I. Locator Information:

Instructor: Dr. Finley Bryan
Semester/year: Fall 2013
Course: BOTN 210 General Botany
Semester hours: 3
Day/Time Class Meets: Lectures: T 11:00 a.m. - 12:50 p.m. in LSA 120
Room/Building: Labs: R 12:00 NOON.- 1:50 p.m. in LS 114
Office Location: LSA 240
Cell Phone: 910-703-3411
E-mail fbryan1@uncfsu.edu
Office Hours: T 2:00 – 3:00 p.m. W 3:00 – 4:00 p.m.

II. Course Description:

Botany 210, General Botany, is a course designed for students majoring in Biology or interested in plant science. Information and concepts concerning the identification, evolutionary relationships, anatomy, and physiology of plants will be presented. Evolutionary relationships among major groups will be traced in the context of structural, ecological, and reproductive characteristics of those major plant groups.

III. Disabled Student Services:

In accordance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ACA) of 1990, if you have a disability or think you have a disability to please contact the Center for Personal Development in the Spaulding Building, Room 155 (1st Floor); 910-672-1203.

IV. Required Textbooks:


Labs: Individual labs have been adapted and modified from Kassem & Haas, and will be posted on blackboard.

Students are responsible for printing and reviewing labs before class starts.

The lecture text, Raven, et al. is required for this class.

V. Student Learning Outcomes:

Upon completion of this course, the successful student will be able to:

1. Identify the various tissues found in plant organs.
2. Demonstrate an understanding of vascular plant structure, function, and development.
3. Contrast herbaceous eudicot stem structure with monocot stem structure.
4. Observe and define characteristics of plants they see.
5. Contrast herbaceous stem development with woody stem development.
6. Evaluate leaf morphology and structure in terms of its role in photosynthesis.
7. Show the involvement of energy and matter in the process of photosynthesis.
8. Evaluate the role of chlorophyll, ATP, NADPH, and light in the photosynthetic process.
9. Compare and contrast the light dependent reaction of photosynthesis with the carbon fixation (light-independent) reaction.
10. Demonstrate understanding of the processes responsible for the movement of water and solutes in plants.
11. Understand structures and reproduction for bryophytes, lower vascular plants, ferns and seed plants.
12. Compare and contrast seed structure in gymnosperms and angiosperms.
13. Arrange the floral parts of a flower in their correct order relating their function in the reproduction.
14. Relate the structure of the flower to the structure of the fruit and seed.
15. Understand and apply the fundamentals of Mendelian genetics.
16. Identify the major groups of plant hormones found in angiosperms and evaluate their effects on growth, morphology, development, and germination.

VI. Course Requirements and Evaluation Criteria:

You are required to:

1. Attend all classes and labs regularly and to keep scheduled appointments.
2. Be informed of the academic requirements of the instructor. An absence, excused or unexcused, does not relieve you of any course requirement.
3. Take all exams on the scheduled date. Make-up exams will not be given. One Exam will be dropped. This will compensate for emergencies where a student was unable to attend. In the extremely rare cases where a make-up exam is granted, any and all make-up exams will be administered during the final week of classes (ending on Dec 5, 2013).
4. Complete all your assignments and work on time. Late assignments may be submitted but will not be granted a grade.
5. Notify me in advance if you will be absent.
6. Send your paper electronically, and ask a friend to get hard copy assignments, if any, and pick up any handouts.
7. Demonstrate an understanding of content covered in class on the day of the absence.

I will assign the grade that I feel best expresses your learning and performance in the course using the following as my guide:

<table>
<thead>
<tr>
<th>Percent of Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 -100</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89.9</td>
<td>B</td>
</tr>
<tr>
<td>70 – 79.9</td>
<td>C</td>
</tr>
<tr>
<td>60 – 69.9</td>
<td>D</td>
</tr>
<tr>
<td>&lt; 60</td>
<td>F</td>
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</tbody>
</table>

Attendance Requirement:

Attendance is required. I will evaluate the quality of your laboratory work and your contributions to class. Students are required to read the University attendance policy very carefully. It will be enforced in all classes as follows. -If you have excessive absences, the instructor may not drop you as we approach the deadline for withdrawal; therefore, it is the students’ responsibility to obtain a withdrawal slip and withdraw if he/she does not want an earned grade!

Deadlines for withdrawal: from the class is xxx, from University is xxx.
For a number of absences above 5, you may be dropped from the class. Three tardinesses or early departures will count as one absence. There are no excused absences. If a student is dropped from the class he/she must appeal the action in order to be allowed to complete the course. He/she should continue to attend the class until the appeal is accepted.
VI. Course Requirements and Evaluation Criteria, continued.

Graded Assignments:
The exams, presentations, quizzes and other graded assignments will be valued as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Number of Items</th>
<th>Points/Item</th>
<th>Total points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly Exams – best 4 of 5</td>
<td>4</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Online module terminology quizzes</td>
<td>15</td>
<td>10</td>
<td>150</td>
</tr>
<tr>
<td>Diversity presentation</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Group presentation Chemistry</td>
<td>1</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Final Exam (cumulative)</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Lab Activities (best 5 of 6)</td>
<td>5</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Lab/Class Participation</td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Experiment 1,2 /Paper -See Rubric</td>
<td>2</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total points:</strong></td>
<td>**</td>
<td>**</td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>

* Number of items/total points may vary slightly from above.
** Pre-lab quizzes may be given if found to be necessary. If so, these grades will NOT be dropped.

Value of Each Assignment:
The value of each graded assignment is shown above (graded assignments). Maintain a notebook where you record observations from all laboratory exercises. I may ask to examine your records at various times. Additional records of lab observations may be announced at the start of each laboratory meeting. Be sure to save all graded reports, all quizzes and all exams in an organized manner and be prepared to show them to me when requested.

Policy on Missed or Late Assignments:
There will be no excused absences. One exam grade will be dropped; plan to use this for any emergency. Make-up exams will be given only in the most extreme cases. If this happens, the make up exam will be given the last week of classes.

Policy on electronic devices:
They will be turned off during class. Consulting them during graded assignments earns a grade of zero (0) for assignment.

Policy on disruptive behavior in classroom:

FSU Policy on Disruptive Behavior in the Classroom

The Code of the University of North Carolina (of which FSU is a constituent institution) and the FSU Code of Student Conduct affirm that all students have the right to receive instruction without interference from other students who disrupt classes.

FSU Core Curriculum Learning Outcome under Ethics and Civic Engagement (6.03): All students will “prepare themselves for responsible citizenship by fulfilling roles and responsibilities associated with membership in various organizations.” Each classroom is a mini-community. Students learn and demonstrate responsible citizenship by abiding by the rules of classroom behavior and respecting the rights all members of the class.

The FSU Policy on Disruptive Behavior (see FSU website for complete policy) identifies the following behaviors as disruptive:

1. Failure to respect the rights of other students to express their viewpoints by behaviors such as repeatedly interrupting others while they speak, using profanity and/or disrespectful names or labels for others, ridiculing others for their viewpoints, and other similar behaviors;
2. Excessive talking to other students while the faculty member or other students are presenting information or expressing their viewpoints.
3. Use of cell phones and other electronic devices
4. Overt inattentiveness (sleeping, reading newspapers)
5. Eating in class (except as permitted by the faculty member)
6. Threats or statements that jeopardize the safety of the student and others
7. Failure to follow reasonable requests of faculty members
8. Entering class late or leaving class early on regular basis
9. Others as specified by the instructor.
Policy on disruptive behavior in classroom, cont’d:

The instructor may take the following actions in response to disruptive behavior. Students should recognize that refusing to comply with reasonable requests from the faculty member is another incidence of disruptive behavior.

1. Direct student to cease disruptive behavior.
2. Direct student to change seating locations.
3. Require student to have individual conference with faculty member. At his meeting the faculty member will explain the consequences of continued disruptive behavior.
4. Dismiss class for the remainder of the period. (Must be reported to department chair.)
5. Lower the student’s final exam by a maximum of one-letter grade.
6. File a complaint with the Dean of Students for more severe disciplinary action.

Students who believe the faculty member has unfairly applied the policy to them may make an appeal with the faculty member’s department chair.

VII. Academic Support Resources

During this class, especially in labs, we will use the following resources:
1. Different plant specimens, including those in the FSU Biological Reserve.
2. Several Internet Websites.
3. The Department/College Computer Lab.

VIII. Teaching Strategies

Lectures: the instructor will use a variety of lecture and lab settings: chalk/white board, power point presentations, small group activities and discussions, etc. Student input by comments, discussions, and questions is encouraged. Students are given prompt feedback on assignments and exams as well as their accumulative point totals so they are aware of their progress in achieving a grade. Grades must be earned not given!

On-line activities: Approximately 70% of the course takes place face-to-face while the remaining 30% portion of the course is online. To emphasize: no more than 50% of the contact hours should occur online.

Labs: the instructor will give students hands on experience with the subject matter. Students will perform observation, inquiry, experimental design and lab experiments.

IX. Bibliography

Students are encouraged to (1) use the library, (2) do supplemental reading in the plant sciences, and (3) read journal articles in various plant sciences journals. A complete set of plant sciences journals can be found online at: http://www.e-journals.org/botany.


American Journal of Botany will serve as the template and guide for written style in the coleus experiment papers.
X. Course Outline and Assignment Schedule:
   Posted separately on the course blackboard site is a tentative lecture and laboratory schedule. It may be modified at need.

XI. Lab Safety and Comfort:

   Appropriate dress for conditions: Please note that for several labs we may spend time outside or in the greenhouse. Always come to lab dressed appropriately for walking out of doors or dealing with chemicals indoors. This means comfortable walking shoes, long pants, close-toed shoes, clothes that will not snag on branches or provide heartbreak if they are snagged. This does not mean sandals composed of 3 spaghetti-thin straps.

   Potential Toxicity of Materials: We will handle plant materials and be around plant materials, some of which can cause skin irritation on contact or be toxic if ingested. Please follow the directions and guidance of the instructor, and do not ingest materials unless specifically told that they are safe. Please wash your hands with soap and water as your last activity before leaving lab each week.

XII. Time and Location of Final Exam:

   Tuesday     December 10     10:00. - 11:50 a.m.     LSA 120