

SYLLABUS

BIO 1020
Fall 2021

CONTACT INFORMATION

Instructor: Roy Vijesurier, Ph.D.
E-mail: rvijesurier@carthage.edu

OFFICE HOURS

I will be available to students before and after class.

COURSE DESCRIPTION

This course introduces the fundamentals of growth and development of plants with special reference to the history and social influence of cultivated plants. The course is designed to provide non-science majors with an introduction to plants and their environments with emphasis on the impact of plants on human society. In the first part of the course you will learn basic principles of plant structure and function. The second part of the course will explore the economic aspects and social implications of plants. The laboratory exercises will include observation of, and experimentation with, plants.

COURSE OBJECTIVES

1. To teach others about the importance of plants to humans.
2. To explain the connections between basic plant structures and function.
3. To explain how flowering plants reproduce, and how the products of plant reproduction are used by humans.
4. To develop fundamental skills common in plant research laboratories: correct use of a microscope, hypothesis generation, documenting observations, data analysis.
5. To gain stronger oral presentation and writing skills.

TEXTBOOK

Plants and Society: 8th Edition by Levetin and McMahon (McGraw-Hill)

LABORATORY MANUAL

BIO 1020: Plants and People Lab Manual – available from the bookstore

CREDIT HOURS

Lecture: 2 credit hours. Lab: 2 credit hours. Total: 4 credit hours

MEETING TIMES AND LOCATIONS

Lecture: Room DSC 263, 6:00-9:00 PM, Tuesday
Lab: Room DSC 263, 6:00-9:00 PM, Thursday

GRADES

The Final Grade is based on the total number of points earned from weekly quizzes, oral presentations, reading journal entries, lab exams, participation, attendance, and the final exam. The point total will be converted to percentage using 700 points as the denominator.

A: >90%	D: 60.0% – 69.9%
B: 80.0% – 89.9%	F: Less than 60%
C: 70.0% – 79.9%	

LABORATORY NOTEBOOK

Please obtain a 1 inch 3-ring binder for the lab manual. You must read each lab procedure carefully in preparation for each laboratory session. The lab notebook will also hold all your

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notes, drawings, raw data, finished graphs and tables, and photographs from the labs. Your lab notebook will be graded at mid-semester and at the end of the semester.

READING JOURNAL ASSIGNMENTS

Starting in Week 3 (9/21/21), your reading journal entries are to be turned in for evaluation. Write two thoughtful, well-constructed paragraphs for every assigned chapter: (1) Pick one topic in the chapter and write why it intrigued you. (2) Pick a different topic in the chapter and relate it to your life.

STUDENT PRESENTATIONS

One or two students per week will give a 15-minute powerpoint presentation based on a mini research project that will be assigned in class.

QUIZZES

There will be 12 quizzes during lecture (Tuesdays) and will contain mainly short answer questions.

ATTENDANCE

One (1) point will be awarded if the student is present for each lecture and lab up to a maximum of twenty-five (25) points.

Carthage College Learning Accessibility Services (LAS) Policy on Class Attendance as an Accommodation under the Americans with Disabilities Act of 1990, as amended, and Section 504 of the Rehabilitation Act of 1973:

At Carthage College, it is understood that class attendance is critical to mastery of knowledge and skills taught in a specific course. Carthage students are expected to follow the attendance policy established by the instructor in each class. However, when a student has a chronic condition with unpredictable or cyclical acute episodes, modification to an attendance policy may be appropriate as an accommodation. If a student believes they may need a class attendance accommodation because of issues related directly to a disability, the student must contact LAS at the beginning of the semester, or as soon as possible after the need for an accommodation arises, to discuss the matter of a possible accommodation.

Determination of eligibility for a disability-related class attendance accommodation is made on a case-by-case basis, through consultation with the course instructor and LAS. If necessary, the department or division chair or other appropriate administrator may be included in the discussion. In every case, proper relevant written documentation from an appropriate professional must be submitted to LAS before an accommodation request can be considered.

LEARNING ACCESSIBILITY SERVICES

Carthage College strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers due to your disability (including mental health, learning disorders and chronic medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, you also need to register with Diane Schowalter (dschowalter1@carthage.edu) in Learning Accessibility Services.

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PARTICIPATION

Participation is critical for success, particularly in the laboratory setting. If you must miss a lab session, please make arrangements in advance or as soon afterwards as possible. Up to twenty-five (25) points will be awarded for participation at the end of the term.

CHEATING

Will not be tolerated. This includes copying others' work on labs, examinations, presentations, and papers. Please see the Carthage College 'Student Community Code' for detailed information on Academic Dishonesty.

POINT DISTRIBUTION

The point distribution for this course is as follows:

Component	Type	Number	Points Each	Total Possible Points
Lecture	Weekly Quizzes	12	25	300
	Oral Presentation	1	50	50
	Reading Journal Entries	5	20	100
	Final Exam	1	100	100
Laboratory	Lab Exams	2	25	50
	Participation	1	25	25
	Attendance	1	25	25
Total				650

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LECTURE TOPIC AND TEST SCHEDULE			
WEEK	DATE	LECTURE TOPIC	CHAPTER
1	9/7	Plants in Our Lives	1
		The Plant Cell	2
2	9/14	The Plant Cell (Quiz 1)	2
3	9/21	The Plant Body (Quiz 2) (J)	3
4	9/28	Plant Physiology (Quiz 3)	4
5	10/5	Plant Life Cycle: Flowers (Quiz 4) (J)	5
6	10/12	Plant Life Cycle: Fruits and Seeds (Quiz 5)	6
		Plant Systematics and Evolution	8
		Diversity of Plant Life	9
7	10/19	Human Nutrition (Quiz 6) (J)	10
8	10/26	Origin of Agriculture (Quiz 7)	11
		The Grasses	12
9	11/2	Legumes (Quiz 8)	13
		Starchy Staples (J)	14
10	11/9	Feeding a Hungry World (Quiz 9)	15
11	11/16	Stimulating Beverages (Quiz 10) (J)	16
12	11/23	THANKSGIVING – NO CLASS	
13	11/30	Herbs and Spices (Quiz 11)	17
14	12/7	Materials: Cloth, Wood, and Paper (Quiz 12)	18
		Medicinal Plants	19
15	12/16	FINAL EXAM	

Quizzes: Will cover previous week's readings.

Presentations: Will occur after lectures or labs once topics and dates are finalized.

Journal Entries: (J)

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LAB SCHEDULE		
WEEK	DATE	TOPIC
1	9/9	Lab 0: Identification of Fall Flora (Outdoor Lab)
2	9/16	Lab 1a: How Does a Scientist Work?
		Lab 1b: Pet Plant Project
3	9/23	Lab 2: Plant Cells and Body – The Structure of Flowering Plants
4	9/30	Lab 3: Plant Cells and Body – The Structure of Flowering Plants
5	10/7	Lab 4: Transport and Transpiration
6	10/14	Lab 5: Flowers – Form and Function
7	10/21	Lab 6: Plant Reproduction and Propagation
		<i>Lab Exam #1: Labs 0 through 5</i>
8	10/28	Lab 7: Growing Happy Plants -- Fulfilling Plants' Needs for Mineral Nutrients
9	11/4	Lab 8: Seeds and Macronutrients in the Human Diet
10	11/11	Lab 9: Grasses and Human Foods
11	11/18	Lab 10: Herbs and Spices
12	11/25	THANKSGIVING – NO CLASS
13	12/2	Lab 11: Cellulose and Paper-Making
13	12/9	<i>Lab Exam #2: Labs 7 through 11</i>

Please Note: Lecture and Lab schedules are subject to change due to weather or other unforeseen events.

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