Course: BIOL 4800.001  
Course Title: Biology Seminar  
Semester: Fall 2014  
Time: Friday’s 2:00-3:20 PM  
Meeting Place: ENV (Environmental Science Bldg) 110  
First day of class: Friday, August 29, 2014

Instructor: Dr. Jyoti Shah  
Office: Life Sciences Building –B418  
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 and related areas.

**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 each seminar).  
- Arrive to class prior to the start of the seminar and stay for the entire presentation, including the discussion that follows the presentation. The seminar time is scheduled between 2:00 -3:20 PM.  
- If required (see below), hand in a written (2-page) summary for at least one seminar presentation. This summary can be used to make-up for one missed seminar.

Students are strongly encouraged to ask questions during the discussion that follows the speaker’s presentation. In addition, students are encouraged to look over the speaker’s web site in advance of the seminar, so that they are more familiar with the research subject and thus get more from the presentation.

**Attendance:** You are allowed only one absence without penalty.
- For every seminar class you miss in excess of one, one letter grade will be deducted.  
- You may miss two classes and still earn an A, if you submit a written summary of one seminar that you attended. Thus, the written summary can count for one class day attendance. See below for additional information on what to include in a summary and when to submit the summary.

**Written Summary:** A written summary paper of a seminar you attended can be used as a make-up for ONE missed seminar. You are allowed a maximum of one written summary submission for the semester.
- The summary paper should be a two page summary of any one seminar presentation that you attended. On page 1, the summary should contain your name and ID#, identify the
speaker, her/his affiliation, title and date of presentation. On Page 2, in your own words describe 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 during the seminar- it should not be a website write-up! Plagiarism will result in a ‘F’ grade.

- 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 that you attended on Friday September 12. Your summary will be due latest by 5:00PM Tuesday September 16. Late summaries will not be accepted).
- The summary can be submitted to me immediately after the seminar (most preferred by me). Alternatively, it can be dropped at my office or sent to me via email (Shah@unt.edu).
- You are allowed only ONE summary paper submission during the semester.

GRADING: Final grade is based on attendance and an optional written summary

Examples of grade scenarios:
- Attend all seminars (or miss only one seminar) → Final Grade earned = A
- If you miss 2 seminars (or miss only one) AND turn in the summary paper on time → Final Grade earned = A
- If you miss 2 seminars AND fail to turn in the summary paper on time → Final Grade earned = B
- If you miss 3 seminars AND turn in the paper on time → Final Grade earned = B
- If you miss 3 seminars AND do not turn in your summary paper on time → Final Grade earned = C
- If you miss 4 seminars AND turn in your summary paper on time → Final Grade earned = C
- If you miss 4 seminars AND do not turn in your summary paper on time → Final Grade earned = D
- If you miss 5 seminars AND turn in your summary paper on time → Final Grade earned = D
- 5 misses or more and no paper → Final Grade earned = F.

Website: https://learn.unt.edu/ (Blackboard)

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.

Fall 2014 BIOL4800 Seminar Class Schedule

Meets: Friday’s 2:00-3:20 PM Where: ENV 110
Attendance: Mandatory

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker (affiliation), UNT host</th>
<th>Title:</th>
<th>Date</th>
<th>Speaker (affiliation), UNT host</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 29</td>
<td>Brian McFarlin (Univ. North Texas); Host: Jannon Fuchs</td>
<td>Interaction between poor nutrition and immunodysfunction in the pathophysiology of obesity-associated disease</td>
<td>Sept 5</td>
<td>Dan Graur email: (Univ. Houston) Host: Rajeev Azad</td>
</tr>
</tbody>
</table>
Title: How to assemble a human genome? Mix generous amounts of junk DNA and indifferent DNA, add a dollop of garbage DNA and a sprinkling of functional DNA

Sept 12  Chris Nomura (SUNY-ESF; Syracuse) – Host: Steven Brumbley
Title: Engineering bacteria to produce biodegradable plastics

Sept 19  Heike Bucking (South Dakota State Univ); Host: Rebecca Dickstein
Title: tbd

Sept 26  Jorge Rodrigues (Univ. Texas-Arlington); Host- David Hoeinghaus
Title: A guide on how to disrupt the spatial structure of microbial communities

Oct 3  Zhonglin Mou (Univ. Florida) – Host: Jyoti Shah
Title: Function of extracellular NAD(P) in plant immunity

Oct 10  Graham Scott (McMaster Univ); Host: Ed Dzialowski
Title: Physiology and evolution of high-altitude mammals and birds

Oct 17  Rick Dixon (Univ. North Texas); Host: Jyoti Shah
Title: Lignin: first you hate it, then you like it

Oct 24  Steven Strauss (Oregon State Univ); Host: Brian Ayre
Title: Genetic engineering of coexistence: Containment technology to enable transgenic innovations in trees

Oct 31  Amie Lund (Univ. North Texas); Host: Jyoti Shah
Title: Pathways involved in air pollution-mediated progression of vascular disease and blood brain barrier disruption

Nov 7  Andrew Weyrich (Univ. Utah); Host: Pudur Jagadeeswaran
Title: tbd

Nov 14  Huaqi Jiang (Univ. Texas-Southwestern); Host: Qunfeng Dong
Title: The transcriptional network of intestinal stem cells in Drosophila adult midgut

Nov 21  Todd Gillis (Univ. Guelph); Host: Dane Crossley
Title: Getting hot and going fast, the evolution of regulatory control in the vertebrate heart

Nov 28  Thanksgiving break

Dec 5  Study Day-no seminar

Fall 2014 Seminar Coordinator: Jyoti Shah (shah@unt.edu) Phone: x3535

Note: Attendance will be taken during the seminar. It is your responsibility to fill in your attendance.