Exploring Research

Course Syllabus

2017 Spring Semester

Instructor: Eric J. Kildebeck
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Class: HONS 3199.H10 24163
Time: Tuesdays, 4:00 PM to 4:50 PM
Location: CB3 1.304

Course Description: This course is a broad introduction to the active laboratory research at UT Dallas. This course will provide students with interactions with faculty in multiple scientific disciplines to explore their areas of research, engage in discussion about research topics, and develop skills for critical interpretation of scientific publications. This course will examine the process of designing research projects to answer scientific questions and establish relationships between students and research faculty to create student research opportunities.

Course Objectives / Learning Outcomes: Upon completion of this course, students will be able to:

- understand areas of active research at UT Dallas;
- interact actively with research faculty; and
- interpret scientific publications.

Assignments and Grading Structure: Course attendance and participation is required and the essential nature of participation is reflected in the final grade. A selected research article will be assigned weekly prior to each faculty lecture. The students will read each article and choose two faculty throughout the semester that they will learn about in greater depth. For these two faculty, the student will answer a series of questions about the faculty, analyze the provided research article and submit questions to discuss with the faculty member. A breakdown of the grading structure is as follows:

Attendance and Participation (Weekly presentation and discussion) = 70%
Assignments (Selected publications and Faculty Questionnaires) = 30%

Students will be evaluated on their ability to identify, define, and discuss the purpose, methods, results, and conclusions of a scientific publication and how these relate to the researcher's overall aims.

Lecturer Schedule

Date:	Faculty:	Field:
Jan 10	Dr. Eric Kildebeck	Course Introduction & Expectations
Jan 17	Dr. Eric Kildebeck	How to be a successful undergraduate researcher
Jan 24	Dr. Eric Kildebeck	Research opportunities available at UT Dallas
Jan 31	Dr. Ronald Smaldone	Chemistry 3D Printing and Organic Chemistry
Feb 7	Dr. Walter Voit	Materials Science and Mechanical Engineering Smart Polymers and Bioelectronics
Feb 14	Faculty Guest Lecturer	
Feb 21	Faculty Guest Lecturer	
Feb 28	Faculty Guest Lecturer	
Mar 7	Faculty Guest Lecturer	
Mar 14	**Spring Break**	
Mar 21	Faculty Guest Lecturer	
Mar 28	Faculty Guest Lecturer	
Apr 4	Faculty Guest Lecturer	
Apr 11	Faculty Guest Lecturer	
Apr 18	Faculty Guest Lecturer	
Apr 25	Faculty Guest Lecturer	
May 2	**Final Exam Week**	