I. LOCATOR INFORMATION:

SEMESTER: Spring 2006

COURSE NUMBER AND NAME: BIOL 630 Topics in Biology Online
SEMESTER HOURS AND CREDIT: 3.00

TIME CLASS MEETS AND FORMAT: In a distance learning format that includes streaming video and/or text based presentations and discussion boards. Discussion boards will be posted on Monday’s and must be completed by Fridays by 4:00 PM. Streaming video may be viewed at your convenience.

Course website: You must log on through FSU’s Blackboard Gateway @ http://blackboard.uncfsu.edu/. You will need your network login and password for access.

INSTRUCTOR’S NAME: DR. STEPHEN J. SALEK
OFFICE LOCATION: LS 307
TELEPHONE: (910) 672-1050
EMAIL: Stephen.Salek@uncfsu.edu
II. COURSE DESCRIPTION:

BIOL 630- TOPICS IN BIOLOGY is a graduate level course designed to study current topics in biology with emphasis on significant advances. It also serves to equip new and continuing graduate students with skills necessary to complete their degrees. This is an online course that may be accessed through the university's blackboard gateway. This website contains detailed information about the course including, online audio and video lectures, links, sample presentations, exams, quizzes, calendar, discussion board, and a digital drop box for turning in assignments. *** You will need access to a document scanner in order to assemble your electronic portfolio.***

III. TEXTBOOKS:

ISBN 1-59486-054-8

** Text books can be purchased online at Barnes and Noble or Amazon.com, please order your books as soon as you decide to register for the class **
No textbooks will be available at the FSU bookstore.

IV. OBJECTIVES:
At the completion of this course, students should be able to demonstrate:
1. The ability to organize and present ideas coherently.
2. An improved proficiency of communication skills and logical thinking.
3. The ability to read and critically evaluate a scientific research article.
4. The ability to identify and utilize the scientific literature and appropriate internet resources.
5. The ability to prepare and present an oral scientific paper through a discussion board
6. The ability to think critically and express him/herself creatively.
7. The ability to prepare a thesis proposal.
8. The ability to successfully construct a curriculum vitae.

V. STUDENT COMPETENCIES:
Upon completion of this course, students should be able to demonstrate the following competencies:
1. Using the library to obtain information on a given scientific topic.
   a. How to conduct a manual search of scientific literature using indexes and abstracts, such as, Medline, Web of Science, Science Direct and Biological Abstracts.
2. How to make an online presentation of a journal article before a group using the latest online presentation software.
3. How to make an online presentation of a scientific journal article.
4. How to research the literature on a given scientific topic and prepare a thesis proposal.
5. Demonstrate knowledge of the purpose of scientific training at the baccalaureate, masters, doctoral, post-doctoral and professional level.
6. Demonstrate the ability to find, apply and interview for professional level science positions.
7. The ability to evaluate research articles critically.

V. EVALUATION CRITERIA:

Evaluation will be based on examinations, quizzes, exams and discussion boards.

12 Weekly online discussion boards (25 ea) 300 points
12 Weekly assignments (10 ea) 120 points
1 Proposal 100 points
1 Portfolio 100 points
2 presentations (1 restak chapter, 1 paper) (40 ea) 80

700 Total points

Grading Scale  
A = 92-100%
B = 83-91%
C = 73-82%
F = 72 or below

Students are advised to familiarize themselves with the policies of the graduate school regarding grades and grade point average and are required to maintain in order to be in good standing.

Assignment format: Students will view weekly streaming audio presentations. The assignment will be located randomly in one of these presentations or it will be posted on the schedule page. Students must submit answers through the digital drop box. Answers must be typed into a
Microsoft Word file and submitted with the Title of the assignment and the students name in the subject line. *** I do not accept word perfect documents.***

VI CLASS FORMAT:

Lectures:
Class will be a combination of streaming video lectures by the instructor, and discussion boards about weekly readings from, scientific papers, Restak or the video lecture.

Discussion boards
You are expected to read your weekly assignment posted in the course schedule and on the discussion board.
Each student will be assigned a date and time to present first a chapter from Restak and second scientific research article. Restak chapters will be assigned to students randomly, you must come up with 3 questions from each chapter to post on the discussion board at your assigned time. You will moderate the discussion at that time. Scientific articles must be located through Science Direct (available through the library), and posted in the discussion board in PDF format. If you have trouble accessing the library databases please contact them at (910 672 1751) and read this site: http://library.uncfsu.edu/offcampuse.html
Discussion questions should be posted prior to the week's discussion board so students will have adequate time to prepare answers and read the papers. Although questions are posted ahead of time, the instructor reserves the right to modify, add, or subtract from them as needed, so please re-check the questions before submitting your answers. Each student must write a MINIMUM OF 8 sentences to respond to EACH question and make one additional comment or response to one classmate's submission.

VII: REFERENCES AND READING RESOURCES

Bibliography
1. Dazzle 'Em With Style: The Art of Oral Scientific Presentation by Robert R. H. Anholt
   Paperback: 200 pages
   Publisher: W H Freeman & Co.; (March 1994)
   ISBN: 0716725835
2. How to write and publish a Scientific Paper  
by Robert A. Day  
212 pages  
Orex Press (1988)  
ISBN 0-89774-456-x

**Journals**
Electronic journals and databases may be accessed through the Charles Chestnutt Library or through external links from our blackboard page: [http://blackboard.uncfsu.edu/](http://blackboard.uncfsu.edu/)  
[http://library.uncfsu.edu/](http://library.uncfsu.edu/)

**VIII: STUDENT RESPONSIBILITY**
Students are expected to completely view all lecture sessions, complete all assignments, tests and discussion boards. It is the student’s responsibility to make up any and/or all missed work. The student is expected to contact the instructor if there is any difficulty with the online format of the course.

**IX DISCLAIMER:**
To accommodate emergent circumstances, the professor reserves the right to make reasonable changes in the syllabus while the course is in progress. Any understandings between the student and the professor including but not limited to, changes, expectations, or modification to course requirements or procedures must be in writing and must be signed by both parties. Any questions of the interpretation of course requirements or of understandings between a student and the professor will be at the discretion of the professor.

**X. COURSE REQUIREMENTS:**
Students are required to attend view all lectures, complete and read all discussion boards and turn in all assignments appointments when they are due. It is the responsibility of each student to be informed of the academic requirements of the instructor, to make presentations at the prescribed time, to turn in all assignments when they are due, and to participate fully in class activities. An absence, excused or unexcused, does not relieve the student of any course requirements.

Current research articles from scientific journals are one focus of this course. These are required readings and will be given to students. The
student will be required to read the paper and provide in depth discussions of articles both in a "journal club" format over the discussion board. The journal club format should include an overview of the paper's experiments, the importance of the experiment, figures in the paper, conclusion and a summary evaluating/critiquing whether the experimental goals were met. All students are expected to participate in the discussion.

XII. ACADEMIC HONESTY AND PLAGARISM

I expect you to do your own work. Submissions of projects, papers, and discussion board replies must be in your own words expressing your own thoughts. I do not accept responses copied from other sources (i.e. other students, textbooks, publications, or web pages). The penalty for academic dishonesty or plagiarism is at the instructors' discretion and is not limited to dismissal from the course, and "F" in the course or in extreme cases, or complete dismissal from the program and university.

Thesis Proposal

A thesis proposal will be developed according to FSU guidelines during the semester. It is designed to assess the student's ability to critically evaluate the literature and to address questions to be asked in the area of biology. It will consist of a minimum of 5 pages (double spaced, typewritten). Further details will be provided during the course of the semester.

Curriculum Vitae

A major goal of the course is to help you to develop a curriculum vitae that you will use for job and grant applications. I will provide you with several examples as well as a worksheet to help you develop this document.

Portfolio

You will develop a professional portfolio that will be evaluated for part of your grade. This will contain evidence of your professional training, and scholarly, scientific and community activities. You will receive more information about how to develop this in class.

IX. TEACHING STRATEGIES

The primary mode of instruction will be through independent learning by students. Online lectures will be presented to help students learn the necessary skills to master this course. Discussion boards will be used to exchange ideas about assigned topics therefore active participation in this activity is an important teaching strategy as well.
Biology 630 Topics in Biology Course Schedule

Weekly course activities must be completed in the following order:

Assignments, Discussion boards, Online Lectures.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments</th>
</tr>
</thead>
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| **Week 1**  
1/14 | Introduction  
Lecture: Planning a schedule.  
Assign chapters | schedule_example.ppt (1584128 Bytes)  
Think carefully about the next two years of your life. Make a list Professional, scholastic, and personal goals. Divide the next two years into semesters and designate which goals you will pursue in each semester. Devise a system of accountability to ensure these goals are met. See the example that is attached. Submit your goals and schedule to the digital drop box  
Discussion Board 1: orientation |
| **Week 2**  
1/21 | Lecture: Using Technology in Research  
Library search engines and databases | Reading Assignments  
We have selected a research paper to read and discuss. The purpose of this paper will be to discuss the many different methods and reasons for reading a scientific publication. As you read the paper, make notes on the paper about things you do not understand. When you are finished, make clear notes to yourself about why this paper is useful to you. |
<table>
<thead>
<tr>
<th>Week 3</th>
<th>1/28</th>
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</table>
| Lecture: Reading a research paper  
How and why to do it! | Reviewable paper  
[AVT_old_draft.pdf](AVT_old_draft.pdf) (230098 Bytes)  
Attached is a copy of an early draft of a manuscript that I wrote and submitted to a scientific journal. You must pretend that you are a reviewer and it is up to you to recommend that the paper be rejected, accepted as is, accepted with revision, or accepted if additional data are provided. Submit your review to the digital drop box  
Discussion Board 3  
Restak Ch 1.  
Student moderator: |
| **Week 4**  
2/4 | No Lecture  
Read "AVT old paper" | Article reviews  
**Article_Review_Format.pdf** (34529 Bytes)  
You will review an article you select from Science direct and submit a written review not to exceed three pages in the digital drop box. Please see the attached file for further instructions.  
Discussion Board 4  
Research paper  
Student moderator: |
|---|---|---|
| **Week 5**  
2/11 | Lecture:  
How to write a Research Paper | Curriculum Vitae Worksheet  
**CV_worksheet.pdf** (38531 Bytes)  
Do this worksheet then make a CV using the Illustrative solution in the link below  
Illustrative solution to CV worksheet  
**Salek_Current_CV.pdf** (157094 Bytes)  
Attached is my CV, after answering the questions on the CV work sheet you should be able to make a CV like this one.  
Discussion Board 5  
**Restak Ch 2.**  
Student moderator: |
| Week 6 | 2/18 | Lecture: Resumes and curriculum vitae | Discussion Board 6  
Research paper  
Student moderator |
| --- | --- | --- | --- |
| Week 7 | 2/25 | Lecture: Developing a Thesis Proposal  
A contract and time budget | General Interview Questions.pdf (147643 Bytes)  
Please prepare a written answer to the relevant questions on this worksheet in order to prepare for your job interview  
Discussion Board 7  
Restak Ch 3.  
Student moderator: |
| Week 8 | 3/4 | No lecture  
Spring break.  
Complete "CV worksheet" | Discussion Board 8  
Research paper  
Student moderator: |
| Week 9 | 3/11 | Lecture: Developing a Curriculum Vitae  
Analysis and discussion | Discussion Board 9  
Restak Ch 4  
Student moderator: |
| Week 10 | 3/18 | No Lecture: Gather Portfolio Items Listed in "Portfolio Check List" | Discussion Board 10  
Research paper  
Student moderator |
|---------|------|---------------------------------------------------------------|------------------------------------------------------|
| Week 11 | 3/25 | Lecture: Statistics I | Read "Assembling a Professional portfolio" and do it!  
Discussion Board 11  
Restak Ch 5.  
Student moderator: |
| Week 12 | 4/1  | Lecture: Statistics II | Discussion Board 12  
Research paper 11  
Student moderator |
| Week 13 | 4/8  | Lecture  
Careers in Science | Discussion Board 10  
Restak Ch 6  
Student moderator |
| Week 14 | 4/15 | Lecture  
Master’s Procedures and Paperwork | Discussion Board 11  
Research paper  
Student moderator |
| Week 15 | 4/22 | Lecture  
Portfolio Review | Discussion Board 12  
Restak Ch 7  
Student moderator |
| Week 16 | 4/29 | Course Wrap Up | Complete and Turn in All Assignments |