

VALENCIA COLLEGE

COURSE SYLLABUS: BOT 2010C

INTRODUCTORY BOTANY

Fall 2017

Session 01, 2018 CRN# 12864

4 credit hours 6 contact hours/week

Instructor: **Jennifer Hitchcock, M.S.**

Office: **Science Office AHS 231**
407-582-1407

(Note: Main office (M-F) number to leave a message in my mailbox)

E-mail: **jhitchcock2@valenciacollege.edu**
(Best method to communicate for non-emergencies)

Office Hours: **Before or after class by appointment**

Meeting Times/Locations:

Lab Mon 1:00 pm to 3:45 pm Bldg. AHS, Rm 317

Lecture Wed 1:00 pm to 3:45 pm Bldg. 1, Rm 113

COURSE DESCRIPTION: Welcome to the fundamentals of Botany. This course, and the accompanying laboratory, is designed to provide understanding of the principles of botany; the study of structural organization, classification, physiology, reproduction, heredity, and evolution of plants. Includes survey of the plant kingdom and comparison of various plant groups like algae and organisms like fungi.

The laboratory that accompanies this course will reinforce many course concepts plus allow the student an opportunity to become technically functional in a science laboratory.

Botany meets the General Education Science requirement for graduation. Botany is also a program requirement for Associate of Science degree seeking students in the study of Plant Science and Agricultural Technology at Valencia College.

Students should be prepared to complete college level reading, writing, and mathematics assignments.

The Prerequisite for this course: Satisfactory completion of all mandated courses in Reading, Mathematics, English, and English for Academic Purposes.

COURSE LEARNING OBJECTIVES:

By the end of the course you will be able to:

1. Demonstrate competency in the application of critical thinking and scientific reasoning.
2. Demonstrate knowledge of how plants function in ecosystems.
3. Differentiate the mechanisms involved in plant physiology and growth.
4. Demonstrate knowledge of the fundamental principles of plant genetics, plant breeding, and propagation.
5. Categorize plants based on growth, morphological and taxonomic characteristics including their appropriate taxonomic group.
6. Describe how macromolecules contribute to the functions necessary for plant life and the structure of a generalized plant cell.
7. Describe the structure of the various types of tissues found in plants and identify their location in the plant.
8. Relate the anatomy of plant structures to their roles in plant life.
9. Distinguish between and explain each of the processes involved in plant metabolism.
10. Difference between sexual and asexual reproduction in plants

COURSE REQUIRED TEXTBOOK:

Bidlack, J., & Jansky, S. (2017). *Stern's Introductory Plant Biology*, (14th ed.). New York, New York: McGraw-Hill Education.

OTHER COURSE REQUIREMENTS:

Scantrons (green) & a pencil

Long White Lab Coat

Closed toed footwear in the lab

VALENCIA STUDENT CORE COMPETENCIES:

This course will reinforce the following competencies:

THINK Clearly, critically and creatively Analyze, synthesize, integrate and evaluate in many domains of human inquiry.

VALUE Make reasoned value judgments and responsible commitments.

COMMUNICATE Communicate with different audiences using varied means.

ACT Act purposefully, reflectively and responsibly.

GRADING POLICY:

Point System Divide the number of points earned by total number of points possible (1000).
Points earned come from various sources:

Disclaimer: Point distribution subject to change

| | |
|--|--------------------------|
| Lecture Exams | 200 points |
| Total of 3 exams at 100 points each (lowest dropped) | |
| Final Exam | 100 points |
| Class Assignments | 200 points |
| Lab Assignments (including lab exam) | 200 points |
| Scientific Method Group Class Project | 100 points |
| Plant collection Project & Presentation | 100 points |
| Attendance & Participation | <u>100 points</u> |
| TOTAL | 1000 points |

GRADING SCALE:

- A = 90 – 100% (900-1000 point)
- B = 80 – 89% (800- 899 points)
- C = 70- 79% (700 – 799 points)
- D = 60 – 69% (600 – 699 points)
- F = 59% and below (less than 600 pts)

TESTING POLICY

All tests must be taken on or before dates assigned. No makeup tests are available without explicit consent of instructor which will only be granted in case of documented extreme emergency. The final exam must be taken on the date published for final exams.

NOTE: During the exam, ALL personal effects must be placed in backpacks or bookbags. These must be placed under your desk during the exam. All cell phones must be turned off and placed out of reach.

All quizzes, exams and lab exams use material directly from the lecture or lab. The principles of this course are taught from the required textbook.

Failure to take the comprehensive final exam at the end of the semester will automatically result in an “F” grade. (Please see college catalog for details)

All multiple-choice exams will use machine-scored answer sheets (green scantron). These can be purchased in packs of 6 at the campus bookstore. You are responsible for making sure you have a Scantron sheet of the correct type for each exam. **The required scantrons are the Scantron Form 882-E type.** You need to bring a #2 pencil for marking the form as the scanner will only read pencil – do not use pen. Your name must be printed on the answer sheet and will be checked as you leave the exam room. Scantron will not be returned to students; however, they may be examined in class.

Quizzes and exams are administered at the beginning of each lecture or lab sessions.

Extra credit assignments may be offered during the course. Maximum of Twenty-five (25) points earned from extra credit assignments may be added to total final points. Any extra-credit material will be posted on Blackboard.

GUIDELINES AND EXPECTATIONS:

1. There are many concepts and a large amount of material to learn; the pace of this course is rigorous, demanding and requires your full participation and effort.
2. **Regular attendance in both lecture and lab is mandatory for satisfactory performance in this course.** Leaving early = absent. Your record of attendance may be used as a criterion for assigning a final grade in borderline cases. Please note attendance record is kept and maintained and may be submitted to the registrar upon request. **Please note the new college policy for withdrawal – instructor may withdraw student for multiple absences.**
3. **Be on time!** Tardiness will not be tolerated. Late assignments will not be accepted. If you are absent when work is due, **it is late and will not be accepted.**
4. **Reading assignments** (see course schedule) should be completed prior to lectures and or labs. Complete lab questions and diagrams when appropriate prior to the lab.
5. **Make-up Tests:** There will be **NO** lab exam make-up.
 - There will also be **NO** lecture exam make-up unless extraordinary circumstances develop and only with my approval.
 - No make-up exam unless I am notified **prior to the exam**. If satisfactory arrangement is not made with me prior to the exam, a grade of zero (0) may be given.
 - There will be **NO** make-up for missed quizzes (when applicable) unless accompanied by doctor's note or emergency documents (e.g. tow-truck receipt) or arrangements made prior to the quiz.
 - Medical excuses must be covered by a doctor's note.

- There will be **NO** makeup of extra-credit work and/or assignments when applicable.
- 6. College policy forbids children/pets (unless service animal) from attending lectures or labs.
- 7. Electronic devices that emit audible sound are **not** allowed in lectures and labs. Please put such devices on off or vibrate. If an emergency situation requires your attention, please quietly remove yourself from the room. **NO electronic devices allowed during testing.**
- 8. No food/drink in the lab.
- 9. Grades will be discussed only between the student earning them and the instructor. Grades will not be discussed over the telephone or via email.
- 10. Academic dishonesty **will not** be tolerated. Cheating and/or plagiarism and/or disruption in lecture or lab can and will result in severe academic penalties which may include withdrawal from course, failure of exam/quiz and or course withdrawal with referral to the Academic Dean.

“Each student is required to follow Valencia policy regarding academic honesty. All work submitted by students is expected to be the result of the student’s individual thoughts, research, and self-expression unless the assignment specifically states ‘group project.’”

Students guilty of engaging in a gross or flagrant act of academic dishonesty or repeated instances of academic dishonesty shall also be subject to administrative and/or disciplinary penalties which may include warning, probation, suspension and/or expulsion from the college.

- 11. Academic disputes – Students are encouraged to contact the Academic Dean or Office of the Ombudsman if any unresolved conflicts arise.

“Valencia College is committed to providing each student a quality educational experience. Faculty members have set high standards of instruction for themselves and for you. If you have a problem in a class, your first step is to talk to your instructor. If you are still dissatisfied, you may talk with the academic dean of the division for your class. We will work together to resolve any issues that arise.”

DROP/REFUND DEADLINE:

September 5 @ 11:59 PM

WITHDRAWAL DEADLINE:

The date for WITHDRAWAL WITHOUT PENALTY is

November 10, 2017 @ 11:59 p

PLEASE FAMILIARIZE YOURSELF WITH THE WITHDRAW (“W”) COLLEGE POLICY

Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and Withdraws), a student who withdraws from a class before the withdrawal deadline of “insert appropriate date” will receive a grade of "W." A student is not permitted to withdraw after the withdrawal deadline. A student who is withdrawn by a professor at any time before the start of the final examination period will receive a grade of "W." A student who is withdrawn for administrative reasons at any time will receive a grade of "W" or other grade as determined in consultation with the professor. Any student who withdraws or is withdrawn from a class during a **third or subsequent attempt** in the same course will be assigned a grade of "F." For a complete policy and procedure overview online go to: <http://valenciacollege.edu/generalcounsel/policy/>

(Please refer to your college catalog for further information on VC withdrawal policies).

LABORATORY PROCEDURES

No food or drink in the labs! Including gum.

-If have a water bottle place in bookbag/purse. Drink outside classroom as needed.

Long white coat and closed toe shoes are required. You will not be allowed to participate in lab without this. Henceforth you will receive a grade of zero (0) for that lab.

When using microscopes, be sure to handle them with care; **BE SURE TO CLEAN OBJECTIVES ESPECIALLY WHEN USING OIL**

Laboratory specimens and or equipment **MAY NOT** be removed from the lab- that is considered **THEFT!**

Follow laboratory safety procedures. Report any injuries, accidents, cuts, etc. you may sustain while in the lab no matter how minor you believe to the instructor. All incidents are reported and assessed by campus security.

Clean up your lab station, put away slides, models etc.

Wash your hands before leaving the lab

SUCCESS STRATEGIES:

- Attend class weekly and be on time and prepared (text & notes)
- Familiarize yourself with the material (read notes, handouts, etc.) prior to class
- There is a great deal of material to learn. Study daily (Set aside 1-2 hours/day for studying).

CAUTION: DO NOT TRAP YOURSELF INTO THINKING YOU HAVE A WEEK

- Form study groups or get a study-buddy when possible to compare notes, test each other etc.; make flash cards
- Organize yourself
- Seek help early
- You are encouraged to visit the McGraw-Hill Websites for great resources such as tutorials and practice quizzes.
- There are many animations on sites such as YouTube
- LifeMap – Students are encouraged to utilize LifeMap for resources and support.
- SmartThinking Online tutoring service available through the college
- Consult General Tutoring Center to check if tutoring is available
Bldg. 7, Room 240 (407) 582-1633

- Valencia College offers a variety of SkillShops:
short seminars covering a variety of topics which deal with student success, goals and purpose.

To check out Valencia's Skillshop offerings, go to:

<http://valenciacollege.edu/student-services/skillshops.cfm>

- Email me for assistance/clarification/questions

- The rigor of college courses as well as academic and nonacademic obligations may impart stress upon students; the college provides support and assistance through advisors and counselors. In the event of stress or feeling overwhelmed, please seek assistance and support through Student Services and or **Baycare Behavioral Health's Student Assistance Program** (for private counseling)

- *"Valencia is committed to making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help that may assist them with psychological issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. Students have 24-hour unlimited access to the **Baycare Behavioral Health's confidential student assistance program** phone counseling services by calling **(800) 878-5470**. Three free confidential face-to-face counseling sessions are also available to students."*

BECAUSE OF PRIVACY ISSUES, RECORDERS AND ANY OTHER DEVICE THAT CAN RECORD THE INFORMATION IN THIS COURSE ARE **NOT** ALLOWED. PLEASE DO NOT RECORD AND OR POST CLASS DISCUSSIONS, PROCEDURES, EXAMS, ETC ON THE INTERNET/SOCIAL MEDIA.

Students requiring recording must bring documents from the Office of Students with Disabilities.

STUDENTS WITH DISABILITIES: Students with disabilities who qualify for academic accommodations **MUST** provide the professor with a letter from the Office of Students with Disabilities at the **start** of the term. Accommodations can only be implemented at the time the student presents the letter to the professor. The Office of Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

SECURITY STATEMENT

*We want to reassure you that our security officers are here around the clock to ensure the safety and security of the campus community. It's important to remain alert and aware of your surroundings, especially during the early morning or evening hours. Remember that you can always call security for an escort if you feel uncomfortable walking alone on campus. White security phones can also be found in many of our buildings; simply pick up the phone and security will answer. Finally, report any suspicious persons to **West Campus Security at 407-582-1000**, 407-582-1030 (after-hours number) or by using the yellow emergency call boxes located on light poles in the parking lots and along walkways.*

ACADEMIC INTEGRITY

As a member of the Valencia College community, a student is expected to be honest in all his or her academic coursework and activities. Academic dishonesty such as cheating of any kind on examinations, course assignments or projects, plagiarism, misrepresentation and the unauthorized possession of examinations or other course-related materials, is prohibited.

DISCLAIMER

Changes in syllabus and/or schedule may be altered at any time during the term by the professor. A revised syllabus may be issued at the discretion of the instructor.

LETTER FROM THE DEAN

Expectations of a Valencia College Science Student

Welcome to the Science Division of Valencia College's West Campus; we are enthused to have this opportunity to assist you in achieving your educational goals. Higher education is a privilege and an opportunity; it is your responsibility to realize that you are in control of those behaviors and actions that can enable success in this course.

From your professors, **you can expect** the following:

1. They will be prompt, courteous and respectful.
2. They will provide a professional learning environment throughout the entire scheduled instructional period.
3. They will provide an up-to-date syllabus; when changes need to be made, they will announce changes in a manner that is conveyed to all students in their class.
4. They will provide you with a course that is of necessary rigor to prepare you for the career you have chosen; because the class you are taking transfers to a four-year college or university, it will be taught with the same academic expectations. The bonus of starting your education at Valencia, when compared to attending a four-year college, is you will be able to get more personal attention with small class sizes and you will be able to save money; the classes are not easier.
5. They will offer time outside of class to discuss your questions.
6. They will be available to discuss your class concerns in private, outside of class time; you should try to resolve your class concerns with your professor before you try to voice your concerns with administrators.
7. They will respond to emails within 2 business days.
8. They will expect from you what they have expected from the many students who passed their classes in the past.

In return, this is **what your professor will expect from you**:

1. You will be prompt, courteous and respectful.

Prompt means you come to class on time, ready to work, with all assignments completed before you enter class or lab. It means that you have studied, that all conversations, texting and diversions come to a stop and that you are ready to contribute to a positive learning environment from the beginning of the class or lab.

Courtesy means you are polite in your attitude and behavior towards your professor and classmates.

Respectfulness means that you regard everyone's classroom experience as valuable to them, that you accept your professor's expertise and experience to create relevant course objectives and that you treat college and personal property with care.

2. You will read your syllabus; your syllabus is a contract between your professor and you. Be aware of deadlines to complete assignments on time and know your professor's attendance policy. You will need to attend class for the full length of time allotted to your science class and lab.
3. You will be aware of Valencia College policies and procedures found in the college catalog; ignorance of policies and procedures doesn't mean they don't apply.
4. You will be serious about learning; it is your responsibility to be an active participant in your own learning. You will need to devote sufficient time to learn the material presented by your professor; for most students, this means you will need to spend at least two hours studying for every hour of instruction. Learning is an action verb; you will need to do more than sit through class and reread your notes to be successful. To succeed in higher level classes, you must retain the information, concepts and skills you will learn; this can only happen if you work at learning to make the course content a part of your long-term memory. Do not cram!!

5. You will be encouraged to produce your own study guides. Most college professors do not provide study guides, but they can give you tips that will help you produce your own study guides to gain a better understanding of the course content.

6. You will be expected to participate fully in classroom activities. The work you produce must be your own; cheating in any form is not tolerated and your professor will have specific consequences, in their syllabus, which will be enforced should cheating occur.

7. You will be expected to contribute to a positive learning environment. Avoid classmates who speak negatively, or who have a negative outlook, about your class or your professor. Instead, get to know your professor during office hours; you will learn much more with a positive attitude.

8. You will be held to a high standard of maturity and responsibility. Disruptive behaviors will not be tolerated in the classroom or lab. First time disruptions will be handled by your professor and may include a request that you leave the class or lab. Very serious or repeated disruptions will be reported, to the Dean of Science and the Dean of Students, with specific consequences that can include your permanent removal from the class. Disruptions include:

- Being noisy when arriving late to class or leaving early.
- Carrying on private conversations while the professor is talking.
- Disrespectful language, tone and mannerisms.
- Sleeping or attempting to sleep in class.
- Repeatedly asking unnecessary or irrelevant questions.

My wish is that you get the best learning value from the science classes that you are taking. With everyone abiding by the expectations in this letter, your science classes at Valencia should be the next step in achieving your academic dreams.

Dr. Robert Gessner
West Campus Dean of Science
Valencia College

VALENCIA COLLEGE

COURSE SCHEDULE: BOT 2010C INTRODUCTORY BOTANY

FALL 2017

| Week | Monday | Lab | Wednesday | Chapter | Lecture |
|------|------------------------|---|------------------------|---------|--|
| 1 | Aug. 28 th | Intro to the Metric System and Microscope | Aug. 30 th | 1 | Introduction to Plant Biology |
| 2 | Sept. 4 th | Labor Day Holiday- No Lab | Sept. 6 th | 2 & 10 | Plant chemistry and Photosynthesis |
| 3 | Sept. 11 th | Cell Lab and photosynthesis; plant seeds | Sept. 13 th | 3 & 16 | Plant taxonomy, Plant cells |
| 4 | Sept. 18 th | Plant cells | Sept. 20 th | 4 | <u>Exam 1</u> Tissues |
| 5 | Sept. 25 th | Stems lab | Sept. 27 th | 5 & 6 | Roots & Stems |
| 6 | Oct. 2 nd | Mitosis lab Root lab | | 7 | Leaves |
| 7 | Oct. 9 th | Flowers, Fruits, Seeds lab | Oct. 11 th | 8 | Flowers, Fruits and Seeds |
| 8 | Oct 16 th | Plant Nutrition lab | | 11 | <u>Exam 2</u> Plant Growth and Development |
| 9 | Oct. 23 rd | Algae lab | Oct. 25 th | 18 & 19 | Protista & Fungi |
| 10 | Oct. 30 th | Fungus lab | Nov. 1 st | 20 & 21 | Bryophytes and Ferns |
| 11 | Nov. 6 th | Mosses and Ferns lab | Nov 8 th | 22 | <u>Exam 3</u> Seed Plants and gymnosperms |
| 12 | Nov. 13 th | Gymnosperm lab | Nov. 15 th | 23 | Angiosperms |
| 13 | Nov. 20 th | Angiosperm lab | Nov. 22 nd | | Thanksgiving Holiday- No Lecture |
| 14 | Nov. 27 th | Review + Lab reports due | Nov. 29 th | 24 & 25 | Plant Families Presentations |
| 15 | Dec 4 th | <u>Lab Exam</u> | Dec. 6 th | | Review |
| 16 | Dec. 11 th | <u>Final Exam</u> | | | |