Course: **BIOL 5860.001**  
Course Title: **Biology Seminar**  
Semester: Fall 2010  
Time: F: 2:00-3:10 PM  
Meeting Place: ENV 125

Instructor: Dr. Jyoti Shah  
Office: Science and Research Building (SRB) #124  
Office Hours: (M) 10:00-11:00 AM  
Phone: (940) 565-3535  
Email: Shah@unt.edu

**Course Description:**  
This seminar course is designed to make students aware of cutting-edge research underway in diverse areas of Biology. Weekly presentations will be made by invited speakers actively engaged in research in Biological Sciences.

**Course Objectives:**  
By the end of the course, you will be able to:
- Have an increased awareness of the importance of scientific research  
- Understand scientific methodology, how research is conducted in a scientific manner, including the formation and testing of hypothesis, data collection and interpretation

**Course Requirements:**  
Students enrolled in this course are **expected to**:
- Record their attendance for the seminar with the coordinator (sign-up sheet will be available at the seminar).  
- Arrive to class prior to the start of the seminar and stay for the entire presentation, including discussion afterward. The seminar time is scheduled between 2:00 -3:10 PM.  
- Hand in a written (2-page) summary for at least one seminar presentation (see details below)

Students are strongly encouraged to ask questions and encouraged to look at the speaker’s web sites describing their research programs in advance of the seminar, so that they are more familiar with the research subject and thus get more from the presentation.

**Attendance:** **Everybody is permitted one miss without penalty!**
- You may miss two seminars and still earn a **Pass**, if you submit a written summary (see below) of one seminar on time. Thus, the written summary can count for one seminar attendance.

**Written Summary:** Paper should be a two page summary of any one seminar presentation. The summary should identify the speaker, her/his affiliation, title and date of presentation. The summary should include the research problem being investigated, the rationale for the approach, a brief, general description of methods used and the major results and conclusions of the work presented. The summary should be prepared from the material presented in the seminar- it should not a website write-up! The summary **is due the Tuesday following the seminar** for which you are submitting a summary (e.g. You decide to submit a summary for the Seminar held
on Friday September 3. Your summary will be due latest by 5:00PM Tuesday day September 7. 
Late summaries will not be accepted

**GRADING:** BIOL5860 does not have a letter grade. You will earn either a Pass or a Fail. 
Final grade is based on **attendance** and **one written summary** (due the Tuesday following the 
seminar for which you are submitting a summary), as outlined above.

**Website:** [http://webctvista.unt.edu](http://webctvista.unt.edu)

This will be the official site for this course. Course Information, a list of the scheduled seminar 
speakers, seminar titles and abstracts will be are posted on this website. Announcements will 
also be posted weekly. In addition, communication pertaining to this course will also be made 
through this website.

**Disabilities:** The Department of Biological Sciences and the University of North Texas 
complies with the Americans with Disabilities Act of 1990 in making reasonable accommodation 
for qualified students with disabilities. If you have a qualifying disability as defined in the ADA 
and would like to request accommodation, please see the instructor and or contact the Office of 
Disability Accommodation at (940) 565-4323 during the first week of class.

**Tentative Schedule for fall 2010:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>Aug 27</td>
<td>First meeting for class to discuss course policy, seminar schedule, etc</td>
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<tr>
<td>Sept 3</td>
<td>Qing Richard Lu, UT-Southwestern</td>
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<td></td>
<td>Seminar title: Epigenetic Control of CNS Myelination</td>
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<tr>
<td></td>
<td>Speaker Website: <a href="http://www8.utsouthwestern.edu/utsw/cda/dept24916/files/88738.html">http://www8.utsouthwestern.edu/utsw/cda/dept24916/files/88738.html</a></td>
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<td>Sept 10</td>
<td>Ben Holt, University of Oklahoma</td>
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<td>Department of Botany and Molecular Biology</td>
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<td></td>
<td>Seminar title: Intersecting roles for NF-Y transcription factors in plant floral development and stress responses</td>
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<td>Speaker Website: <a href="http://www.ou.edu/cas/botany-micro/faculty/holt.html">http://www.ou.edu/cas/botany-micro/faculty/holt.html</a></td>
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<td>Sept 17</td>
<td>Lee Hughes, UNT Biology</td>
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<td>Seminar title: Biology education: emphases in technology uses in biology education, scholarship of teaching and learning</td>
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<td>Sept 24</td>
<td>Stephen Spiro, UT Dallas</td>
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<td>Dept. Molecular and Cell Biology</td>
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<td></td>
<td>Seminar title: Responses to nitric oxide in <em>Escherichia coli</em>: regulatory networks and defense mechanisms</td>
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<td>Speaker Website: <a href="http://spiro.openwetware.org/">http://spiro.openwetware.org/</a></td>
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<td>Oct 1</td>
<td>Robert L. Tanguay, Oregon State U.</td>
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<td>Aquatic Biomedical Models Facility Core</td>
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<td>Seminar title: Using Zebrafish as a platform to advance environmental and human health</td>
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<td></td>
<td>Speaker Website: <a href="http://tanguaylab.com/">http://tanguaylab.com/</a></td>
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Oct 8  David Braun, U. Missouri
Department of Biological Sciences
Tentative seminar title: Genetic control of carbon partitioning in maize
Speaker Website: http://www.biology.missouri.edu/people/person.lasso?-Search=Action&-Table=Faculty_Research&-Database=Tracking&-KeyValue=132

Oct 15 Heather Lerner, Smithsonian Institute & National Zoo
Seminar title: Hawaiian Honeycreepers radiation: Phylogeny and comparative evolutionary rates from pyrosequencing and species-tree methods
Speaker Website: http://nationalzoo.si.edu/SCBI/Scientific_Staff/staff_scientists.cfm?id=246

Oct 22 Xiang Gao, UNT biology
Seminar title: Studying genome evolution with experimental and computational methods

Oct 29 Marie-Alda Gilles Gonzalez, UT-Southwestern Medical School
Dept Biochemistry
Tentative seminar title: Heme sensing proteins
Speaker Website: http://www.utsouthwestern.edu/findfac/professional/0,,57464,00.html

Nov 5 David Nelson, Indiana University
Department of Biology
Seminar title: Microbial interaction in the male urogenital tract, all urethritis is not created equal
Speaker Website: http://www.bio.indiana.edu/faculty/directory/profile.php?person=nelsonde

Nov 12 Janine Sherrier, University of Delaware
Dept. Plant and Soil Sciences
Seminar title: ENOD16 Functions in Symbiotic Root Nodule Formation
Speaker Website: http://ag.udel.edu/plsc/faculty/sherrier.html

Nov 19 Donald DeAngelis, US Geological Service, Miami
Seminar title: Modeling vegetation effects of sea level rise & storm surges
Speaker Website: http://sofia.usgs.gov/people/deangelis.html

Nov 26: Thanksgiving- no seminar

Dec 3: Brendon Larson, U. Waterloo-Canada
Environmental and Resource Studies
Tentative Seminar Title: Invasive species, metaphors in science and social/ecological interface of natural systems and conservation
Speaker Website: http://environment.uwaterloo.ca/ers/faculty/larson/

Dec 10: Prefinals week- no seminar