Undergraduate Research III
The University of Toledo
Department of Chemistry and Biochemistry
CHEM 4910-001, 091 (CRN: 42055, 42057)

Instructor: Jon R. Kirchhoff
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Office Hours: (M,T,W,R 9-10; by appointment)
Office Location: BO 2024
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Term: Fall 2019

Class Location: BO/WO Laboratories
Class Day/Time: schedule with research advisor
Lab Location: various
Lab Day/Time: schedule with research advisor
Credit Hours: 1-3

COURSE/CATALOG DESCRIPTION

Thesis level research under the guidance of a faculty member. May be repeated. A minimum of three hours and an acceptable thesis required for credit toward the B.S. major. A maximum accumulated credit of 10 hours in CHEM 2910, 3910 and 4910 may be applied toward a degree. A written report is required. May be taken only as P/NC.

COURSE OVERVIEW

Students will conduct research in an area of chemistry in the laboratory of a faculty advisor from the Department of Chemistry and Biochemistry. Students should view the department web page and identify faculty whose research interests match their interest. They should then contact the faculty member(s) and make an appointment to discuss research opportunities in their lab. Once a faculty advisor is selected, the student and faculty advisor will formalize a schedule and specific learning outcomes for the assigned project. Typically 3 hours of research time in the laboratory per credit hour is required per week.

STUDENT LEARNING OUTCOMES

Students will learn specific laboratory techniques, the operation of scientific instrumentation, and the chemistry knowledge specific to the assigned project.

TEACHING STRATEGIES

Students will conduct research in a laboratory setting under the direction of a faculty member.

PREREQUISITES AND COREQUISITES

Prerequisite: GPA (overall and in chemistry courses) above 2.5 and permission of department Corequisite: CHEM 3740 or 4570

REQUIRED TEXTS AND ANCILLARY MATERIALS

Approved chemical safety goggles meeting the American National Standard Z87.1-1968 are required.
TECHNOLOGY REQUIREMENTS

None

UNIVERSITY POLICIES

Policy Statement on Non-Discrimination on the Basis of Disability (ADA)

The University is an equal opportunity educational institution. Please read The University’s Policy Statement on Nondiscrimination on the Basis of Disability Americans with Disability Act Compliance. Students can find this policy along with other university policies listed by audience on the University Policy webpage (http://www.utoledo.edu/policies/audience.html/#students).

Academic Accommodations

The University of Toledo embraces the inclusion of students with disabilities. We are committed to ensuring equal opportunity and seamless access for full participation in all courses. For students who have an accommodations memo from Student Disability Services, I invite you to correspond with me as soon as possible so that we can communicate confidentially about implementing accommodations in this course. For students who have not established affiliation with Student Disability Services and are experiencing disability access barriers or are interested in a referral to healthcare resources for a potential disability or would like information regarding eligibility for academic accommodations, please contact the Student Disability Services Office (http://www.utoledo.edu/offices/student-disability-services/) by calling 419.530.4981 or sending an email to StudentDisability@utoledo.edu.

ACADEMIC POLICIES

A listing of the important undergraduate student policies, which students should be aware of, can be found at (http://www.utoledo.edu/policies/academic/undergraduate/)

General information and opportunities related to undergraduate research can be found at the Office of Undergraduate Research (https://www.utoledo.edu/honors/undergradresearch/)

COURSE EXPECTATIONS

In consultation with their faculty advisor, it is expected that students create a regular schedule for continuous research activity throughout the semester to ensure timely completion of their project goals. Regular communication with the research supervisor is essential to maintain progress.

OVERVIEW OF COURSE GRADE ASSIGNMENT

The faculty research advisor will provide the department’s coordinator of undergraduate research (course coordinator listed on front) a recommendation for a grade in the class. The class is graded as Pass or No Credit. A grade of Pass indicates the student has met the expectations for regular or Honors research as set forth by the faculty member.
Midterm grades will be entered and are used to assist students with determining where they stand academically in the course. Attendance is also recorded during Midterm grading to meet state and federal laws regarding financial aid disbursement. Please note, if you are not attending class it could impact your financial aid (scholarships, grants, loans or Federal Work Study). If you decide you are not going to attend this class (or any other class you have registered for), you must formally withdraw (drop) from the course. You can do this by logging onto the myUT portal, clicking on the “Student” tab, and then under My Toolkit clicking on Register/Drop/Withdraw. For more information about add/drop dates please visit the Registrar’s Office online at: http://www.utoledo.edu/offices/registrar/registration_dates_fall.html

The deadline for withdrawing from class is Friday November 1, 2019.

COMMUNICATION GUIDELINES

Students will communicate directly with their research advisor on research specific questions. The course coordinator is available for all general questions.

ACADEMIC AND SUPPORT SERVICES

A comprehensive list of Student Academic and Support Services can be found at (http://www.utoledo.edu/studentaffairs/departments.html)

SAFETY AND HEALTH SERVICES FOR UT STUDENTS

A comprehensive list of Campus Health and Safety Services available to you as a student can be found at http://www.utoledo.edu/offices/provost/utc/docs/CampusHealthSafetyContacts.pdf

COURSE SCHEDULE

To be determined in consultation with the faculty research advisor.