# **Biology 1331 - Plants and Civilization**

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Subject/Discipline: Biology
School: St. Joseph's University

**Project Area:** 

Spring 1999

### **Brief course description**

We will start by studying some basic concepts of botany that we'll need to understand interactions between plants and people. We will then concentrate on plants and plant products used for food, fiber, medicine, and recreation, in the context of their consequences for human history. The goal for the service component of the course will be to extend our awareness of the importance of plants outside the classroom.

#### Office hours

My office is 225 in the Science Center, office hours are posted on the door. You can also make an appointment in class or by phone (660-1826) or email (ksnetsel). You can usually catch me in my office or labs (213, 206, and 217) for conferences or to make appointments.

#### Attendance and academic honesty

Attendance at all lectures, exams, and service sites is expected. Student behavior in this course must at all times be consistent with the Academic Honesty Policy as stated in the St. Joseph's University.

# Readings

The required textbook is <u>Plants and Society</u>, by Estelle Levetin and Karen McMahon, published by Wm. C. Brown. Reading assignments from the textbook will be supplemented with materials from various sources; these will be assigned during the semester and placed on reserved in the library. Lectures will be designed around the assumption that you have read the assigned pages before coming to class.

# Grading

There will be a total of 600 possible points for this course. There will be two lecture exams, each worth 100 points, and a 200 point final exam. Half of the final will be comprehensive, while the other half will cover the material studied since the second exam. Seven quizzes, each worth up to 10 points, will be given during the semester; the lowest two quiz grades will be dropped. No make-up quizzes or exams will be given, except by prior arrangement and at the discretion of the instructor. The service component of the course will count 150 points toward the final grade. You will earn 100 points by attending all service meetings (on-site and at SJU) and completing written assignments. The final 50 points will be a subjective assessment of the service component that will incorporate feedback from the supervisors at the service sites.

## More about the service component

You are expected to spend at least 3 hrs per week outside of class, on the service component of this course. This will include time at the service site and time spent in discussion groups. You will sign up for discussion groups in class. Format of the discussion groups will vary, and you will have choices. These sessions will be designed to help you work out your service projects, hear what other students are doing at their sites, and start thinking about ways to integrate what you are learning in formal lecture with your life outside school.

Date	Lecture Topics	Reading
19 January	Intro to class and service components, greenhouse tour	Chapter 1
21 January	Properties of life, plant cell function	Chapters 1,2
26 January	Plant cell structure	Chapter 2
28 January	Plant OrgansStems, Roots, Leaves	Chapter 3
2 February	Plant Metabolism	Chapter 4
4 February	Plant Metabolism and Transport	Chapter 4

9 February	Ecology	Chapter 25
11 February	Review and discussion	
16 February	Exam 1	
18 February	Sex in PlantsFlowers	Chapter 5
23 February	Fruits and seeds	Chapter 6
25 February	Plant Genetics	Chapter 7
2 March	Naming and Identifying Plants	Chapter 8
4 March	Plant Diversity	Chapter 9
9-11 March	Plants as FoodHuman Nutrition	Chapter 10
16 March	SPRING BREAK	
18 March	Origins of Agriculture	Chapter 11
23 March	Wheat and other grains	Chapter 12
25 March	Exam II	
30 March	Legumes, Potatoes, and other starchy food plants	Chapters 13, 14
1 April	The Green Revolution and Alternative Crops	Chapter 15
6 April	Beverages, Spices, and Herbs	Chapters 16, 17
8 April	Fibers, wood, pulp, and paper	Chapter 18
13April	Medicinal Plants	Chapter 19
20 April	Psychoactive Plants	Chapter 20

22 April	Poisonous Plants	Chapter 21
27 April	Fungi in the environment	Chapter 22
29 April	Fungi-friends and foes of humans	Chapters 23-24