Professional Skills (BIOL 2200.002; BIMS 2200.002)  
Department of Life Sciences  
Spring 2020

A. COURSE INFORMATION

Course number/section: BIOL 2200.002 & BIMS 2200.002  
Class meeting time: Monday and Wednesday, 9:00-9:50 AM  
Class location: Bay Hall 128  
Course Website: [https://bb9.tamucc.edu/](https://bb9.tamucc.edu/)

B. INSTRUCTOR INFORMATION

Instructor: Dr. Michael G. Reuscher  
Office location: Tidal Hall 121  
Office hours: MTWR 11:30 – 1:00 PM  
e-mail: [Michael.reuscher@tamucc.edu](mailto:Michael.reuscher@tamucc.edu)  
Appointments: please email

C. COURSE DESCRIPTION

Catalog Course Description: 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; satisfies computer literacy requirements. 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, and guidance on application completion and interviewing.

D. PREREQUISITES AND COREQUISITES

Prerequisites: None

Corequisites: None
E. **REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES**

**Required Textbook(s)**

No textbook is required. Students are expected to read peer-reviewed literature provided by instructors.

**Highly recommended Textbook(s):**


**Other helpful textbooks:**


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

**Supplies**

Tri-fold poster for your poster presentation.

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.

**By the end of this course**, students should be able to:
SLO1: Properly construct a resume, CV and cover letter for applications to jobs or grad school.
SLO2: Accrue knowledge in the biological sciences and improve skills necessary to communicate this information as a professional.
SLO3: Perform professional activities such as literature research, visual aid development, and organization of oral and written scientific research.
SLO4: Professionally present results from research activities, both in a written and visual/oral manner.
SLO5: Learn the components of a research paper in the A-IMRAD form.
SLO6: Distinguish between primary scientific literature and reviews.
SLO7: Critically analyze research papers.

G. INSTRUCTIONAL METHODS AND ACTIVITIES
   This course will be a combination of lecture section which will include traditional lecture, discussion, guest presenters and in-class participation (including student presentations).

H. MAJOR COURSE REQUIREMENTS AND GRADING

1. Personal Statement or Cover Letter: 100 Points
   Students will write a personal statement or cover letter that would be suitable for an application package for a job or graduate school.

2. Resume: 100 Points
   Students will write a resume that would be suitable for an application package for a job or graduate school.

3. Title & Abstract: 150 Points
   Instructor will give class a short “decapitated” paper (missing title and abstract); students will write title and abstract paper.

4. Bibliography: 100 Points
   Students will turn in a draft of their poster/power point bibliography. A minimum of 8 references is required, of which 5 must be primary literature, and only two can be reviews. One source may be from the Internet; the entire URL must be given with the date accessed. Use of the d.o.i. is encouraged. Student must format the bibliography in one specific journal style (you choose the journal), and state this format (journal name) at the top of their first page. You will use the same topic to do the Bibliography, Poster and the Power Point presentation.

5. Poster Presentations: 150 Points
   Students are required to make a poster of a research topic in their area of interest and present this area as if they had done the research.
   Students are expected to read 3-5 primary articles in their field of interest, take a future aim from a paper Discussion section, and formulate one hypothesis from this. Students will then describe a detailed research plan in which they will use experiments to “test” this hypothesis, and give results based on what they have read in the literature, as well as a conclusion. The results in the
Poster and Power Point will be based on the work described in their literature search. Posters are NOT to be printed out on the plotters, but instead students will purchase tri-fold display boards (36” x 48” or 91.4 x 122 cm) on which they can place their projects in Abstract-IMRAD form. Students must also do a 5 minute oral defense of this area, as if they were presenting this information at a meeting. Length of presentation may be adjusted to the number of students in this course. Other important guidelines will be discussed in class. Additionally, the (preliminary) grading rubric is attached at the end of this syllabus. This grading rubric will be used by both the instructor and the peers to evaluate the presentations. The overall presentation grade will consist of the instructor’s grade (50%) and the average grade given by the presenter’s peers (50%).

7. Power Point Presentation: 150 Points
Students must do a 10 to 15-slide Power Point presentation of their topic of interest (excluding the title slide). This presentation must run in length between 8 to11 minutes for presentation, with 2 to 4 minutes for questions from their peers. The total time for presentation and questions should be 15 min and MUST NOT exceed 20 minutes! Length of presentation may be adjusted to the number of students in this course. Other important guidelines will be discussed in class. Additionally, the (preliminary) grading rubric is attached at the end of this syllabus. This grading rubric will be used by both the instructor and the peers to evaluate the presentations. The overall presentation grade will consist of the instructor’s grade (50%) and the average grade given by the presenter’s peers (50%).

8. Presentation Discussion: 50 Points
For each presentation, two students will be assigned discussion leaders. This means that every student will co-lead the discussion of two poster and two Power Point presentations. Discussion leaders will have to read in the literature about the specific topic of the presentation they are assigned to, in order to become subject matter experts. Discussion leaders take charge asking the presenter questions. They can also come up with creative ways to engage the rest of the class in the discussion.

8. Final Exam: 150 Points

9. Attendance: 50 Points
Lose 10 pts per unexcused absence.

TOTAL POINTS POSSIBLE 1000
A>900 pts B=800-899 C=700-799 D=600-699 F<600
## I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment Due</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 22</td>
<td>Intro &amp; Syllabus</td>
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<tr>
<td>2</td>
<td>Jan 27</td>
<td>Presentation topics and presentation scheduling</td>
<td>Identify a scientific topic to present on after spring break</td>
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<td></td>
<td>Jan 29</td>
<td>Career Paths in Life Sciences</td>
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<td>3</td>
<td>Feb 3</td>
<td>How to create your online presence</td>
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<td>4</td>
<td>Feb 5</td>
<td>Resume, Personal Statements &amp; Cover letters</td>
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<td>5</td>
<td>Feb 10</td>
<td>Career Services Speaker</td>
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<td>6</td>
<td>Feb 12</td>
<td>Library Services</td>
<td>Resume</td>
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<td>7</td>
<td>Feb 17</td>
<td>CASA Speaker</td>
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<td>8</td>
<td>Feb 19</td>
<td>Writing a scientific paper</td>
<td>Cover letter or Personal Statement</td>
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<td>9</td>
<td>Feb 24</td>
<td>Bibliographies, Figures, Tables, Graphs</td>
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<tr>
<td>10</td>
<td>Feb 26</td>
<td>Funding opportunities / research proposals</td>
<td>Title/Abstract</td>
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<td>11</td>
<td>Mar 2</td>
<td>Paper discussion</td>
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<td>12</td>
<td>Mar 4</td>
<td>How to make an oral Presentations</td>
<td>Bibliography</td>
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<td>13</td>
<td>Mar 9-13</td>
<td>Spring Break</td>
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<td>14</td>
<td>Mar 16</td>
<td>How to make a poster presentation</td>
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<td>15</td>
<td>Mar 18</td>
<td>Student Poster Presentation</td>
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<td>Mar 23</td>
<td>Student Poster Presentation</td>
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<td>Mar 25</td>
<td>Student Poster Presentation</td>
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<td>18</td>
<td>Mar 30</td>
<td>Student Poster Presentation</td>
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<td>19</td>
<td>Apr 1</td>
<td>Student Poster Presentation</td>
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<td>20</td>
<td>Apr 6</td>
<td>Student Poster / PowerPoint Presentation</td>
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<td>21</td>
<td>Apr 8</td>
<td>Student PowerPoint Presentation</td>
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<td>22</td>
<td>Apr 13</td>
<td>Student PowerPoint Presentation</td>
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<td>Apr 15</td>
<td>Student PowerPoint Presentation</td>
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<td>Apr 20</td>
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<td>27</td>
<td>Apr 29</td>
<td>Student PowerPoint Presentation</td>
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<td>28</td>
<td>May 4</td>
<td>Student PowerPoint Presentation</td>
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<tr>
<td>29</td>
<td>May 6</td>
<td>Make-up presentations; review session; last day of class</td>
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<tr>
<td>30</td>
<td>May 11</td>
<td>Final Exam</td>
<td>8:00-10:30 am</td>
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Syllabus may change at the discretion of the instructor.
J. COURSE POLICIES

Absences: Attendance is mandatory. Exceptions will be granted in the event of illness, death in the family, university sponsored event and military deployment. Other conflicts such as attendance of professional symposia or the need to conduct field research will be considered on a case-by-case basis. In any case, documentation must be provided for absences to be considered excused. Students with a university approved scheduled absence (athletics, military duty, etc.) or other conflict must contact the instructor well in advance of the anticipated absence.

Attendance/Tardiness: Each unexcused absence result in the deduction of 10% of the attendance score, which equals 1% of the final grade. Frequent late arrivals in class may also result in point deductions at the discretion of the instructor.

Late Work and Make-up Presentations: If you have an emergency and cannot make your scheduled presentation date, please e-mail Dr. Reuscher as soon as possible. It is very important that every student is ready to present their presentation one class period before their scheduled presentation date, in case the scheduled presenter has an emergency and is unable to present that day. The same applies to the discussion leaders. We cannot afford losing an entire class period because we have no presenter!

Late assignments will get a point deduction of 10% for every 24-hour period following the deadline. A presenter that misses his/her assigned presentation date unexcused will also receive a 10% deduction.

Cell Phone Use
Not allowed.

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** (http://disabilityservices.tamucc.edu/)
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.

**M. 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.
Rubric for Grading Power Point Presentations

BIOL 2200 / BIMS 2200– Professional Skills – Spring 2020

M. Reuscher

Name of presenter _______________________________
Start time____________    Finish time _______________

Directions: Score as follows:
0= Missing     1= Poor    2= Fair    3= Good    4=Very Good   5=Excellent

1. Slides have appropriate format and color scheme (background, color) _____
2. Font is legible and appropriate color for all slides of power point presentation (PPP) ____
3. Title slide has authors with correct affiliations ______
4. PPP slides do not have too many words/facts on a single slide ______
5. PPP has clear and accurate tables and/or figures that help to tell the story____
6. Power point slides were fairly accurate for scientific content____
7. Presenter spoke in 8-11 minutes (deduct 1 pt for every two minutes under/over). ____
8. Presenter gave presentation in IMRAD form____
9. Presenter used proper speed, tone and diction in presentation. ____
10. Presenter told an interesting story with smooth transitions between sections. ____
11. Presenter clearly articulated major points of the work._____ 
12. Presenter adequately handled questions at the end of the presentation. ______
13. Presenter spoke without reading from slides or cheat sheet_____ 
14. Presenter exhibited professionalism in making presentation _____
15. Presenter talked to audience, not to wall or slides. _____

Final score given by instructor _______

Average number of points from peers______

Final score________________________

Comments:
Rubric for Grading Poster Presentations

BIOL 2200 / BIMS 2200– Professional Skills – Spring 2020

M. Reuscher

Name of presenter _______________________________

Start time____________    Finish time _____________

Directions: Score as follows:

0= Missing     1= Poor    2= Fair    3= Good    4=Very Good   5=Excellent

Format

1. Poster contains legible font, with appropriate sizes for headings and text _____
2. Poster color scheme and background are professional_____
3. Poster layout allows reader to peruse each section in logical sequence with self-
   explanation_____
4. Title and affiliations are clear and correct_____
5. Poster text, graphs, diagrams, and photos enable reader to understand topic ____

Scientific Content

6. Topic, problem or hypothesis is described on poster or by presenter ______
7. Topic or problem shows proper experimental design (controls, variables replicates)_____
8. Topic or problem shows that presenter was able to extend previous work to the next
   step_______
9. Topic or problem shows that presenter understands the significance (the “so-what?” factor) of
   the research_______

Presentation

10. Presenter spoke in 5-7 minutes (deduct 1 pt for each minute above/ below this range)_____
11. Presenter gave presentation in IMRAD form_____
12. Presenter clearly articulated major points of the work_____
13. Presenter gave a talk that was concise in describing work presented ____
14. Presenter adequately handled questions at the end of the presentation_____
15. Presenter talked to audience, not to wall or poster _____

Final score__________