

CHEMISTRY 197
Midyear 2024

1. IMPORTANT DATES:

June 27 (Thu) – June 28 (Fri)	General registration
July 02 (Tue)	Start of classes
August 5 (Mon)	Last day of classes (see succeeding Note)
August 8 (Thu) tentative	Submit final written reports to Chem 197 coordinator; class wrap-up and oral reports
August 16 (Fri)	Deadline for submitting grades

Note: You are required to complete 200 hours of practicum (240 hours for DOST scholars). If you happen to be assigned to a lab operating on a five and a half (typically half day Saturday) or a six-day work week (typically whole day Saturday), you may be able to finish your practicum earlier.

2. Major Course Learning Objectives:

At the end of the course, the students should have gained:

1. A familiarity with the organization and functioning of an existing applied chemistry laboratory.
2. A better appreciation of opportunities for application of the basic concepts and theories of Chemistry in various settings.
3. A more developed knowledge and practical skills to recognize and potentially solve real world Chemistry problems or challenges.
4. A better appreciation and understanding of the requirements for professional Chemistry work.

3. Obligations/Responsibilities:

Based on the existing guidelines from the UP Office of the Chancellor, in the Memorandum No. MLT-18-126 (04.18.2018 – The Guidelines on Practicum or Internship Program in the Philippines (UPD Academic Field Activity Type 1A by the Office of the Vice Chancellor for Academic Affairs as consolidated by the Office of the Field Activities (OFA) Diliman, in relation to CHED Memo No. 104 Series 2017).

A. Student Interns

1. Enter into an internship contract and/or agreement with the host laboratory head.
2. Sign all the required documents necessary for his or her participation in the internship program, including the acceptance letter, internship contract or written agreement.
3. Comply with the provisions of the agreement including the rules and regulations of the research laboratory.
4. Undergo the required orientation/internship program conducted by the host laboratory.
5. Perform tasks and activities indicated in the internship plan within the specified time period.
6. Maintain confidentiality of information during and after the internship period which can include, but are not limited to: all the data, scientific or trade secrets, intellectual property rights, etc., where such information is not within the public domain and is understood to be confidential.

7. Adhere to the existing rules and regulations of the host laboratory including the proper use of tools, instruments, machines, and equipment (may not be applicable if the work is done virtually) and data/information - handling from the use of such.
8. Submit a written report or any required documentation of internship as required by the host laboratory reflecting on the approved internship plan, his or her experiences describing the internship activities, any problem/s encountered, and his or her reflections on the internship experience to the head of the host laboratory.
9. Complete the agreed duration of his or her internship; In case the student intern will be unable to finish his or her internship within the designated period, he or she shall inform the Chem 197 instructor and the head of the host laboratory in writing of his or her intent and reasons to prematurely end his internship, at least a week before his or her last day of internship. Failure to complete the internship program without valid cause may result in the student getting a grade of INC (or DRP depending on the case).
10. Report to the head of the host laboratory for an exit assessment after the completion of the internship period.

B. Head of the Host Laboratory (Research Adviser)

1. Designs and implements the internship plan.
2. Encourages student interns to develop professionalism in a safe and supportive learning environment.
3. May assign a point person (example a research assistant or graduate student) to directly supervise/oversee the implementation of all the phases of the internship but keeping the sole responsibility of ensuring the overall welfare of the student during the internship period.
4. Ensures that the student intern receives appropriate orientation on the standard rules and regulations of their laboratory before a formal agreement is made with the student intern.
5. Enters into a formal agreement of internship with the student intern.
6. Ensures that practical training or work experience is sufficiently provided to the student intern, in accordance with the agreed internship plan. This shall include activities which can be conducted remotely/online or F2F in accordance with UPD guidelines during the Covid-19 pandemic.
7. Facilitates the processing of the documents of the student intern/s in coordination with the Chem 197 instructor.
8. Ensures that the student intern/s do not perform tasks and duties outside of the internship agreement plan.
9. Provides supervised applied learning experience for the student intern/s in accordance to the internship agreement plan and within the specified time period/schedule of activities.
10. Provides feedback to the student intern/s and to the Chem 197 instructor with regard to the performance of the student intern. (The Chem 197 instructor will email the link to the Google Feedback form).
11. Immediately notify the Chem 197 instructor through writing/email in the event of any unacceptable behavior, misconduct or breach of contract committed by the student intern/s.
12. Issues certificates of completion for the student interns not later than two (2) weeks after the completion of internship or the satisfactory submission by the student intern of the requirements mandated by the host laboratory.

C. Chem 197 Instructor

- A. The Chem 197 Instructor serves as the main coordinator of the practicum, an intermediary or liaison between the student intern and the head of the host laboratory (research adviser).
- B. Conducts periodic monitoring and assessments of the progress of each student intern during the internship period.
- C. The instructor acts as an internship coach to the students, providing proper counsel and motivation for them to achieve the goals of the Internship Agreement Plan.
- D. Consults with student interns to discuss issues/problems which may come up and to provide the needed assistance to resolve these issues/problems.
- E. Conducts assessment and validation of the overall result and output of the students' internship at the end of the semester.

4. REPORTS

A. Weekly Report (to be negotiated with your adviser)

Each student will be required to submit an accomplishment report to his or her practicum supervisor or mentor **weekly**. The report should include the following:

- a brief description of assigned tasks and duties
- new knowledge/information gained
- constraints and problems encountered, and how these were solved (if applicable).
- other remarks and suggestions

B. Final Report

At the end of the practicum, each student must submit a printed comprehensive **final report** to the Chemistry 197 coordinator. The final report must mention:

- Benefits/knowledge you gained during the practicum. Be sure to dwell on this.
- Instruments and equipment you learned to use during your practicum.
- What aspect of Chem 197 did you find least useful?
- Suggestions for the improvement of Chem 197. Were your expectations met? Should Chem 197 continue to be a requirement or instead be converted to an elective?
- Must be no more than 3 pages

C. Oral Report

We will have a final wrap-up session during the summer finals week in which each of you will deliver 5 to 10-minute **oral reports** describing your practicum experiences before your classmates and the Chem 197 coordinator.

5. Student Internship and Host-Laboratory Agreement Plan

The Internship Agreement Plan is to be prepared for each student intern. The agreement will specify the activities and the schedules of accomplishing the tasks for the duration of the student internship period. The agreement shall be signed by the student intern and the head of the host laboratory.

THE INTERNSHIP ACTIVITIES CAN ONLY BE STARTED WITH THIS SIGNED AGREEMENT.

General Proposed Activities for the Internship Agreement Plan:

- A. Acquiring knowledge and skills from working in a specialized research laboratory.
 - Literature review
 - Organizational chart
 - Specific experiment procedures being practiced in the host laboratory
 - Instrumentation techniques
 - Process flow
- B. Increasing awareness of responsible conduct and current best practices and quality systems in a work environment.
 - Chemical Waste Management
 - Health and Safety Procedures
 - Documentation and Record Keeping (Including Financial Documents)
 - Security and storage of data and information
- C. Developing important people's skills such as teamwork, communication, adaptability, respect for diversity/individuality, etc.
 - Specific tasks to experience working within a team in the host laboratory
 - Opportunities to join in group meetings and discussions and learn from peers
- D. Other tasks. The host laboratory may add additional competencies and tasks when deemed relevant (*The tasks required for the student's Chem 200 thesis work should be enumerated and distinguished from those required for Chem 197*).

6. GRADES

Your grades will depend on your supervisor's assessment (on the Post-Practicum Evaluation Sheet - Form Chem 197-B) and on the quality of your written and oral reports.

Assessment from Host Laboratory Supervisor	90 %
Assessment from Chem 197 Instructor (oral/final report)	10 %

Grading Scale:

95 – 100 %	1.00
90 – 94.99 %	1.25
85 – 89.99 %	1.50
80 – 84.99 %	1.75
75 – 79.99 %	2.00
70 – 74.99 %	2.25
65 – 69.99 %	2.50
60 – 64.99 %	2.75
55 – 59.99 %	3.00
< 55.00	DRP

7. ITEMS TO BRING WITH YOU TO THE PRACTICUM:

1. UP Form 5A and valid UP ID
2. Lab gown, lab notebook, and safety glasses
3. Post-practicum evaluation sheet (Form Chem 197-B). This is to be given to your assigned mentor/supervisor.

8. ADDITIONAL

- Know how to get to your practicum site. It would be wise for you to visit the site at least once before you start the practicum.
- Always arrive on time.
- Submit reports and other requirements on time.
- Produce quality work.
- Have fun.