Professional Skills (BIOL2200 / BIMS2200)
Department of Life Sciences
Fall 2018

A. COURSE INFORMATION
   Course number/section: BIOL 2200.003/BIMS 2200.003
   Class meeting time: W 7:00-8:40 p.m.
   Class location: BH 201
   Course Website: bb9.tamucc.edu/: 70862.201809 and 70863.201809

B. INSTRUCTOR INFORMATION
   Instructor: Dr. Simon Geist
   Office location: Science Lab1, #101
   Office hours: MW 11:00-12:30, T 9:00-11:00
   Telephone: 361 825 4164
   e-mail: simon.geist@tamucc.edu
   Appointments: Set up via phone or email at least 24 hrs in advance

C. COURSE DESCRIPTION
   Catalog Course Description
   2 sem. hrs. (2:0) Presentation and discussion of selected topics relating to the professional skills of practicing scientists including literature searches, reviews, paper presentation, professional opportunities and job requirements. Biology and Biomedical Science majors only. Students may substitute UCCP 1101 - First-Year Seminar I. (or HONR 1101 - Honors Freshman Seminar) and UCCP 1102 - First-Year Seminar II. (or HONR 1102 - Honors Freshman Seminar) for this course.

   Extended Course Description
   This course involves presentation and discussion of selected topics relating to the professional skills of practicing biological scientists including literature searches, reviews, paper and poster presentations, professional opportunities and job requirements. The course also covers application of scientific literature research skills, including a review of library services pertinent to science, an introduction to ethical issues in science, and guidance on application completion and interviewing.

D. PREREQUISITES AND COREQUISITES
   Prerequisites
   none
   Corequisites
   none
E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

 Highly recommended Textbook(s)

 Please check with instructor before obtaining these.


Optional Textbook(s) or Other References

 Information may be taken from these and presented in lecture, but the student will not be expected to buy them.


Supplies

 Textbook, copies of papers required for your project (do off library databases).

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

 Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

 Upon completion of this course, students will be able to perform these outcomes:

 1. Design and write professional scientific documents (resumes, personal
statements) used in employment searches or application to graduate and/or professional schools.

2. Distinguish between primary reports and reviews of scientific literature.

3. Describe and construct the components of primary scientific literature in the A-IMRAD format.

4. Design a hypothesis of a biological problem, based on extension of a problem from primary scientific literature.

5. Produce a poster and a Power Point presentation of the analysis of this biological problem.

6. Assess and critique the hypotheses, approach, and presentations of peers in a professional manner.

7. Assess and explain ethics in science, and classify examples of scientific misconduct.

8. Complete a job application that stimulates interest and understand the interview process.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This course will be a combination of lecture section which will include traditional lecture, discussion, and in class participation (including student presentations).

H. MAJOR COURSE REQUIREMENTS AND GRADING

TOTAL POINTS POSSIBLE 1000 points

Extra credit assignment may be given at the prerogative of the instructor.

A > 900 pts B = 800-899 C=700-799 D=600-699 F<600

Points are earned by delivering the following assignments and the quality of each:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Max. Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Title &amp; Abstract Scientific Writing (Instructor will give students a short paper missing the title and abstract “decapitated paper”; they will write abstract and title of paper.)</td>
<td>50</td>
</tr>
<tr>
<td>2. Bibliography Library Research (Students will turn in a bibliography of a minimum of five references is required, of which only one can be reviews. <strong>No Internet resources (websites, blogs, Wikipedia etc.) may be cited as primary literature however the Internet can be used to search for primary literature from peer-reviewed journals. Student must format the bibliography in one specific journal style. Make sure you identify the Journal in writing at the top of the bibliography.)</strong></td>
<td>50</td>
</tr>
<tr>
<td>3. Resume/CV  Career Development</td>
<td>100</td>
</tr>
<tr>
<td>4.</td>
<td>Personal Statement Career Development</td>
</tr>
<tr>
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<tr>
<td>5.</td>
<td>Hypothesis design Students will read ~10 journal articles (of which only 1-2 will be reviews). They will take the discussion from one of the papers read, and extend the future experiments into an actual project in which they will formulate a hypothesis or problem statement, write two aims to test this hypothesis or problem statement, then state experiments to “test” these and use literature to devise experimental results. They will reach a conclusion and state what they would do in the future to extend their work.</td>
</tr>
<tr>
<td>6.</td>
<td>Poster &amp; Presentations Oral Defense (Students are required to make a poster of a research topic in their area of interest. The poster should be made in PowerPoint on a single slide with no animations and scaled to 4 feet by 3 feet in size. The poster will be presented to the class digitally in PowerPoint, as if they had done the research and printed out the poster. You must also do a five (5) minute oral defense of the research topic that the poster presentation covers, as if you were presenting this information at a formal meeting. Part of the evaluation in this area also includes peer and professor review (50% each). Some students may have to present a poster before they have received corrections on their bibliography.)</td>
</tr>
<tr>
<td>7.</td>
<td>PowerPoint Presentation (Students must do a 10 to 15-slide PowerPoint presentation of their topic of interest (excluding the title slide). The full presentation (present + questioning) must run in length between 8 to 10 minutes, ideally talk for 8 minutes and then answer questions for 2 minutes from their peers. The total time for presentation and questions should be 10 min, and MUST NOT exceed 10 minutes! Part of the evaluation also includes peer review (50%), as well as professor review (50%). Note that the PowerPoint and the Poster will be on the same topic!!)</td>
</tr>
<tr>
<td>8.</td>
<td>Final Exam</td>
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<tr>
<td>9.</td>
<td>Active Participation</td>
</tr>
<tr>
<td>10.</td>
<td>Attendance (recorded with Signin sheet)</td>
</tr>
</tbody>
</table>

3 tips for successfully completing the class and score an excellent grade:

1. For a successful completion of this class a regular attendance is of utmost importance.
2. Timely submission of the deliverables is of utmost importance. Late submissions may only be accepted with a penalty in points, if reasonable excuse is presented, and depend on instructor approval. Do your math based on the table, and you will see that one or two missing deliverables will not allow you to get an excellent grade.
3. Active participation involves participation in discussions during the first half of the semester, in the second half the students will present poster and oral talks while the rest of the class and the instructor are rating the quality of the talks on evaluation sheets. The instructor collects these sheets at the end of each class and they are a document for active
participation.

I. **COURSE CONTENT/SCHEDULE**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENTS</th>
<th>ASSIGNM. Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 29</td>
<td>Overview, Intro to course, Bio on Dr. Geist, Schedule posters and talks</td>
<td>Identify a topic (manuscript) for the presentations after the break</td>
<td>none</td>
</tr>
<tr>
<td>Sep 5</td>
<td>Topics, Scientific Method, Study Design</td>
<td>Write a title and abstract for a decapitated paper</td>
<td>none</td>
</tr>
<tr>
<td>Sep 12</td>
<td>Library resources, internet searches, keywords, primary and secondary literature, journal/paper format / Library visit</td>
<td>Write bibliography</td>
<td>Title &amp; Abstract due</td>
</tr>
<tr>
<td>Sep 19</td>
<td>Resume/CV &amp; Personal Statement</td>
<td>Write either Resume or CV, and Personal Statement</td>
<td>none</td>
</tr>
<tr>
<td>Sep 26</td>
<td>How to make a poster, how to do an oral presentation</td>
<td>Prepare a poster</td>
<td>Bibliography due</td>
</tr>
<tr>
<td>Oct 3</td>
<td>Ethics and Integrity in Science plagiarism / Hypothesis &amp; Experimental Design</td>
<td>Hypothesis Assignment</td>
<td>none</td>
</tr>
<tr>
<td>Oct 10</td>
<td>Career Counseling</td>
<td></td>
<td>Resume/CV due</td>
</tr>
<tr>
<td>Oct 17</td>
<td>Academia / Applying to Grad School</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Oct 24</td>
<td>Teaching K-12/ Interview</td>
<td>none</td>
<td>Personal Statement due</td>
</tr>
<tr>
<td>Oct 31</td>
<td>Poster Presentations</td>
<td>Present and evaluate according to schedule that will be made in class</td>
<td>none</td>
</tr>
<tr>
<td>Nov 7</td>
<td>Poster Presentations</td>
<td>Present and evaluate according to schedule that will be made in class</td>
<td>Hypothesis / Experimental design due</td>
</tr>
<tr>
<td>Nov 14</td>
<td>Poster Presentations</td>
<td>Present and evaluate according to schedule that will be made in class</td>
<td>none</td>
</tr>
<tr>
<td>Nov 21</td>
<td>Thanksgiving Reading Day No Class</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>Nov 28</td>
<td>Oral Presentations</td>
<td>Present and evaluate according to schedule that will be made in class</td>
<td>none</td>
</tr>
<tr>
<td>Dec 5</td>
<td>Oral Presentations</td>
<td>Present and evaluate according to schedule that will be made in class</td>
<td>none</td>
</tr>
</tbody>
</table>
Dec 7-13  | Final exam  | none  | none

Note: Changes in this course schedule may be necessary and will be announced to the class by the instructor. The assignments and exams shown are directly related to content of syllabus sections above.

All important dates for general deadlines can be found online in the Fall 2018 Academic Calendar: https://www.tamucc.edu/academics/calendar/2018_fall.html.

J. **COURSE POLICIES**

### Attendance/Tardiness

Students are expected to attend every scheduled class, including Bell Library and Career Center presentations. It is the responsibility of the student to obtain any material missed during an absence from his/her classmates. PowerPoint slides are usually not provided on Blackboard 9.1 for students present in class, and will not be provided for late or absent students. You will get 10 points subtracted from the final total for each unexcused absence (negative attendance grade possible). Three unexcused tardies (2 minutes or more) equals one unexcused absence.

The professor makes the decision as to what constitutes an unexcused absence, as defined by the Catalogue and the University Handbook. Please schedule routine personal events (e.g., vacations, weddings, reunions, non-emergency medical or dental visits, parent-teacher conferences, household or auto repairs) to avoid conflicts with your classes. Oversleeping is never an acceptable excuse.

### Late Work and Make-up Exams

Students will be given a Late Assignment Penalty for tardy work: 10% assignment grade deduction per class day late. Final approval of late entries upon decision of instructor. Please note that assignments may be sent to me by e-mail. Tardiness is determined by the time noted on the instructor’s Inbox, but allowances can be made for server problems. Files contaminated by viruses, spyware, and worms will not be accepted. Missed extra credit assignments cannot be made up for unexcused absences; approved University absences may be given alternative extra credit work which may NOT be identical to the missed assignment.

### Extra Credit

Extra credit is given is given if course evaluations are submitted in time by the participants.

### Cell Phone Use

**DO NOT USE CAMERA PHONES IN LECTURE OR LAB. DO NOT SEND TEXT MESSAGES DURING CLASS.** Please turn off all cell phones, beepers, and Bluetooth devices, iPhones, Palm Pilots, Blackberrys, etc., before entering the classroom, or at least place them on silent or airplane mode. I would prefer that
earpieces not be worn in lecture. Recording of lectures with tape recorders can only be
done with permission of instructor.

**Laptop Use**
Laptop use in class will be granted by the instructor depending on the topic and
assignments in class.

**Food in Class**
Eating in class is permitted so long as it does not disrupt the learning environment or the health
and safety of others in the class.

**Missed Exam**
Prior notice will be required to miss the scheduled exam date/time. If absence is caused
by an emergency such as accident, illness etc. an alternative date for the exam may be
arranged with the professor.

**Participation**

**List-serve:** All students must subscribe to Opportunities List Serve. To subscribe, send a
separate e-mail to opportunities-list-request@sci.tamucc.edu. Make sure that your e-
mail appears in the “From” heading. In the subject heading, type “subscribe,” then send
the e-mail. Next, you will receive a second message with a long set of letters and
numbers in the subject line. You must also reply to that message in order to be
subscribed to the list-serve.

You may not receive the messages from the list-serve if your Internet service provider
(Yahoo, Hotmail, Excite, Roadrunner, Grande, etc.) filters these messages. You may
have to adjust the filters on your inbox to keep these messages from being placed in
junk-mail. I will be placing more information on Blackboard 9.1, including either papers
assigned, or a link.

At the end of the course, if you want to unsubscribe, send an e-mail that contains your e-
mail address in the “From” heading. In the subject heading, type “unsubscribe”, then
send the e-mail. I hope that students will continue to subscribe to opportunities-
list@sci.tamucc.edu!

**K. COLLEGE AND UNIVERSITY POLICIES**

- **Academic Integrity (University)**
  University students are expected to conduct themselves in accordance with the highest
standards of academic honesty. Academic misconduct for which a student is subject
to penalty includes all forms of cheating, such as illicit possession of examinations or
examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is
the presentation of the work of another as one’s own work.) In this class, academic
misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at
http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.
http://disabilityservices.tamucc.edu/

- **Statement of Academic Continuity**
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. **OTHER INFORMATION**

- **Academic Advising**
The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**GENERAL DISCLAIMER**
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.