



South Portland, Maine 04106

Biological Sciences Department

Title: Botany

Credit Hours: 4

Lecture: M 6-7:50, W 6-6:50; Lab: W 7-8:50

Office Hours: By appointment

Catalog Number: BIOL 115-W1

Total Contact Hours: Lecture 48; Lab 32

Instructor: Andrea Southworth

Contact Information:

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Course Syllabus

Course Description

BIOL 115 is an introductory course designed to introduce the student to the structures and functions of plants and the science of plant systems. Course content provides lecture and laboratory topics in plant anatomy, morphology, and physiology, as well as the history of plant science. The objective of the course is to provide students with the fundamentals of plant biology, ecology, and taxonomy that will foster greater confidence and success identifying, growing, and maintaining plants. This course is Blackboard® enhanced, therefore some materials, assignments, and/or assessments will be delivered in an online format. Students need regular access to a computer with internet access.

Course Objectives

After successfully completing the course, students should be able to:

1. **Discuss** the importance of plants as they relate to all life on earth.
2. **Design** and conduct an experiment utilizing principles of the scientific method.
3. **Comprehend** and produce plant descriptions using appropriate and correct botanical terminology.
4. **Demonstrate** an understanding of plant taxonomy and the system of binomial nomenclature.
5. **Identify** various plant structures and discuss their functions.
6. **Discuss** the movement of water and nutrients in plants.
7. **Discuss** the processes of photosynthesis and respiration.
8. **Discuss** the processes of growth, differentiation and development in plants and factors that may influence them.
9. **Discuss** how meiosis allows for genetic diversity, and the importance of genetic diversity.
10. **Differentiate** between monocots and dicots, and angiosperms and gymnosperms.
11. **Apply** course content in such a way as to develop greater confidence and success identifying, growing, and maintaining plants.

Topical Outline of Instruction (sequence may vary)

- Connections to plants
- Invasive plants
- Leaves
- Binomial nomenclature
- Flowers, fruit, seeds
- Threatened, endangered species
- Biodiversity
- Succession
- Ecology
- Land ethic
- Pollination, pollinators
- Grasses, lawns
- Tissues
- Roots, stems
- Atoms, molecules
- Cells
- Photosynthesis, cellular respiration
- Water in plants, diffusion, osmosis
- Genetics, mitosis, meiosis, GMO's
- Phylogeny
- Mosses, ferns
- Gymnosperms
- Angiosperms

Course Requirements

Assignments: All assigned material such as reading, online quizzes, homework, and discussion preparations will be completed BEFORE attending lecture or lab. Material and activities covered during lecture and lab are the responsibility of the student, including arrangements for make-up work when possible. (In general, make-up labs will not be given.) Required work includes reading, quizzes, various in-class and lab activities, lab notes and responses compiled in a notebook, group work and group projects, individual projects, and exams.

Communication: As this is a web-enhanced course, students are required to use Blackboard to check for assignments and announcements and to reply as directed. Students are likewise expected to use their school email account for communication with the instructor and classmates. On dates of field trips or planned outdoor activities, students should check their SMCC email account often in case of changes due to weather, etc. If students know about absences in advance, students should contact the instructor by email. If an absence occurs, students should contact the instructor as soon as possible to establish an effective plan to complete all missed coursework.

Student Evaluation and Grading

Assignments	Points Each
<u>Content quizzes</u> : Completed online before discussion; may be taken more than once, highest score recorded. Quizzes available for one week.	20
<u>Lab quizzes</u> : Taken before lab begins on the previous week's lab content. No make-up lab quizzes.	20
<u>Lab notebook</u> : Completed objectives; legible handwriting and labeled drawings; responses to questions, reflections, and summaries for each lab. Due at the conclusion of lab. Students are responsible for all content.	20
<u>Homework</u> : Homework assignments will be given each week. Homework is due at the beginning of class; late homework assignments will not be accepted.	20
<u>Projects</u> : A variety of project assignments will be given, including both group and individual projects. Descriptions/objectives/timelines of projects will be established. Projects are due at the beginning of class; late project assignments will not be accepted.	50
<u>Exams</u> : One or more exams will be given, plus a final exam. Exams will be "take home." Exams will be due at the beginning of class; late exams will not be accepted.	30

Grading

A student's grade will be determined by dividing the total number of points earned by the total number of points assigned. Letter grade translations are provided below. (For example, if a student earns 512 of 600 possible points, that student has earned 85.3% of the points assigned; semester grade is therefore a B.)

Grading equivalents

93-100	A	78-79	C+
90-92	A-	73-77	C
88-89	B+	70-72	C-
83-87	B	60-69	D
80-82	B-	0-59	F

Text, Tools and / or Supplies

- Stern's Introductory Plant Biology. Boston: McGraw-Hill, 2014; 13th Edition.
- Bound laboratory (composition) notebook and a three-ring binder.

Attendance Policy

Students are expected to attend every class. Attendance is essential to success in any course, however if **students are truly sick, they should not come to class**. Three (3) absences in a row with no communication may result in Administrative Failure (AF). More than two (2) missed lectures or one (1) missed lab may result in an Early Alert Grade or an Academic Alert. Late arrivals and early departures beyond 15 minutes may be considered as absences. Three (3) late arrivals or early departures within 15 minutes may be totaled and considered an absence. An absence means missed discussions, activities, or field trips which are difficult or impossible to replicate.

Students will be courteous and respectful to all members of the class. Disrespectful/disruptive behavior is grounds for dismissal from the course (grade of AF) and review by the College's Disciplinary Office for further action. Students should avoid cell phone disruptions and will be asked to discontinue their use if distractions occur. Students should also minimize or refrain from the use of colognes or perfumes out of respect for allergies/sensitivities.

End-of-Course Evaluation

Students complete evaluations for each course attended at SMCC. Evaluations are submitted online and can be accessed through the student portal. Students can access the course evaluations beginning one week before the end of classes. The deadline for submission of evaluations occurs Monday at 5 p.m. following the last day of the class. You will receive an email to your student email account when course evaluations are available.

ADA Syllabus Statement

Southern Maine Community College is an equal opportunity/affirmative action institution and employer. For more information, please call (207) 741-5798. If you have a disabling condition and wish to request accommodations in order to have reasonable access to the programs and services offered by SMCC, you must register with the Disability Services Coordinator, Sandra Lynham, who can be reached at 741-5923. Further information about services for students with disabilities and the accommodation process is available upon request at this number. Course policies about online testing are modified to suit each individual's accommodations.

SMCC Pay-for-Print Policy

Each semester students receive a \$20 printing credit. The balance resets at the end of the semester and any remaining credits are removed. The College's pay-for-print system monitors printing on all printers (including those in general access labs, library printers, Tutoring Services, Campus Center Lounge and technology labs). Be sure to log OUT of the system when you've finished your printing, to prevent

unauthorized access to your account. Students can check the number of pages they have printed by using the Printing Balance tool available on SMCC computers (located in the lower right corner of the screen, near the clock). Departments with work study students who need to print documents for the department should contact the Help Desk at 741-5696 to have a special account set up. To find ways to reduce your printing charges, please go to the IT Help tab on My SMCC. If you have questions about the pay-for-printing policy or your printing charges, please contact the Help Desk at 741-5696 or send an email to helpdesk@smccme.edu.

Refunds

Print jobs are eligible for a refund in the event of mechanical or electronic error on the part of the printer, print server, or software used to submit the job. Jobs are not eligible for a refund in cases where the job was not set up correctly, was submitted multiple times, or the student is not satisfied with the result. To request a refund, please bring the offending print to the IT Department in the basement of the Ross Technology Center. Refunds will be granted in the form of a credit to the student's account.

Add-Drop Policy

Students who drop a course during the one-week "add/drop" period in the fall and spring semesters and the first three days of summer sessions receive a 100% refund of the tuition and associated fees for that course. Please note any course that meets for less than the traditional semester length, i.e., 15 weeks, has a pro-rated add/drop period. There is no refund for non-attendance.

Withdrawal Policy

A student may withdraw from a course only during the semester in which s/he is registered for that course. The withdrawal period is the second through twelfth week of the Fall and Spring semesters and the second through ninth week of twelve-week Summer courses. This period is prorated for shorter-length courses (usually 75 percent of course meeting times; please check with the Registration Office. To withdraw from a course, a student must complete and submit the appropriate course withdrawal form, available at the Registration Office. This process must be completed either in person or by using SMCC e-mail accounts.

Plagiarism Statement

If an instructor suspects that a student has knowingly committed a violation defined in the Maine Community College System Policy on Student Grade Appeals and Academic Misconduct, the instructor has the authority to review the alleged misconduct and determine the grade that the student should receive for the assignment and the course. The instructor may assign a failing grade for the assignment or course and may require the student to complete additional work for the course. The instructor may consult with the department chair and/or the College's chief academic officer prior to making such decisions. If a student seeks to challenge an instructor's determination, the student should submit a grade appeal. Grade appeal forms are available in the Advising Office on the South Portland Campus or in the administrative offices in the Learning Commons on the Midcoast Campus. An instructor may also refer the matter to the College's disciplinary officer for review under the procedures of the MCCS Student Code of Conduct.