BIO180 Plants and Civilization
Summer Session I 2007

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Course objectives: The objective of this course is to provide you with a working knowledge of, and appreciation for, the seminal role that plants have played in (1) the origins of the earliest sedentary human civilizations, (2) the subsequent cultural and economic development of Middle Eastern, East Asian and Western European, and New World cultures, and (3) the indispensable roles that plants play in contemporary societies.

We focus particularly on the uses of plants and their economic and, sometimes, philosophical and religious impacts on particular civilizations. We will also examine the development of botany as a scientific discipline, beginning with the Greeks, moving through the Medieval Western European and Arabic herbalists, and, farther into the future, on to contemporary plant biotechnology.

This course, therefore, melds together the latest in a number of different fields of inquiry including cultural and physical anthropology, archaeology, macroeconomics, biotechnology, botany and genetics, among others. I can also guarantee you will learn something of electromagnetism, particle physics, and witchcraft. In short, this course is designed to be synthetic. In particular it is a synthesis of human history as specifically interpreted through the 'eyes' of a botanist.

Office hours: I will be available to answer your questions each day after lecture. If you need to meet with me at another time we will arrange a meeting in my office at CMS or on campus. To arrange a meeting please email me.

Grading policy: Your grade will be based on the average of four equally weighted scores. There are two lecture exams. Exam I focuses on the basic biology of plants with emphasis on the angiosperms, or flowering plants. Exam II focuses on broad topics within that field of inquiry known as ethnobotany. An oral presentation and review paper round out the four requirements. The latter two assignments will be discussed in detail in class. Grades are determined on a strict 10-point (and + and -) scale; there is no 'curve'. Extra credit is unavailable under any circumstances. Only under extraordinary circumstances will you be allowed to make up an exam.

Schedule for Lecture Topics and Exams

MAY	17	Introduction to the land plants
MAY	21	NO CLASS THIS DAY
MAY	22	Angiosperms: Organs and tissues
MAY	23	Angiosperms: Floral Anatomy
MAY	24	Angiosperms: Water relations
MAY	29	Angiosperms: Photosynthesis
MAY	30	EXAM I: Begin Human Origins and Migrations
MAY	31	Mesopotamia
JUNE	4	Eastern China and Southeast Asia
JUNE	5	Central America
JUNE	6	South America
JUNE	7	Eastern North America
JUNE	11	The Doctrine of Signatures and 'plant superstitions'
JUNE	12	Herbals, herbalists and Medicine / The Witches' Garden
JUNE	13	Student Presentations
JUNE	14	Student Presentations
JUNE	18	Student Presentations and End-of-term paper due
JUNE	19	EXAM II @ 11AM

If you want to do well in this course:

1. Note that most of the exam material will be drawn from the lectures.
2. Do not miss class! Your grade will suffer disproportionately if you miss lectures.
3. Sit in the front of the lecture hall if possible. Studies demonstrate that students who sit nearer the instructor typically make better grades.
4. Develop a botany vocabulary. Pay special attention to bold-faced terms in the text and definitions for terms provided in lecture.
5. If you have a question, then ask it! I'll be happy to answer questions for you, or find the answer if I don't have one handy.
6. You will not do well in this course if you only study the night before the exam. Prepare early. Re-read your notes each evening after lecture. Read the text carefully. Re-writing your notes is a good learning exercise.
7. Study alone prior to the exam. Then you can join a study group of 3-5 persons for a few evenings if you wish. Quiz one another; read each other's notes. The night before the exam study as you think best, but get some rest.

There is no text for this course, but I highly recommend that you obtain a copy of the Pulitzer Prize winning book "*Guns, Germs and Steel*" by Jared Diamond [W.W. Norton and Co., New York, NY: ISBN 0-393-31755-2. Key themes introduced in the latter half of the course are lifted from this text (and many other, less famous, ethnobotanically-oriented works).

BIO180 End-of-term Review Paper

Here are easy to follow instructions. These instructions will be supplemented by handouts that should

Select one plant.
Select several plants indigenous to a particular region/culture.