## Instructor:
Richard Southgate

### Office times:
My office, RITA 224, is less than 6 ft apart for 2 people in the room.

### Office Hours:
By appointment ([southgater@cofc.edu](mailto:southgater@cofc.edu)) or after your online lab. on zoom.

### Email:
[southgater@cofc.edu](mailto:southgater@cofc.edu)  BEST

## BIOL 305L-03, (21157; T; BIOL 305L-04, (21720; R)
Face to face labs., SPRING 2021

Due to changes in the plan with Covid 19, the first three weeks will be online, until new instructions.

Richard Southgate, PhD.
U. of Geneva, Switzerland, 1985
TUESDAYS and THURSDAY
From 2-5pm on ZOOM until we return, hopefully, to face to face.

### SOME INFORMATION ABOUT YOUR INSTRUCTOR
I was born in Great Britain many moons ago, and at the age of 17, I moved to Central Europe for 12 years, before arriving legally in the USA in late 1984. As a Post Doctorate (i.e. having earned a PhD), I have worked as a Molecular Biology researcher at Harvard University, Boston University School of Medicine, M.I.T., Lehigh University and now at CofC (since 1999). Currently, due to my teaching load, I no longer contribute much to Dr. Agnes Southgate’s CofC’s research interests on
the origin and evolution of insect flight at both the molecular and cellular levels in insects. We have collaborated on this research themes since the early 1990s with published articles (some shown below) but her research has been severely slowed due to Covid-19. OK. this photo is a bit younger picture of me. Starting in 2001, I have been teaching at CofC to now, except an 18-month research grant between in 2006 - 2007. Over the years at CofC, I have taught BIOL-111, 101, 102, 305L, Cell Biology 313, 313L, Developmental Biology 322 (class and lab.), Molecular Biology 312L, and I would have loved to teach evolution. In late 1998, my wife and I had the honor to become USA naturalized citizens (the only differences with you is we can never be the President or Vice President of the USA, but we could try to be a governor or senator of South Carolina. Not worry, this will not happen, but we have that right

A FEW PAST PUBLICATIONS:

Email:
Most contacts at the College are dependent on email for communications. The way you present yourself in emails to your instructor, your friends, or inquiring for a summer position at CofC or MUSC etc. says a lot about your work ethic, and your priorities. Start practicing email etiquette at the College now so that it will be second nature when you get your soon great new job.

When emailing with me, please:
- include "CB BIOL-305L – X (i.e. 1 or 2) in the subject line (I have 4 genetics labs. this semester with ~53 students in total) so state your name and the lab. M, or W.
- use a “polite” salutation,
- please fully sign your name,
- use complete sentences,
- proofreading your email, don’t laugh, it takes seconds, and this simple task makes you look very professional.

I will answer your email within 24 hours, but this will be slower on weekends (24-48 hours). As I would like to have a sort of private life at home, I stop responding to emails after ~9:00pm, unless emergencies. If you do not hear from me after 24 hours, send another email (as it can happen if I did not see you the original email), and after 2 days and no answer, send me a third and angry (but still polite) email, but this will be very rare (my badge of honor), although this semester may be very different than the norm.

SUMMARY: I promise to answer your e-mails within 24 hours weekdays (48 hours on weekends), which will be probably much shorter in time, unless there is a major reason.
**Course description:**
An introduction to the principles of heredity using common experimental organisms. Recent techniques in molecular genetics are also covered. Laboratory three hours per week.
**Prerequisites:** BIOL 111/111L, BIOL 112/112L.
**Co-requisites or prerequisites:** BIOL 211 and 211D, BIOL 305, MATH 250 or equivalent course in statistics or permission of instructor

**Learning Outcomes**
Students will
- Demonstrate the ability to analyze data obtained from crosses
- Understand Mendelian Genetics and common deviations, such as epistasis, penetrance and complex traits
- Apply basic statistical tools to genetics data.
- Demonstrate an understanding of the critical genetic concepts of mutations, alleles, and gene interaction in genotype-phenotype interpretation
- *Demonstrate an understanding of some basic molecular genetic techniques.*
- Exhibit proficiency for developing hypotheses and interpreting results on the basis of hypotheses.
- Format, analyze, and communicate experimental results.

**Text book**
None. Protocols and other information will be posted on OAKS

**Planned online experiments on OAKS.**
1. **MODULE 1:** Understanding genes and mutations
2. **MODULE 2:** DNA Polymorphism: PTC tasting in humans, Rock Pocket mice, lactate, Drought genes, Stickleback fish and evolution.
3. **MODULE 3:** Allelic series and molecular basis of phenotype in *Drosophila* and the famous white gene.
4. **MODULE 4:** Penetrance and expressivity in *Drosophila*, and the role of modifier genes
5. **MODULE 5:** Complex traits and gene mapping in dogs.
6. Possible other modules allelism testing in yeast
7. Possible other modules chromosome mutations and FISH analysis and perhaps new info.

**THIS MEANS SOME MODULES WILL HAVE MANY TOPICS AND A FEW RELATIVELY FEW. ALL RELEVATNT INFORMATION WILL BE POSTED ON OAKS. AS SAID ABOVE THE SYLLABS IS TENTATIVE FOR MANY REASONS (WEATHER, ILLNESS, FAMILY CRISES, ETC.) SO THE SYLLABUS HAS TO BE VERY FLEXIBLE AND I GUANTY THAT ANY CHANGES WILL BE POSTED ON OAKS WITH ENOUGH TIME FOR YOU TO UNDERSTAND THE NEW INFORMATION BEFORE THE NEXT LAB.**
I will also cover briefly 111 and its concepts, DNA, RNA and Proteins, as well as Covid-19 biology, and if you have any new info. about genetics, please let me know.

**Planned experiments:** We will perform the analysis of the experiments above using data from previous semesters. You will also have the same computer-based exercises. Hopefully, if we go back to face and face teaching, many of these experiments will be in person, but we are waiting to the end of Jan. 2021 for an update. Apart my age and past medical problems, we will have 12 students in the lab. +/- just 6 ft apart if you do not move, and we cannot open the windows, so a potential very scary scenario. If the number of Covid cases in Charleston drop to more normal levels, we will go back to face to face soon, but if not, there will be many questions to be answered, and mainly online, or perhaps 6 students per week rotating between online and face to face over a space of 2 hours in conditions if we get desperate, so lets hope this will not be the case, so be careful.

**Testing and grading:**

- 15% quizzes and zoom/poll questions
- 25% Lab reports as teams i.e. 2 students. Instructions for lab reports will be available on OAKS. There will be questions to answer and analyses to perform for each investigation. You must work closely with your partner to gather/analyze the data, which should be clearly presented, legible, and neat. The stepwise calculations done to obtain the results should be shown, as you will be graded accordingly.
- 25% Team lab exercises: these are computer-based
- 20% Final test (on OAKS),
- 15% Final powerpoint presentation (on zoom), details later, possible with three students per PPT.

**Grading scale:**

92 and above: A
90-91.9: A-
87-89.9: B+
83-86.9: B
80-82.9: B-
77-79.9: C+
74-76.5: C
70-73.9: C-
67-69.9: D+
64-66.9: D
60-63.9: D-
below 60: F
## Spring 2021 Academic Calendar

**Main dates in this calendar are subject to change without notice.**

### January 2021

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Wednesday, January 6 - Sunday, January 10</td>
<td>Students return by appointment to residence halls.</td>
</tr>
<tr>
<td><strong>Monday, January 11</strong></td>
<td><strong>Spring full semester and Express I classes begin.</strong></td>
</tr>
<tr>
<td>Monday, January 18</td>
<td>Martin Luther King, Jr. Holiday, observed. No classes. College closed.</td>
</tr>
<tr>
<td>Tuesday, January 19</td>
<td>• Last day of Drop/Add for full semester classes.</td>
</tr>
<tr>
<td></td>
<td>• Last day for students to submit a request to Audit or apply for a Pass/Not Pass grade option full semester classes.</td>
</tr>
<tr>
<td><strong>Wednesday, January 27</strong></td>
<td><strong>Attendance Verification for faculty opens in MyCharleston via Final Grades.</strong></td>
</tr>
<tr>
<td>Friday, January 29</td>
<td>Last day for faculty to submit Individual Enrollment and Bachelor's Essay applications to the Registrar's Office for all full semester, Express I and Express II classes.</td>
</tr>
</tbody>
</table>

### February 2021

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Monday, February 1</strong></td>
<td>Last day to submit an Undergraduate Application to Graduate in Spring 2021.</td>
</tr>
<tr>
<td><strong>Wednesday, February 3</strong></td>
<td>Attendance Verification for faculty closes at noon.</td>
</tr>
<tr>
<td><strong>Wednesday, February 10</strong></td>
<td>Last day for students to withdraw with a grade of &quot;W&quot; from Express I classes. NOTE: Holds placed by the Treasurer's Office will prohibit students from being able to withdraw in Banner Self-Service. Students should settle the hold with the Treasurer to be able to withdraw online or contact the Registrar's Office by this deadline to withdraw.</td>
</tr>
<tr>
<td><strong>Friday, February 12</strong></td>
<td><strong>Spring 2021 Express I Course-Instructor Evaluations open.</strong></td>
</tr>
<tr>
<td>Saturday, February 13</td>
<td>Storm Day Makeup (on campus instruction for PE Activity Courses, labs, studio, performance courses only; virtual instruction on these days for all other courses). (SD*)</td>
</tr>
<tr>
<td>Sunday, February 14</td>
<td>Storm Day Makeup (on campus instruction for PE Activity Courses, labs, studio, performance courses only; virtual instruction on these days for all other courses). (SD*)</td>
</tr>
<tr>
<td><strong>Monday, February 15</strong></td>
<td>Last day to submit a Graduate Application to Graduate in Spring 2021.</td>
</tr>
<tr>
<td><strong>Tuesday, February 16</strong></td>
<td>Last day for students to submit incomplete undergraduate coursework to faculty for any Fall 2020 session (Fall 60 Day Deadline). Change of grade form to be submitted by faculty.</td>
</tr>
<tr>
<td><strong>Tuesday, February 23</strong></td>
<td>Undergraduate missing and incomplete grades for Fall 2020 convert to a grade of &quot;F&quot;.</td>
</tr>
<tr>
<td><strong>Wednesday, February 24</strong></td>
<td>Last day of Express I classes.</td>
</tr>
</tbody>
</table>
March 2021

<table>
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<tr>
<th>Date(s)</th>
<th>Description</th>
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</thead>
</table>
| Monday, March 1     | • Express I final exams for M/W classes.  
                          • Full semester Mid Term and Express I final grading open to faculty.                                                             |
| Tuesday, March 2    | • Review and Study Day.  No classes.  
                          • Spring 2021 Express I Course-Instructor Evaluations close.                                                                        |
| Thursday, March 4   | Review and Study Day.  No classes.                                                                                                                                                           |
| Monday, March 8     | • Express II classes begin.  
                          • Full semester Mid Term and Express I final grades due by noon EST.                                                                |
| Wednesday, March 10 | • Last day of Drop/Add for Express II classes.  
                          • Last day for students to submit a request to Audit or apply for a Pass/Not Pass grade option for an Express II class.        |
| Thursday, March 18  | Maymester and Summer Sessions registration begins for College of Charleston students.                                                       |
| Monday, March 22    | Last day for students to withdraw with a grade of "W" from full semester classes  
                          NOTE: Holds placed by the Treasurer's Office will prohibit students from being able to withdraw in Banner Self-Service.  
                          Students should settle the hold with the Treasurer to be able to withdraw online or contact the Registrar's Office by this deadline to withdraw. |
| Tuesday, March 23   | Fall 2021 early registration begins based on earned hours.  
                          NOTE: Holds will prohibit students from being able to register.  
                          Students should settle holds with the office that placed the hold before their opportunity to register.                          |
| Tuesday, March 30   | Maymester and Summer Sessions registration begins for visiting students.                                                                          |

April 2021

<table>
<thead>
<tr>
<th>Date(s)</th>
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<tbody>
<tr>
<td>Tuesday, April 6</td>
<td>Spring 2021 Full semester and Express II Course-Instructor Evaluations open.</td>
</tr>
</tbody>
</table>
| Wednesday, April 21 | Last day of full semester and Express II classes.  Only classes that normally meet on Thursday should meet on this date.  
                          #                                                                                                                                 |
| Thursday, April 22  | • Reading Day  
                          • Full semester and Express II grading open to faculty.                                                                 |
| Friday, April 23    | First day of full semester and Express II final exams.  
                          In the BIOL-305L, the final will be on April 12 – 15 2021.                                                                          |
| Friday, April 30    | • Last day of full semester and Express II final exams.                                                                                                                                              |
Spring 2021 Full semester and Express II Course Instructor Evaluations close.

May 2021

<table>
<thead>
<tr>
<th>Date(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Monday, May 3</td>
<td>Full semester and Express II final grades due by 5 p.m. EST. Faculty must submit a Change of Grade form after the 5 p.m. EST deadline.</td>
</tr>
</tbody>
</table>
| Tuesday, May 4     | - Final grades for full semester and Express II classes available to students on MyCharleston after noon.  
                     - Graduate missing and incomplete grades for Fall 2020 convert to a grade of "F". |
| Friday, May 7      | Spring 2021 Commencement Ceremony: Graduate, Undergraduate School of Humanities and Social Sciences |
| Saturday, May 8    | Spring 2021 Commencement (2 Ceremonies): (Morning: Undergraduate School of the Arts and School of Business)  
                     (Afternoon: Undergraduate School of Education, Health and Human Performance; Undergraduate School of Languages, Cultures and World Affairs; Undergraduate School of Sciences and Mathematics) |
| Wednesday, May 12  | Degrees are scheduled to be posted on this date. Students should wait until after this date to order official transcripts if they want the degree to appear on the transcript. |

July 2021

<table>
<thead>
<tr>
<th>Date(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, July 6</td>
<td>Last day for students to submit incomplete undergraduate coursework to faculty for any Spring 2021 class (Spring 60 Day Deadline). Change of grade form to be submitted by faculty.</td>
</tr>
<tr>
<td>Tuesday, July 13</td>
<td>Undergraduate missing and incomplete grades for Spring 2021 sessions convert to a grade of “F”.</td>
</tr>
</tbody>
</table>

# Monday, April 19 (make up Monday class for Martin Luther King, Jr Holiday); Tuesday, April 20 (make up Tuesday class for March 2); Wednesday, April 21 (make up Thursday class for March 4).  
*SD – Storm Day Makeup (no classes unless the College deems necessary)
Note: Consistent with all applicable laws, any weekend day or designated holiday may be used as a storm makeup day.

Last Revised: 10/14/2020
Check on [https://registrar.cofc.edu/calendars/ac-2021spring.php](https://registrar.cofc.edu/calendars/ac-2021spring.php) for full Info.

**COURSE POLICIES**

**Attendance and absence**

I will NOT enforce a strict attendance policy as it may inadvertently send the message that attending class is more important than our shared responsibility for community wellness by staying home when we are sick. However, I will trust you to tell me directly any time if you miss the lab. In return I will trust that the explanation you give me for the absence is honest and truthful. In the eventuality that your absence is prolonged, I will work with you to provide alternative learning and assessments with documented proof.
Lab Safety:
A list of safety policy and procedures will be discussed even in the online labs. as if you work in a real lab. hopefully later. The official SSM lab safety policy document is posted on OAKS and needs to be reviewed. If you were in a real face of face lab. student i.e. with no covid-19, you would have to take a lab safety quiz and you had to PASSED it to continue in the lab. …… This will be delayed due to Covid, but we will discuss the issues and a quiz, and back in the lab. you will have to sign a form you agreed to the rules in the lab. (and in all labs. everywhere) and if you say no, the department will ask you to leave the lab ….

Reason, if you are going to be a nurse, doctor or a physician assistant, researcher etc. you need to know the rules, especially with the metric system – if you inject the wrong dose, you can kill a human.

…. “The third-leading cause of death in US most doctors don't want you to know about. A recent Johns Hopkins study claims more than 250,000 people in the U.S. die every year from medical errors (in surgery). Other reports claim the numbers to be as high as 440,000. Feb 22, 2018, https://www.cnbc.com/2018/02/22/medical-errors-third-leading-cause-of-death-in-america.html"
OK, injections are not all medical errors, but "Each year, in the United States alone, 7,000 to 9,000 people die due to a medication error with a wrong dose prescription/wrong dose preparation, https://www.ncbi.nlm.nih.gov/books/NBK519065/"

Like in face – face labs. this online class will include a variety of online and technology enhanced components to reinforce continuity of learning for all enrolled students. Before the drop/add deadline, students should decide whether the course plan on the syllabus matches their own circumstances.

OAKS, including Gradebook, will be used for this course throughout the semester to provide the syllabus, class materials, announcements, and grades for each assignment, which will be regularly posted. It is your responsibility to check OAKS for updates frequently.

Recording of Classes (via ZOOM)
Class sessions will be recorded via zoom. By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only, and may not be shared with anyone who is not enrolled in the class. As the “online” zoom sections (2 or more) will normally have students asking a question in the session, the recording will record your voice. If students do not want to be 'seen' or 'recorded', they can mute or turn off their video during the synchronized meetings, and they can watch a recording of the synchronized meetings afterwards. This is legally up to you, but you have the option.

Inclement Weather, Pandemic or Substantial Interruption of Instruction
If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.

“Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when suspected, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This status indicator will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent.

Students can find the complete Honor Code and all related processes in the Student Handbook at: [http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php](http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php)

**Disability/Access Statements:**
Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged.

**Center for Student Learning:**
The Center for Student Learning’s (CSL) academic support services provide assistance in study strategies, speaking, hearing & writing skills, and course content. Services include tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at [http://csl.cofc.edu](http://csl.cofc.edu) or call (843) 953-5635. **If a student needs this help, please let me know ASAP to make sure you have all your rights.**

**Inclusion:**
The College of Charleston offers many resources for LGBTQ+ students, faculty and staff along with their allies.

- Preferred Name and Pronoun Information
- On Campus Gender Inclusive facilities
- Campus Resources
- College of Charleston Reporting Portals
- National Resources for Faculty & Staff
- GSEC Reports
- Documenting LGBTQ Life in the Lowcountry (CofC Addlestone Library Special Collections Project)
- College of Charleston Quality Enhancement Plan (QEP)
- Articles about CofC and LGBTQ+ Issues
Statement on “Religious Accommodation for Students”

The College of Charleston community is enriched by students of many faiths that have various religious observances, practices, and beliefs. We value student rights and freedoms, including the right of each student to adhere to individual systems of religion. The College prohibits discrimination against any student because of such student’s religious belief or any absence thereof.

The College acknowledges that religious practices differ from tradition to tradition and that the demands of religious observances in some traditions may cause conflicts with student schedules. In affirming this diversity, like many other colleges and universities, the College supports the concept of “reasonable accommodation for religious observance” in regard to class attendance, and the scheduling of examinations and other academic work requirements, unless the accommodation would create an undue hardship on the College. Faculty are required, as part of their responsibility to students and the College, to ascribe to this policy and to ensure its fair and full implementation.

The accommodation request imposes responsibilities and obligations on both the individual requesting the accommodation and the College. Faculty members are expected to reasonably accommodate individual religious practices. Examples of reasonable accommodations for student absences might include: rescheduling of an exam or giving a make-up exam for the student in question; altering the time of a student’s presentation; allowing extra-credit assignments to substitute for missed class work or arranging for an increased flexibility in assignment dates. Regardless of any accommodation that may be granted, students are responsible for satisfying all academic objectives, requirements and prerequisites as defined by the instructor and by the College.

2020 – 2021 Religious Holidays

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Faith</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 7, 2021</td>
<td>Christmas</td>
<td>Orthodox Christian</td>
</tr>
<tr>
<td>February 17, 2021</td>
<td>Ash Wednesday (Beginning of Lent)</td>
<td>Christian</td>
</tr>
<tr>
<td>February 25-26, 2021</td>
<td>Purim</td>
<td>Jewish</td>
</tr>
<tr>
<td>March 15, 2021</td>
<td>Great Lent Begins</td>
<td>Christian</td>
</tr>
<tr>
<td>March 20, 2021</td>
<td>Naw-Ruz</td>
<td>Baha’l Faith</td>
</tr>
<tr>
<td>April 2, 2021</td>
<td>Good Friday</td>
<td>Christian</td>
</tr>
<tr>
<td>March 26 – April 3, 2021</td>
<td>Passover</td>
<td>Jewish</td>
</tr>
<tr>
<td>April 12-13, 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 11, 2021</td>
<td>Ramadan</td>
<td>Muslim</td>
</tr>
<tr>
<td>April 30, 2021</td>
<td>Good Friday (Orthodox)</td>
<td>Orthodox Christian</td>
</tr>
<tr>
<td>April 20 and 28, 2021</td>
<td>Ridvan</td>
<td>Baha’l Faith</td>
</tr>
</tbody>
</table>


Mental & Physical Wellbeing:
At the college, we take every students’ mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.953.5520). And if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at http://counseling.cofc.edu or 843.953.5640 3rd Robert Scott Small Building) or the Students 4 Support (certified volunteers through texting "4support" to 839863, visit http://counseling.cofc.edu/cct/index.php, or meet with them in person 3rd Floor Stern Center). These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.

Food & Housing Resources:
Many CofC students report experiencing food and housing insecurity. If you are facing challenges in securing food (such as not being able to afford groceries or get sufficient food to eat every day) and housing (such as lacking a safe and stable place to live), please contact the Dean of Students for support (http://studentaffairs.cofc.edu/about/salt.php). Also, you can go to http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to Professor ABC if you are comfortable in doing so.

SAFETY POLICY AND PROCEDURES

The School of Sciences and Mathematics of the College of Charleston understands that the safety of our students, staff and faculty is of paramount importance. Engendering a safety culture is an important part of our mission in teaching and doing science. Each department, course of instruction, or research lab may require higher standards or procedures. The policies and procedures set forth below are understood to be minimum requirements across our departments.

In this document, the term “laboratory” is meant for a work space/facility where chemicals, biological agents, or equipment is used for research and/or instruction.

No one (student, staff, faculty, or visitor) will be allowed in a laboratory (teaching or research) to perform experiments or where experiments may be in progress unless these regulations are followed.

Students dismissed from a teaching lab due to violations of the safety procedures will not be allowed to re-enter the laboratory until authorized to do so by their supervisor (instructor) and, in the case of research laboratories, by the department chair or designee. Any course work missed because of a violation of these guidelines cannot be made up at another time (or by an extension of the lab period) and will be treated as an unexcused absence.
1. You are responsible for knowing the biological, chemical, electrical, ergonomic, mechanical, and physical hazards associated with the equipment and materials that are being utilized in the laboratory. Listen to all instructions and ask questions about that which you do not understand.

2. Know the location of safety equipment: telephones, emergency shower, eyewash, fire extinguisher, fire alarm pull.

3. Know the appropriate emergency response procedures. If there is an injury or emergency, call 953-5611.

4. Do not work alone in the laboratory if you are working with hazardous materials or equipment.

5. Use hazardous chemicals, equipment, and biological agents only as directed and for their intended purpose.

6. Do not engage in horseplay, pranks or other acts of mischief while in lab.

7. Drinking, eating, and application of cosmetics is forbidden in laboratories where chemicals or biohazards are present. Smoking is forbidden in all College buildings.

8. Appropriate personal protective equipment shall be worn. The dress code for laboratory work when using chemicals, biological or physical hazards, or when instructed to do so by the laboratory supervisor is as follows:
   a) Wear safety glasses or goggles at all times.
   b) No exposed skin on arms, legs or torso.
   c) Wear lab coats or other approved protective garments.
   d) Wear gloves or other personal protective equipment (PPE) as directed by the instructor or mandated by prudent practices based on the chemicals being handled. If in doubt, wear appropriate gloves. Latex is not permitted. Avoid cross-contamination.
   e) Remove PPE (gloves and lab coat) when exiting the laboratory.
   f) Wash your hands, even if gloves were used, before leaving a lab where you did any lab work.
   g) Closed toe shoes are required. The heel and top of foot must be covered. High heeled shoes, sandals, and perforated shoes are not permitted.
   h) Confine long hair and loose clothing.

9. Inspect equipment or apparatus for damage before adding chemical reagents or biological samples or energizing electrical equipment. Do not use damaged equipment.

10. Never remove chemicals, biological samples, or laboratory equipment from a lab without proper authorization.

11. Presume that all chemicals and biological samples used in the laboratory are hazardous for you and the environment, unless instructed otherwise.

12. Never leave an experiment unattended unless proper safety precautions are in place.
13. Read all labels on chemicals twice before using them in the lab. Read all instructions twice for the operation of any equipment or machinery.

14. Properly and safely dispose of all waste materials.

15. Treat sharps and broken glassware containers carefully.
   a) Broken glass should be disposed of in properly marked safety containers. All sharps (needles, razor blades, etc.) used for any purpose must be disposed of in specially labeled SHARPS containers.
   b) Do not place contaminated glass in the broken glassware container. Consult your supervisor.
   c) Waste chemicals and contaminated PPE should be discarded as directed.

16. When using a reagent, replace the lid immediately. Never return unused reagents to stock bottles. Take only the amount needed for your experiment.

17. All chemicals and biological samples/media are to be disposed of in appropriately labeled containers. Specific instructions for each material will be provided. Pay attention to waste container labels before adding the material to be discarded.

18. Use good personal hygiene. Keep your hands and face clean. Wash hands thoroughly with soap and water after handling any chemical or biological agent.

19. Keep the work area clean and uncluttered with chemicals and equipment. Clean up the work area on completion of an operation or an experiment. Before leaving the laboratory, you are responsible for making sure your lab area is clean and organized.

20. Never store a chemical or biological specimen in an unlabeled container.

20. Always have your College of Charleston identification and insurance information with you when working in a laboratory. MedicAlert identification must be worn if you have any potential life-threatening chemical sensitivities or medical conditions.

21. Report any accident or injury, however minor, to your teaching assistant, instructor, or lab supervisor immediately. An accident report form must be completed and forwarded to the department chair, dean, and to the Director of Environmental Health and Safety.

If you have questions/concerns about safety in the lab please first consult your instructor. If these are not answered, please see the department chair. Finally, you may consult the director of Environmental Health and Safety, Randy Beaver at 3-6802 or beaverr@cofc.edu. Adopted: March 7, 2012
CougarAlert

The College of Charleston has an agreement with Blackboard Connect Inc. (formerly The NTI Group, Inc. (NTI)) to use its Connect ED communication software to provide an emergency notification system that is capable of reaching students, faculty, staff and parents within minutes of a campus crisis. This system is called CougarAlert.

Information for Students

The CougarAlert emergency notification system will contact up to six phone numbers for the student. Students may include family member numbers in their address and phone number information.

All students should log onto MyCharleston to review their address and telephone information and update as needed.

To access the address and telephone information, follow these steps:
1. Log on to MyCharleston
2. Click on the Academic Services tab
3. Click on the Banner Self-Service link in the third column
4. Click on the Personal Information link
5. Click on the Update Address and Phones and Cougar Alert link

The CougarAlert system will pull the phone number in the following order – cell phone with text messaging option, cell phone without text messaging option, residence hall room phone number, mailing phone number, home phone number, parent phone number and parent 2 phone number.

If you do not have one of these numbers in your student record, the system will select the next number on the list.

To avoid issues related to timely communication of emergency messages to the proper places, every student must update his or her contact information in MyCharleston with current and accurate information.

CougarAlert Display Information

When you receive an emergency message from the College of Charleston’s CougarAlert System, the return e-mail address will be displayed as cougaralert@cofc.edu and Caller ID will be displayed as 843.725.7246 (this is the College’s Emergency Information Hotline).

Testing and Implementation

Testing will be conducted each semester to verify all systems are operating properly. The campus community will be notified via e-mail and web page postings when testing of the system will be conducted.

Blackboard Connect Software

Blackboard Connect is an emergency communication software that sends notification before, during and after an emergency. With this new system, the College will be able to communicate in many modes, including voice messages to home, work and cell phones; text messages to cell phones, PDAs and other devices; written messages to e-mail accounts; and messages to teletypewriters and telecommunication devices (TTY/TDD) for the hearing impaired. In combination with our existing communications methods and emergency response plans, this new notification system will significantly enhance the College of Charleston’s ability to maintain a learning environment in which students are safe, secure and comfortable.

In an emergency, communications to the campus will be issued in the following priority order:
1. Message to the Blackboard Connect Emergency Notification System (phone and e-mail).
2. Recorded message to the College’s Emergency Information Hotline, 843.725.7246.
3. Update to the Website.
4. Printed update sheets to be distributed and posted on campus (if necessary).

The CougarAlert system will only be used to notify you in the event of a campus crisis or emergency.

PS. If you see errors etc. in the syllabus, please let me know, thanks.