UTRGV CHEMISTRY INTERNSHIP SYLLABUS

Course: CHEM 4325
Instructor: Dr. Yonghong Zhang

Term: Fall 2018
Office location & phone: ESCNE 4.620 & (956) 665 2288

Meeting times: N/A
Email: yonghong.zhang@utrgv.edu

Meeting location: Not required
Office hours: MW 8:30 – 9:30 am

Textbook and/or Resource Material
In discretion of each internship host.

Course Description
This course is designed to give the Chemistry majors the opportunity to gain insight and experience in applying chemistry principles and concepts in an actual work-related environment. Students will perform the internship under the supervision of both a chemistry faculty member and a collaborating member of the participating internship site. This course will provide opportunity for chemistry students to apply prior learning to practical laboratory situations.

Prerequisites
Senior standing in Chemistry and consent of instructor.

Learning Objectives/Outcomes for the Course
This course will provide opportunity for chemistry students to apply prior learning to practical laboratory situations.

Learning Objectives for Degree Curriculum Requirements
1. ATTENDANCE: Students are required to run experiments in the host’s research lab regularly (while specific schedule should be discussed with his/her supervisor) and may be dropped from the course for excessive absences (no show in the lab for more than five consecutive working business days without prior notice to his/her supervisor). UTRGV’s attendance policy only excuses students from attending school if they are participating in officially sponsored university activities, such as athletics; for observance of religious holy days; or for military service. Students should contact his/her supervisor in advance of the excused absence and arrange to make up missed research work.

2. Under the close guidance of his/her advisor, each student will maintain a research journal, documenting the dates and time spent on laboratory work, literature study and meetings with mentors. The journal will be a bound notebook containing data, pertinent observations and notes. Accurate and complete notes are essential in any type of research. Students are expected to keep this journal up to date, neat and organized. Students are expected to show this notebook to their supervisor and have them initial the notebook once a month.

3. A final written report using the ACS style (e.g. Journal of the American Chemical Society) or style suitable for Chemistry that is reviewed by the mentor prior to submission.
   a. The report should be written double spaced with size 12 font and 1 inch margins all around.
   b. Main text, including Introduction, Experimental Methods, Results, Discussion and Conclusion, is expected to be at least 10 pages long. This page length does not include charts, graphs, figures, acknowledgement, and literature references, which should be placed at the end of the final report with proper indexes. More specifically, spectra should be reduced to a single page size and placed at the end.
   c. A Title page and table of contents should be included at the beginning of the report.
   d. You may refer to a general example at the end of this syllabus for contents of the final report.

4. A poster presentation at the end of the semester in a poster presentation session organized by the Instructor of Record.

Safety
Students are expected to attend Safety training as required for research students and other trainings such as Blood Born Pathogen as required by their host mentor/advisor if they have not already done so. This must be documented with his/her mentor’s facility.
Grading Policies
It is graded different from normal course work (both lectures and labs). The three contributors for overall grade include:

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<th>No.</th>
<th>Contributors</th>
<th>Percentages</th>
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| 1   | Daily performance: attendance, communication, and interaction within the selected mentor's research group and lab  
   a. Direct input from mentor                                              | 20          |
| 2   | Preparation and presentation of a poster:                                   |             |
   a. Direct input from mentor                                              | 10          |
   b. Faculty evaluation on the scheduled poster presentation session      | 30          |
| 3   | Final report:                                                                |             |
   a. Direct input from supervisor                                          | 20          |
   b. Evaluation by the Instructor of Record                                | 20          |

In the poster and final report, you will be asked to describe or explain certain phenomena, reactions, structures, or other characteristics of various elements or compounds. Your score will depend on your ability to describe a variety of chemical events in correct and meaningful sentences using proper scientific terms and draw geometrically and chemically correct structures of certain compounds. If you have deficiency in the language, it will affect your grade. **Use of shorthand in sentences, which is not used in chemistry books or journals, will affect your grade. Illegible writing will not be graded.** The purpose of grading is to reward students for their work. **There is NO additional curve for any grade.** Letter grades are assigned taking into consideration of the university policy and the overall performance of the class. Please remember that your supervisor and instructor of record can NOT make any special consideration regardless of your graduation requirement.

The FIRM grading scale is as follows:
- 90 and above = A
- 80-89 = B
- 70-79 = C
- 60-69 = D
- 59 and below = F

Calendar of Activities
Tentative class schedule is included at the end of this syllabus. The UTRGV academic calendar can be found at [https://my.utrgv.edu/home](https://my.utrgv.edu/home) at the bottom of the screen, prior to login. Some important dates for Fall 2018 include:

- **August 27** First day of classes
- **August 30** Last day to add a course or register for fall 2018
- **September 3** Labor Day – NO classes
- **November 14** Last day to drop a course; will count toward the 6-drop rule
- **November 22 - 24** Thanksgiving Holiday – NO classes
- **December 6** Study Day – NO classes
- **December 7 - 13** Final Exams
- **December 14 – 15** Commencement Exercises

UTRGV Policy Statements
**STUDENTS WITH DISABILITIES:**
Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive academic accommodations should contact **Student Accessibility Services (SAS)** as soon as possible to schedule an appointment to initiate services. Accommodations can be arranged through SAS at any time, but are not retroactive. Students who suffer a broken bone, severe injury or undergo surgery during the semester are eligible for temporary services.

**Pregnancy, Pregnancy-related, and Parenting Accommodations**
Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) are encouraged to contact Student Accessibility Services for additional information and to request accommodations.

**Student Accessibility Services:**
**Brownsville Campus:** Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at ability@utrgv.edu. **Edinburg Campus:** Student Accessibility
Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at ability@utrgv.edu.

**MANDATORY COURSE EVALUATION PERIOD:**
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available from November 15 – December 5.

**SCHOLASTIC INTEGRITY:**
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

**SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE:**
In accordance with UT System regulations, your instructor is a “Responsible Employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct and discrimination.

**COURSE DROPS:**
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

**STUDENT SERVICES:**
Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Students Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email (ucentral@utrgv.edu) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions. Students seeking academic help in their studies can use university resources in addition to an instructor’s office hours. University Resources include the Learning Center, Writing Center, Advising Center and Career Center. The centers provide services such as tutoring, writing help, critical thinking, study skills, degree planning, and student employment. Locations are:
- Learning center: BSTUN 2.10 (Brownsville) or ELCTR 100 (Edinburg)
- Writing center: BLIBR 3.206 (Brownsville) or ESTAC 3.119 (Edinburg)
- Advising center: BMAIN 1.400 (Brownsville) or ESWKH 101 (Edinburg)
- Career center: BCRTZ 129 (Brownsville) or ESSBL 2.101 (Edinburg)

**FAIRNESS POLICY:**
UTRGV is committed to social justice and does not discriminate on the basis of race, color, national origin, age, sex, sexual orientation, religion, or disability. I concur with the commitment and expect to maintain a positive learning environment based upon open communication, mutual respect and non-discrimination. Any suggestions as to how to further such a positive and open environment for this class will be appreciated and given serious consideration.

Other Course Information

Tentative Schedule:

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<th>Date and Time</th>
<th>Activity</th>
<th>Location</th>
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<tbody>
<tr>
<td>Dec. 6, 10:00 am – 12:00 pm</td>
<td>Poster Presentation</td>
<td>Hallway in front of computer lab</td>
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<tr>
<td>Dec. 7, 5:00 pm</td>
<td>Final Report due (in electronic copy to both internship host and instructor of record)</td>
<td>N/A</td>
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Note:
1. Majority of your time for this course should be spent in your selected host's facility.
2. There is no specific meeting time scheduled with the Instructor of Record, but enrolled students are encouraged to request for meetings at his office hours.

General Instructions on Poster Presentation and Final Reports:

**Poster Presentation**

Content:
- Abstract
- Introduction
- Materials and Methods
- Results
- Discussion
- Future work
- Acknowledgements
- References
- Figures, tables embedded

Size: 24 to 36 inches tall by 36 to 48 inches wide

**Final Report**

- **Title page:** containing
  - Internship Project Title
  - Student's name: CHEM 4325
  - Host Mentor:
  - Date (Fall/Spring/Summer and year)

- **Table of contents**
- **Abstract:** An half to one page long.
- **Introduction:** Describe the background information on the studies related to the project. Relate your project work with existing information and at the end describe the specific objective of your project.
- **Materials and Methods:** Give the details of only important chemicals and reagents and describe the methods used in the projects.
- **Results:** The description should refer to appropriate table and figures numbers.
- **Discussion:** This section should discuss the results in light of the past work and the significance of your work in the future. (*Results and Discussion may be written together*).
- **Conclusion**
- **Acknowledgements**
- **References:** Suggested format – Author(s) names; Title of the referred article; Journal name (*italicized*); Volume (*bolded*); Page numbers; Year of publication. (*slight variation from this format will be acceptable.*)
- **Figures, charts, tables, schematics, etc.**

Note: refer to the Course Requirement described above for further details.