Richard Mueller; 797-2479; [richard.mueller@usu.edu](mailto:richard.mueller@usu.edu) (or through Canvas)

**OFFICE HOURS:** Mon. and Wed. 9-10 am; ESLC 245L (or drop in or by appt.)

**TIME & PLACE:** Tues. and Thurs. 10:30-11:45; ESLC 046

**TEXT:** Plants and Society 7th Ed., Levetin and McMahon. 2016 (Custom USU edition is cheaper option than full text commercial version; 6<sup>th</sup> Ed. also acceptable)

**CANVAS:** Grades, Lecture PowerPoints, Syllabus, Supplemental Readings, Quizzes, Videos, Review Session dates and other class resources are available.

**REQUIRED SUPPLEMENTAL READING:** Access through Canvas (see attached schedule for titles/dates)

## GRADING:

- Exams: I, II, III are 50 points each
- Final: 65 points; 50 points will be on the last section of the course and 15 points will be repeated questions from the first 3 exams to encourage review of earlier material
- Quizzes: 15 points (5 points each); online in Canvas available over 2 days; based on lectures and readings; due Sept. 14, Oct. 12, and Nov. 2
- Topic Paper: "Supermarket botany" or "Plants that heal" are 30 points. One is required! Due Oct. 26<sup>th</sup> and Nov. 21<sup>th</sup> respectively.
- Grade percentage based 260 possible points
- Bring a blue full-page Scantron and #2 pencil to each exam
- No make-up exams will be given unless prior arrangements are made. No extra credit assignments will be offered.

Percent score	Grade	Percent score	Grade
100-93	A	<80-77	C+
<93-90	A-	<77-73	C
<90-87	B+	<73-70	C-
<87-83	B	<70-67	D+
<83-80	B-	<67-60	D
		< 60	F

## PARTICIPATION AND PREPARATION:

- My expectation is that you will prepare for class by doing the assigned reading before class, attend lecture and take notes and fully participate in classroom discussions and other activities.

## COURSE OBJECTIVES:

- Demonstrate the nature of scientific knowledge and inquiry and how science functions as our most reliable method of understanding the physical and biological natural world
- Reinforce student's knowledge of basic biological facts and processes that are necessary for all citizens to be able to make informed decisions related to biological issues.
- Understand the uses and importance of plants and plant products to current and historical human societies.
- Encourage students to become lifelong learners of biology and biological issues that impact society in our ever more complex, crowded and interconnected world

## IDEA SURVEY AND LEARNING OBJECTIVES:

Most of you now have experience with the **IDEA Course Evaluation** system. **Please take time to carefully and thoughtfully participate!** The course objectives I have listed above are strongly tied to the "Essential" and "Important" Learning Objectives for the course in the IDEA evaluation instrument. The data and especially the written comments provide me with valuable information to evaluate this course and make improvements.

## COURSE POLICIES:

- **No make up exams** will be given unless prior arrangements are made.
- **No extra credit** assignments will be offered.
- Last day to **add** this class is Sept.18. Last day to **drop** this class without a "W" notation on the transcript is Sept. 18.
- Last day to change to **P/D+/D/F** or **withdraw** is Oct. 30.

## Academic Integrity - "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the higher level of conduct expected and required of all Utah State University students.

The Honor Pledge: To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge: "I pledge, on my honor, to conduct myself with the foremost level of academic integrity." A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

## Plagiarism

Plagiarism includes knowingly "representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials." The penalties for plagiarism are severe. They include warning or reprimand, grade adjustment, probation, suspension, expulsion, withholding of transcripts, denial or revocation of degrees, and referral to psychological counseling.

### **Sexual Harassment**

Sexual harassment is defined by the Affirmative Action/Equal Employment Opportunity Commission as any "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature." If you feel you are a victim of sexual harassment, you may talk to or file a complaint with the Affirmative Action/Equal Employment Opportunity Office located in Old Main, Room 161, or call the AA/EEO Office at 797-1266.

### **Students with Disabilities**

The Americans with Disabilities Act states: "Reasonable accommodation will be provided for all persons with disabilities in order to ensure equal participation within the program. If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center (797-2444), preferably during the first week of the course. Any request for special consideration relating to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative format, large print, audio, diskette, or Braille."

### **Withdrawal Policy and "I" Grade Policy**

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

WEEK	DAY	TOPIC	<i>Plants and Society</i> Reading (pages: 7 <sup>th</sup> =7 <sup>th</sup> Ed; USU=Special USU Ed.)	
1	T 8/29	Introduction	CH 1 & Supplemental: <i>Understanding Science</i>	
	H 8/31	Plant Cells and Chemistry	CH 2 & Appendix: Atoms, Molecules, Chemical Bonds	
2	T 9/5	The Plant Body	CH 3	
	H 9/7	Plant Physiology	CH 4	
3	T 9/12	The Flower	CH 5	
	H 9/14	Fruit, Seed& Seedling (Quiz 1 due)	CH 6	
4	T 9/19	Genetics I	CH 7 (pp. 7 <sup>th</sup> :99-108; USU:126-35)	
	H 9/21	<b>EXAM I</b>		
5	T 9/26	Genetics II	CH 7 (pp. 7 <sup>th</sup> :108-117; USU:135-144)	
	H 9/28	Plant Systematics and Evolution	CH 8 & Supplemental: <i>Science, Evolution and Creationism</i>	
6	T 10/3	Human Nutrition	CH 10	H
10/5		Origins of Agriculture	CH 11	
7	T 10/10	Plant Collection and Discovery	no reading	
	H 10/12	Ethnobotany (Quiz 2 due)	Supplemental: <i>Ethnobotany</i>	
8	T 10/17	<b>EXAM II</b>		
	H 10/19	<b>NO CLASS</b>		
9	T 10/24	Grasses	CH 12	
	H 10/26	Legumes and Starchy Staples	CH 13 & 14	
		<b>"Supermarket Botany" Assignment due!</b>		
10	T 10/31	Feeding a Hungry World	CH 15 & Supplemental: <i>Feeding a Hungry World</i>	
	H 11/2	Plant Conservation (Quiz 3 due)	Supplemental: <i>Conserving the World's Plants</i>	
11	T 11/7	Plants and the Environment	CH. 26 (pp. 7 <sup>th</sup> :469-474; USU:424-435) and Supplemental: <i>Climate Change: Evidence, Impacts and Choices</i>	
	H 11/9	Stimulating Beverages	CH 16	
12	T 11/14	<b>EXAM III</b>		
	H 11/16	Herbs and Spices	CH 17	
13	T 11/21	Beverages & Food from Fungi & Plants	CH 24	
		<b>"Plants that heal us" Assignment due!</b>		
	H 11/23	<b>NO CLASS</b> Eat turkey, baked <i>Ipomea batatas</i> and <i>Cucurbita pepo</i> pie!		
14	T 11/28	Cloth, Paper and Wood	CH 18	
	H 11/30	Medicinal Plants I	CH 19	
15	T 12/5	Medicinal Plants II and Poisonous Plants	CH 21 (pp. 7 <sup>th</sup> :365-76; USU 380-91)	
	T 12/7	Psychoactive Plants	CH 20	

**FINAL EXAM: Tuesday, Dec. 12, 11:30-1:20**

## Biol 3040: Plants and Civilization Topic Paper Assignments

**General guidelines:** The assignment should be typed, **double-spaced** and a minimum of **800 words**. A minimum of **3 references** should be given in the Literature Cited. These references should typically be reference books or textbooks or articles (magazine, newspaper or scholarly journal), **only one** may be solely web-based (meaning for example a blog or personal or business site). Please use the **MLA reference and citation format** for your references. Make sure that you cite the references as appropriate in the body of the paper. You may consult the MLA Manual or online resources such as the Purdue University Online Writing Lab site at: (<http://owl.english.purdue.edu/owl/resource/747/01/> )

The reference librarian for the life sciences, Betty Rozum, will be happy to assist you in identifying and locating appropriate resources. I also encourage you to make use of the *Science Writing Center*.

<https://writing.usu.edu/programs/sci-writing>

**Points will be deducted for not following these criteria and for spelling and grammatical errors. I will check each paper for plagiarism (see page 2 for definition), see the next page for the grading rubric I will use.**

**A printed copy of the assignment must be submitted on or before the due date. Electronic submissions will not be accepted and late papers will have points deducted.**

**YOU MUST COMPLETE ONE OF THE TOPIC PAPER ASSIGNMENTS!!!!**

**"Supermarket botany" (30 points, due Oct. 26)**

Cruise the aisles of your favorite produce section (or for a real adventure visit an ethnic food store) and choose an edible, fresh plant that piques your interest as your subject. Your essay should include: historical information on when and where it was first used and cultivated, where it is grown now, how it is prepared and used, and its nutritional value. Also include the scientific name (genus and species) and family name.

**Assignment 2: "Plants that heal us" (30 points, due Nov. 21)**

Choose a plant-based medicine or herbal medicine that you use or are interested in for your subject. Your essay should include: historical information on when and where it was first used and cultivated, where it is grown now, how it is prepared and used, and its medicinal or health-related properties (both beneficial and potentially harmful). Also include the scientific name (genus and species) and family name.

Biol 3040 Paper Scoring Rubric

Student: \_\_\_\_\_

Score: \_\_\_\_\_

Grading Scale: Superior 30-28 pts; V. Good 27-25 pts; Good 24-22 pts; Poor 21-0 pts

Late Penalty: One Day - 2 pts.; Two to Three Days - 3 pts.; Four to Seven Days - 4 pts.

Category	Superior	V. Good	Good	Poor
Introduction and Summary <b>5 Pts</b> _____	Clear statement explaining topic and why chosen; clear summary	Either introduction or summary lacking clarity or inadequately stated	Either introduction or summary inadequately and poorly stated	Both introduction and summary inadequately and poorly stated
Development and Content <b>10 Pts</b> _____	Topic well researched and developed	Topic is well researched, but one or two parts not well developed or explained	Topic is moderately researched, but several parts not well developed or explained	Topic is not well researched, many parts not well developed or explained
Organization <b>5 pts</b> _____	Very well organized with logical transitions and development	Well organized with mostly logical transitions and development	Lacking some organization with problematic transitions and development	Poor organization, lacking development and transitions
Citations and Literature Cited <b>5 pts</b> _____	Citations used throughout paper as needed to indicate sources; correct MLA format	Citations not always used to indicated sources; correct MLA format	Some citations lacking or incorrect MLA format; too few or incorrect citations	Lacking any citations and/or incorrect MLA format
Format and Mechanics <b>5pts</b> _____	Proper MLA format and length, no grammatical, spelling or punctuation errors	Proper MLA format and length, few grammatical, spelling or punctuation errors.	Improper MLA format and length, several grammatical, spelling or punctuation errors.	Improper MLA format, wrong length, many grammatical, spelling or punctuation errors.