SENIOR BIOLOGY PRESENTATION

Course Description: Application of scientific literature research and presentation skills. Student’s oral seminar presentation in a scientific format on an approved biological topic. Focus is on the professional exchange of information between scientists. Students must also take the Major Field Test in Biology.

Course Overview: A seminar represents one means whereby knowledge is exchanged between biologists. This seminar is designed to provide a capstone opportunity to research and orally present scientific information in a professional format. Each student is expected to conduct himself/herself as a professional, including participation in scholarly discourse. Emphasis will be placed on reading, understanding, critiquing, and presenting scientific information.

Students can NOT present their own research or papers discussed in other classes.

LEARNING OBJECTIVES:

1. To increase your knowledge in a specific area of biology and to communicate this information in a concise and orderly manner to fellow scientists.

2. To increase your professional competency in the areas of literature research, organization, synthesis of information, visual presentation and appropriate attribution.

3. To develop the ability and confidence in yourself that is required in orally presenting knowledge concerning biological subjects.

4. To develop your skills in objectively evaluating the presentation/presenter of scientific information.

5. To understand the distinctions between primary scientific literature, review articles and other types of scientific publications, as well as how to extract key information.

Major Course Requirements

Tentative Evaluation:
Your final grade will be based on the percentage you earn out of the total possible points. Individual extra credit is not possible, but extra points may be built into assignments. Statistical manipulations, if used (at the Instructor’s discretion), will be performed only once, at the end of the semester. A 10-point grading scale will be used:

A = 90 - 100 % (But see Participation Requirement below)
B = 80 - 89.9 %
C = 70 - 79.9 %
D = 60 - 69.9 %
F = 0 - 59.9 %
<table>
<thead>
<tr>
<th>Topic</th>
<th>Points (Approximate)</th>
</tr>
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<tbody>
<tr>
<td>Oral Seminar Presentation</td>
<td>150</td>
</tr>
<tr>
<td>(Instructor Evaluation = 2/3)</td>
<td></td>
</tr>
<tr>
<td>(Peer Evaluations = 1/3)</td>
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<tr>
<td>Seminar Attendance</td>
<td>MANDATORY</td>
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<tr>
<td>(See Penalty Schedule Below)</td>
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<tr>
<td>Seminar Participation</td>
<td>30</td>
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<tr>
<td>Seminar Evaluations</td>
<td>30</td>
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<tr>
<td>Abstract</td>
<td>20</td>
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<tr>
<td>Annotated Bibliography</td>
<td>20</td>
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<tr>
<td>Other Assignments</td>
<td>50</td>
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<tr>
<td><strong>TOTAL POINTS (Approximate)</strong></td>
<td><strong>300</strong></td>
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The following **adjustments** to the raw score will determine the final grade:

**Attendance:** Downward adjustment of final grade as explained below

**Participation:** Upward adjustment of the final grade for *exceptional* participation and the grade of “A” requires participation

1. **Attendance:** You are obligated by enrollment to attend *each and every* seminar as both an audience member and peer evaluator. Absence for any part of the class will be counted as 1/2 of an absence. More than (2) unexcused absences from seminar will result in a full letter grade deducted from the student’s overall semester raw grade for each absence in excess of 2.

2. **Participation:** Intellectual curiosity and scientific discourse are attributes of good science. As a listener, it is your responsibility to ask questions or make comments to clarify or expand upon a given point in the speaker’s presentation. Feel free to offer alternative interpretations of data or question evidence. Participation will be monitored. Exceptional participation can result in an increased grade, but *some* participation will be a requirement for the grade of “A”.
3. Evaluation of Presentation:
   You will be graded on your depth of knowledge, organization, critical evaluation of data, ability to answer questions, employment of appropriate visual aids, and professional appearance. The overall presentation will also be evaluated, particularly your ability to provide sufficient background information and description of experiments. You will be graded only to a minor extent on your speaking ability. [SEE SEMINAR EVALUATION FORM BELOW]

   The evaluation will consist of the Instructor’s evaluation (counting 2/3 of the presentation score) and the peer evaluation mean (counting 1/3 of the presentation score). The peer evaluation mean (no pun intended) will be calculated by dropping the highest and lowest scores, and averaging the remainder.

Additional stipulations to the final grade include:

1. All seminars are scheduled in a random and fair manner. Once a presentation schedule is established, IT CANNOT BE CHANGED, and you MUST present on that day and time. Failure to show up on-time for your presentation will result in a zero. THIS IS NON-NEGOTIABLE. If you cannot be sure of your ability to show up for the presentation, you should wait and register for the class when you can.

2. Attendance Penalty: 2 unexcused absences allowed, thereafter a penalty of 1 letter grade per each additional absence. Note that participation is part of your grade and absences, excused or not, preclude the opportunity to participate. Missed assignment points are not excused; you will lose those points.

3. Seminar Length Penalty: Seminars not meeting the length (time) restrictions specified by the Instructor will be severely penalized 1 letter grade. This applies if your seminar is either too short or too long.

4. Each student is REQUIRED to sit for the Major Field Test (MFT). There is no charge to the student for taking this standardized test, but it will be administered outside of the regularly scheduled class periods, typically on a consecutive Friday or Saturday. You will receive information about registration and testing.

   The time schedule may require adjustment. Should this be the case, the assignments and weighting may change slightly. Additional assignments may or may not be provided at the Instructor’s discretion. Such assignments might include outside seminar attendance, homeworks, group projects, reading assignments, quizzes, etc.

   An assignment will likely be due during the last week of class.

Every attempt will be made to follow the time and evaluation schedules shown here. It is the student’s duty to attend each class session and be aware of all assignments, deadlines, changes, etc.

   Quizzes, homeworks and other assignments may be given unannounced in class. Unless specified otherwise, the assignments must be turned in individually and written in your own words, NOT COPIED. An assignment grade of ZERO will be given if the work is not in your own words.

COURSE REQUIREMENTS:

1. Students will contract for a specified presentation date, attend class regularly (see attendance policy), and participate actively in discussions.

2. Students will submit a typed page containing the proposed title and subject material for his/her presentation. At least 2
literature citations relevant to the topic will be included. This page will be submitted within three weeks of the first class meeting.

3. Students will turn in progress reports on their presentation preparation (bibliography, outline, annotated bibliography, abstract, etc) as specified during class. Quizzes may be given on individual reading assignments.

4. Students will participate in “journal club” activities which emphasize reading and interpreting scientific literature. Assigned papers will be carefully read for content and discussed in class.

5. Students will conduct a 20 minute oral presentation representing a synthesis of recent scientific information on a narrowly-defined, pre-approved biological topic of personal interest. The presentation should follow these guidelines:
   A. The presentation will focus on related information from at least three primary research articles. Key data in these articles will be presented to class using appropriate audiovisual aids (PowerPoint, transparencies, handouts, etc). Presentations should follow the format of a mini-review, with information arranged topically, but the elements of the IMRAD format should be included for presentation of data. Experiments and data should be critically analyzed. The presentations should NOT be generalized, encyclopedic reviews of a particular organism, disease or set of passive observations, but rather a focused presentation of experimental results. Students can NOT present their own research or papers discussed in other classes.
   B. Sufficient copies of your abstract should be available for your audience. Each student must present to the instructor a master copy (pdf preferred) of the key papers to be presented 1 week before the presentation. No exceptions.
   C. The presentation should, in a professional manner, cite specific literature references to both guide and inform the viewer.
   D. The presentation should employ visual aids to the extent that points are clarified.

6. Attendance, for the full class period, is mandatory. Roll will be taken and attendance will be factored into the grading. Absence for any part of the class (including lateness) will be counted as 1/2 of an absence. More than (2) unexcused absences will result in a deduction of one full letter grade from the student’s overall semester raw grade. Missed assignments can not be made up. You are advised that if you are unable to attend the weekly class meetings then you should reschedule your enrollment for a semester during which you can attend.

7. Each student is expected to be attentive during seminars and to actively participate in scientific discourse (information exchange). This means that you should ask questions of speakers, add relevant comments, provide opinions on data interpretation, etc. You MUST participate thoughtfully in order to be eligible to receive a grade of “A” in this course.

8. Students are required to serve as peer evaluators of each presentation. These peer evaluations will be conducted on a standard form which should be completed as directed. Each evaluation must contain some written comments to provide constructive criticism or compliments where due.

9. Attend one professional research seminar outside of class and submit a 1 page summary. The Instructor will keep the class informed of upcoming seminars.

10. You MUST subscribe to the Senior Presentation Listserv by sending a message to “srpres-list-request@sci.tamu.edu” with “Subscribe” in the subject line. You will receive a brief welcome message if done correctly. If you do not receive messages, check your spam folder & filter.

**Required Readings**

Required Textbook: None
Recommended Resources (or equivalent texts used in your Professional Skills class):


Additional Resources: The Instructor may make additional learning resources (books, reserve articles, software) available at the library.

*BlackBoard:* Course-associated site for posting notes, readings, handouts, etc.

You should subscribe to the Opportunities Listserv by sending a message to “opportunities-list-request@sci.tamucc.edu” with “Subscribe” in the subject line. This service provides notification of scholarships, research and volunteer opportunities and science-related job opportunities.

Course Policies

ALL E-MAIL COMMUNICATIONS WITH THE INSTRUCTOR OR LAB TA MUST BE MADE THROUGH YOUR OFFICIAL UNIVERSITY E-MAIL (@ISLANDER), BY UNIVERSITY RULE.

*Attendance/tardiness, Late work and Make-up Exams* You are expected to attend all classes and labs in a timely manner. Important new material, as well as schedule changes and quizzes may occur at any time. It is expected that you will take notes, ask/answer questions, and participate in group activities.

*LATE WORK will not be accepted, except as below, or unless otherwise specified.* Attendance is the student’s responsibility. You are responsible for the material covered in every lecture, even if it is not in the book, regardless of your attendance. Nothing missed during an unexcused absence can be made up. An excused absence allows us to make alternative arrangements to complete an assignment. Only unavoidable absences are excused. Routine events (holiday travel, non-emergency medical visits, parent-teacher conferences, household or auto repairs) should be scheduled to avoid conflicts with class. An acceptable excuse must be:

• from an appropriate source (doctor, dentist, funeral director) stating the nature of the event
• In writing, on official letterhead, and signed (it will not be returned)
• presented prior to, or within 1 week of, the absence
• It must state the dates for which the excuse applies

There are No make-up arrangements: In-class assignments cannot be made-up.

*Expectations:* You are responsible for your own education. Take notes in class as some new information may be presented. Lecture notes from the instructor, when made available, do not represent everything you need to know. Read the book and handouts for further detail not covered in class, and to be prepared for laboratory. If you don’t understand, then please ask, or see the instructor after class. Don’t allow yourself to fall behind. Be diligent and thorough on written assignments.

Also:
Be aware of university-imposed deadlines (i.e., drop dates)

* Be aware of due dates, including changes which may be announced in class.

* Keep track of your progress in class.

**Cell Phone/Electronic Device Usage Policy on Disruptive Behavior:**
As adult university students, you are expected to act with courtesy and common sense. Disruptive, disrespectful, or abusive language/behavior towards anyone in class (student, staff, faculty) will not be tolerated and could result in permanent removal from class. This includes tardiness to class, talking in class, insubordination, and electronic disturbances (cell phones, iPods, gameboys, etc). **Turn it off.** Hazardous materials are used in the laboratory so “play” or reckless behavior will not be allowed. Children are not allowed in class or lab.

**Academic Integrity/Plagiarism.**
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 appropriate action at the discretion of the instructor, including failure of the course. **Everything should be in your own words.**

**Dropping a Class**
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 me before you decide to drop to be sure it is the best thing to do. 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.

**Preferred methods of scholarly citations**  *(Format from J. Experimental Marine Biology and Ecology)*

**Grade Appeals** *
As stated in University Rule 13.02.99.C2, Student Grade Appeals, 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 Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**Disabilities Accommodations** *
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 or visit Disability Services at (361) 825-5816 in Driftwood 101.

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.
Tentative Syllabus
(course schedule)

Wk 1: Jan 24  Introduction; Types of Scientific Literature
Wk 2: Jan 31  Syllabus; Scientific Literature
Wk 3: Feb 7  Literature Search
Wk 4: Feb 14  Topic Description/ Lit Citations Due; Structure of Primary Research Articles
Wk 5: Feb 21  Discuss Research Article
Wk 6: Feb 28  Discuss Research Article
Wk 7: Mar 7  Partial Bibliography Due (10 citations); Discuss Research Article
Wk 8: Mar 21  Presentation Skills; Select Presentation Dates
Wk 9: Mar 28  Annotated Bibliography Due (15 citations); Presentations
Wk 10: Apr 4  Outline Due; Seminar Presentation Tips
Abstracts & pdf's of papers due 1 wk prior to presentation dates
Wk 11: Apr 11  Seminar Presentations
Wk 12: Apr 18  Seminar Presentations
Wk 13: Apr 25  Seminar Presentations
Wk 14: May 2  Seminar Presentations
Wk 15: May 9  Seminar Presentations and Evaluation
PEER ASSESSMENT – ORAL PRESENTATIONS OF RESEARCH PROJECTS
Senior Biology Presentation
BIOL 4292.002

Your Name: ________________________    Date: ____________

SUMMARY of Presentation by Evaluator (1 – 3 Complete Sentences):

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Presented:  ________________________   Time:  _______

Title of Presentation (In Brief): ____________________________________

Information content; SYNTHESES of information
Knowledge of topic; Preparation
Relevance/importance of topic; Big picture of what done & why
Methods presented appropriately (sufficient but not excessive detail)
Visual Appeal: Data, figures, tables, summaries appropriate & legible
Organization and flow
Summarize results and tie back to question/hypothesis
Critical review of work; pointed out questions/problems/issues
Delivery: Clearly conveyed main points of paper; Handling of questions
Citation of sources in presentation: Appropriately and correctly
Professional personal appearance and posture

__________  =  Total evaluations points (55 possible)

*Please rank the above criteria on a scale of 1 to 5

5 = Excellent to outstanding; few if any improvements suggested
4 = Above average, overall good, but with minor improvements needed.
3 = Average; room for improvement, but adequate
1-2 = Below average to unsatisfactory, insufficient level of performance based on student’s potential. Serious inadequacies and/or room for many improvements.

COMMENTS (incl strengths/weaknesses):