A. COURSE INFORMATION

Course number/section: Professional Skills BIOL/BIMS 2200.001
Class meeting time: 10:00-11:40 am TWR
Class location: OCNR 222
Course Website: https://bb9.tamucc.edu

B. INSTRUCTOR INFORMATION

Instructor: Gregory W. Buck, Ph.D., Associate Professor
Office location: Center for the Sciences 251
Office hours: M 10:00-11:15 a.m.; TWR 1:00-2:15 p.m. or by appointment
Telephone: (361) 825-3717
e-mail: Gregory.Buck@tamucc.edu
Appointments: Preferred method is by e-mail

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. Biomedical Sciences and Biology majors only; satisfies computer literacy requirements.

Extended Course Description:
This course introduces students in learning to read, analyze, and critique scientific literature, and to distinguish between primary and secondary scientific literature. Students will also learn to devise a hypothesis, design experiments to test that hypothesis, and to presents results that allow the hypothesis to be rejected or not rejected. The course also reviews library services pertinent to science, and gives an introduction to ethical issues in science.

D. PREREQUISITES AND COREQUISITES

Prerequisites
BIOL 1407

Corequisites
None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)

Optional Textbook(s) or Other References
Day, RA and Gastel, B. 2011. How to write and publish a scientific paper. 7th ed. Santa Barbara, CA: Greenwood Press. This text is preferred. The 5th edition is too dated for class use. You may use either the 6th or 7th editions.

Supplies
You must obtain at your own cost the following: textbooks, tri-fold poster for poster presentation, copies of papers required for your project (do off library databases).

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
By the end of this course, students should be able to perform these outcomes at a proficiency level of 70% or more:

1. Design and write professional scientific documents (resumes, personal statements) to be 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.
## G. INSTRUCTIONAL METHODS AND ACTIVITIES

1. Resume Career Developmt. 100 R Jul 07  
   cover letter is optional

2. Personal Statement Career Developmt. 100 T Jul 12

3. Title & Abstract Sci. Writing 150 R Jul 14  
   Instructor will give class a short paper missing the title and abstract (“decapitated paper”); they will write abstract and title of paper.

4. Bibliography Library Research 100 W Jul 20  
   Students will turn in a draft of their poster/power point bibliography. A minimum of eight (8) references is required, of which five (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. **Student must format the bibliography in one specific journal style (NEJM, Fisheries Management, Journal of Bacteriology), and state this format at the bottom of their first page. N.B: You will use the same topic to do the Bibliography, Poster and the Power Point presentation.**

5. Poster & Presentations 150 Jul 19-21, Oral Defense  
   Jul 28-29
   --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. You must also do a five (5) minute oral defense of this area, as if you were presenting this information at a 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.

   (some students may be presenting on the same day as the Final Exam)
   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 to 12 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! Part of the evaluation also includes peer review (50%), as well as professor review (50%). **Note that the Power Point and the Poster will be on the same topic!!**

7. Final Exam 150 R Aug 4  
   R Aug 4-F Aug 5  
   additional poster presentations

8. Attendance 50  
   **You will get 10 points subtracted for the first unexcused absence (receive 40), 20 for the second (receive 30), and 50 pts for the third (receive zero). For the fourth absence, I subtract additional points, so you get 50 points taken away (-50).**

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H. MAJOR COURSE REQUIREMENTS AND GRADING

TOTAL POINTS: 1000  
A≥900 pts  B=800-899  C=700-799  D=600-699  F<600

Extra credit assignment may be given at the prerogative of the instructor, but are unlikely. Please see rubrics on Blackboard to see how assignments are graded.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>Final Exam</td>
<td>15</td>
</tr>
<tr>
<td>Bibliography</td>
<td>10</td>
</tr>
<tr>
<td>Homework (Resume, Personal statement)</td>
<td>20</td>
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<tr>
<td>Poster Presentation</td>
<td>15</td>
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<tr>
<td>Power Point Presentation</td>
<td>20</td>
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<tr>
<td>Decapitated paper (title/Abstract)</td>
<td>15</td>
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<tr>
<td>Attendance</td>
<td>5</td>
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I. COURSE CONTENT/SCHEDULE--Page/Chapter assignments from Gillen (G); Knisely (K); McMillan (M); Rosenberg and Hizer (R&H); Coleman and Ruxton (C&R); Day and Gastel (D/G)-7th ed.

<table>
<thead>
<tr>
<th>DATE (BY DAY OR WEEK)</th>
<th>TOPIC</th>
<th>CHAPTER(S)</th>
<th>ASSIGNMENTS</th>
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<tbody>
<tr>
<td>T July 5</td>
<td>Intro; personal statements, cover letters &amp; resumes;</td>
<td>Handouts; R&amp;H (Ch 1-10, 12)</td>
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<tr>
<td>W July 6</td>
<td>Intro to Science; Scientific Writing; Mr. Jace Medina, Career Ctr. Interviews and Resumes; stay in OCNR 222</td>
<td>G (Sec 3-8); K (Ch 1, 3); D/G (Ch. 4)</td>
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<tr>
<td>R July 7</td>
<td>Alternative Careers in Science &amp; Academic Careers</td>
<td>Decapitated Paper given</td>
<td>Resume due</td>
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<tr>
<td>T July 12</td>
<td>Bibliographies &amp; Scientific Writing</td>
<td>M (Ch 2, 4); C&amp;R (Ch. 1, 2)</td>
<td>Personal Statement due</td>
</tr>
<tr>
<td>W July 13</td>
<td>Oral Presentations &amp; Posters</td>
<td>G (Ch 1-2); K (Ch 2); M (Intro, Ch 1, 6); K: (Ch 8, Appdx 3; M (Ch 3); K (Appdx 2)</td>
<td></td>
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<tr>
<td>R July 14</td>
<td>Ethics in Science</td>
<td>Not in any text</td>
<td>Decapitated paper due</td>
</tr>
<tr>
<td>T July 19</td>
<td>Poster presentations</td>
<td></td>
<td>Bibliography due</td>
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<tr>
<td>W July 20</td>
<td>Poster presentations</td>
<td></td>
<td></td>
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<tr>
<td>R July 21</td>
<td>Poster presentations</td>
<td></td>
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<tr>
<td>T July 26</td>
<td>Poster presentations; power point presentations</td>
<td></td>
<td></td>
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<td>Date</td>
<td>Activity</td>
<td>Note</td>
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<td>W July 27</td>
<td>Poster presentations; Power point presentations</td>
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<td>R July 28</td>
<td>Power point presentations</td>
<td>Deadline to withdraw from TAMU-CC</td>
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<td>T Aug 2</td>
<td>Power point presentations</td>
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<td>W Aug 3</td>
<td>Power point presentations</td>
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<tr>
<td>R Aug 4</td>
<td>Final Exam; Power point presentations (reserved for absences)</td>
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<tr>
<td>F Aug 5</td>
<td>Final Exam and/or Power Presentation make-up</td>
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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 the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Attendance/Tardiness
Students are expected to attend every scheduled class meeting and to be on-time. It is the responsibility of the student to obtain any material missed during an absence from his/her classmates. Power Points are not placed in the library and placement on Blackboard will be limited.

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. However, after the 3rd day, late assignments will not be accepted. In-class late assignments are defined by being turned in after 10:05 am. Please note that class assignments may be sent to me by e-mail or slid under my office door; 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. DO NOT ASK THE CUSTODIANS to let you into my office to place an assignment on my desk.

Extra Credit
Probably none

Cell Phone Use
DO NOT USE CAMERA PHONES IN LECTURE. DO NOT SEND TEXT MESSAGES DURING CLASS. Please turn off all cell phones, beepers, Bluetooth devices, Black Berries, etc., before entering the classroom, or at least place them on silent mode. I would prefer that earpieces not be worn in lecture. DO NOT TAKE PHOTOS of Power Point slides or videos with your cell phone camera unless
otherwise instructed. Recording of lectures with recorders can only be done with permission of instructor—please see me privately.

**Laptop Use**
I have no problems with any student using a laptop in class, as long as they are not looking at pornography, anime, videos, etc.

**Food in Class**
I prefer that you not eat or drink in class, but I will not throw you out or ask you to leave.

**Missed Presentations/Exams**
Missed presentations will have 10% deducted from the final grade, unless there is a valid excuse as defined by instructor. I define excused absences as emergency visits to the ER or physician or dentist; job, graduate and professional school interviews; death of close family members (siblings, in-laws, parents, aunts or uncles, step-parents, grandparents or great-grandparents, first cousins), or University-approved absences as described in the Catalogue and Student Handbook. I have also excused interviews for US Citizenship, student presentations at national scientific meetings, professional school interviews, but NOT weddings, engagement parties, baptisms, graduations, celebrations of your 21st birthday, etc. Note that make-ups for presentations may occur on the same day as the Final Exam. There is no make-up for the final exam; if you will be out of town on the day of the final, please make prior arrangements with instructor.

**Participation**
I expect that all members in the class will participate in the questioning, discussions, and interactions within the lecture. Formal assessment of class participation is not done as part of grade, but I do informally monitor it, and I will note it if you ask me for a letter of recommendation.

**Others**
**Computer Literacy Requirement**: BIOL/BIMS 2200 includes use of various software programs (Word, Power Point, etc.) and students demonstrate computer competency within their assignments. All assignments must be typed on a computer using word processing programs—holographic assignments will not be accepted in most cases. "Successful completion of this class will satisfy the university computer literacy requirement."

**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)**
The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must be submitted. You (the student) must initiate the paperwork in the Student Services Center (the “Round Building”). No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.
Deadline to drop course with a “W” grade: F July 22
Deadline to withdraw from University for the summer session: T Aug 2

- **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 (ADA of 1990, including the ADA Amendments from 2008 (PL 110-325), 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.

  This act also includes **returning veterans** who may be experiencing cognitive and/or physical access issues in the classroom or on campus. 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/](http://disabilityservices.tamucc.edu/)

  If you need disability accommodations in this class, please contact the instructor as soon as possible. If you have mobility problems, are pregnant, or you may have a history of seizures, please notify the instructor *PRIVATELY* so that assistance can be given in case of fire drills or emergencies. Please have your Faculty Notification Letter from the Disabilities Service Office when you talk with Dr. Buck.

- **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.

  If class is cancelled due to a pending hurricane, that information is sent via your islander.tamucc.edu account. It is strongly suggested that students have a
functioning islander.tamucc.edu account!! I will also try to send it within Blackboard 9.1, as stated above. I will not send out personal information regarding grades through other types of e-mail servers, only through islander.tamucc.edu. Please make sure this account is working.

L. OTHER INFORMATION

Opportunities List serve: Please join and stay on this valuable source of information for jobs, summer programs and internships. If you have never joined the list serve, this is what you must do:

To subscribe, send a separate e-mail to opportunities-list-request@listserv.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.

After the initial message to subscribe, to send items on the list-serve, just type opportunities-list@listserv.tamucc.edu (do NOT add –request after list). You may not receive the messages from the list-serve if your Internet service provider (Yahoo, Hotmail, Excite, Roadrunner, Grande, etc.) keep these messages from being placed in junk-mail.

Academic Advising:
The College of Science and 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. The College's Academic Advising Center is located in CI Suite 350, and 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.