

Allegheny College Department of Chemistry

Common Practices

Preamble. This document contains a series of common practices that all faculty members (permanent, temporary, tenure-track and non-tenure-track) in the Chemistry department are expected to be familiar with. Policies that govern all faculty members are discussed in the Faculty Handbook, which can be accessed online on the Provost's web site. This document is intended to evolve and reflect current practices. Any member of the department who wishes to add new items to the list should send them to the Chair.

A. Courses and Teaching:

1. Scheduling. Early in the fall semester of each year the department chair will determine a course load proposal for the coming academic year. In determining loads we generally count course equivalents (CE) and contact hours (CH) and work to ensure that no faculty member is assigned more than three CE's and/or 12 CH's per semester. Course equivalents and contact hours are counted as follows:

course structure	CE	CH
150-min lecture/wk + 1 170-min lab/wk	1.5	6
150-min lecture/wk + 2 170-min labs/wk	2	9
150-min lecture/wk	1	3
2 170-min labs/wk (CHEM386: Multistep Synthesis)	1	6
75-min lecture/wk + 2 labs (CHEM584: Jr. Seminar)	1	7.5
150-min lecture/wk for ½ semester (CHEM4xx: Current topics)	0.5	1.5

The load proposal is generally discussed in a department meeting and any reasonable adjustments suggested or requested by faculty members are incorporated into the load proposal, which is finalized by the end of fall semester. During the first part of the spring semester the department chair assigns time slots to all courses with the input of faculty members teaching each course. Time slots are constrained in general to conform with: a) traditional times for courses; b) avoiding conflicts with courses generally taken concurrently by science students; c) faculty members teaching time preferences.

2. Mentoring and class observation. Please refer to the departmental document on mentoring and class observation.

3. Course numbers. Chemistry department courses are numbered using the following logic:

1 st digit	course type	2 nd digit	subdiscipline
1	foundation	2	inorganic
2	core	3	organic
3	intermediate	4	physical
4	advanced	5	biochemistry
5&6	capstone	6	analytical

4. Independent study. The College distinguishes four types of “independent study” courses:

590 = independent study or research experience

591 = group study – meets regularly with a faculty member to study a topic in depth

592 = student teaching experience

593 = peer mentoring – for FS peer mentors, workshop leaders etc.

5. New courses. Given the small number of majors and the large number of students we teach in the first three semesters of Chemistry, new courses are proposed only very infrequently and typically in conjunction with a departmental curriculum proposal. That being said, faculty are free to offer “group study” (CHEM 591) courses and one-time 490 or 190 courses as overloads to their schedules. Offering these courses is at the discretion of the faculty member and should not take away from assigned teaching and mentoring duties.

6. Senior Projects. Faculty members should be familiar with the “Senior Projects Guidelines” document which can be accessed on the department webpage.

The senior project consists six credit hours of laboratory research under the supervision of a continuing faculty member. Students take two sequential graded courses, CHEM600 (2 credits) and CHEM610 (4 credits) to complete this college graduation requirement.

As part of the junior seminar course students submit names of faculty they would like to work with for their senior project. The faculty members of the chemistry department who are taking senior project students for the coming year together decide upon final assignments of senior project advisors. This is done in such a way that: a) mentoring duties are evenly distributed; b) students get their first or second choice when possible; c) students have had the requisite course work necessary to be successful on a given project.

Project committees consist of three readers: the project advisor and two other faculty members (tenured, tenure track, and non-tenure track) assigned randomly by the building coordinator. Second and third readers are assigned so that the total number of senior project committees is distributed as equally as possible among all faculty members. Each student will have at least two tenure-track faculty members on their Senior Project committee.

First readers (project advisors for a student) are awarded two Senior Project Points for each student. Second and third readers are each awarded one point.

Student research. Many faculty members conduct summer research with students and get students involved in their projects early in the students' careers. Summer research funds are available from the Provost's office and from various departmental funding sources for student stipends and students are provided with on-campus housing for the summer for a nominal fee. There is no formal expectation of research activity during the summer, but faculty members are encouraged to take advantage of this time to work on their research and to be a part of the research community on campus and in the department.

During the school year students may take a CHEM 590 independent study course that awards course credit for research and is not paid. The student and faculty member will agree on the number of credits to award for the proposed independent study work. Students are typically expected to complete three hours in lab for each hour of credit. The instructor will typically expect some form of written documentation at the end of the semester. Independent studies (590) can be taken for a grade or as credit/no-credit courses depending on the agreement between the faculty member and the student.

Each tenure-track faculty member is provided with research space for his/her own use and his/her students' use. All commonly used glassware, reagents and solvents for student/faculty collaborative research is made available in the stockroom to each member of the department through the departmental instructional budget. If a faculty member's research requires particularly expensive reagents or consumable supplies, the faculty member is generally expected to find other sources of support such as the Academic Support Committee funds (see Faculty Handbook).

7. Enrollment policy for multi-section courses. Each section of a multi-section course is assigned a cap during registration. These courses are typically oversubscribed since the cap is intentionally set low so that we can even out the population among all sections. To this end, a common waiting list is kept in a Google document. Students wishing to add a closed section are instructed to supply their schedule AFTER they pre-register and we add them to the waiting list for all sections that fit their schedule. Once registration closes, we assign students to sections that fit their schedule while keeping section enrollments as even as possible. Instructors are expected to follow this procedure and not add students to their sections indiscriminately. It is department policy not to oversubscribe any section of a multi-section course as long as space is available in other sections.
8. Laboratory Coordinators. Each multi-section lab course taught by more than one faculty member has a coordinator assigned. The coordinator's duties are to:
 1. set lab policies and procedures for the course that all instructors of the course will follow;
 2. set a lab schedule and make lab procedures and any instructor's notes available to fellow instructors 3-4 weeks prior to the start of the semester so that each instructor can reasonably construct a syllabus that integrates the lab experience as much as possible into the course;
 3. provide the stockroom manager/technician with a list of all supplies and equipment needed for each lab 2-3 weeks prior to the start of the semester. The list should include the dates each group of supplies and equipment will need to be available in the assigned lab room for the course;

4. coordinate with the instrument technician for any instrumentation that is needed to ensure that all lab courses have access to the instrumentation needed to run the lab.

Each instructor of a multi-section lab course is expected to adhere to the policies and procedures set forth by the coordinator and to communicate regularly with the coordinator any logistical issues or concerns. In addition, instructors are generally NOT at liberty to change labs or substitute their own lab experiences for those planned by the coordinator. This places an undue burden on the stock- room manager/technician and goes against our philosophy of providing a common experience to all students in a multi-section/multi-instructor course.

9. Maintaining common teaching spaces. All members of the faculty are expected to respect the teaching spaces and to remember that they are not the only person using the space. This is particularly true about lab spaces. Policies regarding check-in and check-out for each multi-section lab are set by the course coordinator and should be followed by all instructors of the course. In addition, instructors should strive to leave the lab space cleaner than when they walked into it. TA's can be utilized to regularly clean balance and instrument areas, restock reagents and other supplies, and do a general clean-up sweep after a lab period is finished. However, it is the instructor's ultimate responsibility to ensure the cleanliness of the lab and make sure supplies and materials are restocked prior to the next lab period.
10. General Chemistry. Most faculty members in the department will be involved at some level with the general chemistry courses. These are multi-section courses that are linked by a common lab experience. The course coordinator for these courses holds a three-year renewable position in the department and is responsible for:
 1. teaching one or more sections of the course each semester;
 2. development of labs;
 3. course development; and
 4. holding twice monthly meetings of all faculty teaching in the general chemistry sequence. All faculty members teaching a general chemistry course are expected to attend these meetings where lab and course logistics and philosophy are discussed.
12. Course content and rigor. The Chemistry Department is committed to delivering a uniformly rigorous and excellent curriculum to all students. Unevenness in instructor expectations undermines the department's reputation and negatively impacts student attitudes and preparation. Therefore, instructors of multi-section courses have a particular responsibility to ensure their sections adhere to a common standard of content, rigor, and student responsibility. However, there may be differences in expectations and student responsibilities when comparing the multi-section introductory and organic chemistry courses. For example, at the introductory level, it is often possible for an excused lab absence to be made up in a different instructor's lab section due to the variability inherent to the lab schedule. It is common practice for students with an excused lab absence to reach out to another lab instructor (at the instruction of their own lab instructor) to make up a lab absence. When that is not possible due to a scheduling conflict, the student may complete the lab with data provided by their instructor. At the organic chemistry level such lab make ups are not allowed due to the fact that many of the experiments cover multiple weeks and there is a much tighter lab schedule with substantially less variability.

13. Sharing teaching materials. Further support for teaching is available through the shared syllabi, exams, activities and assignments on the shared Departmental Google Drive folder. All members of the chemistry faculty have access to and can edit this folder where they can share documents related to all courses, but especially for multi-section courses such as the general chemistry sequence.
14. Course prerequisites. Course co- and pre-requisites listed in the Catalogue are strictly observed. In the event of an incomplete (IN) grade in the prerequisite course, the IN grade must be resolved before adding the next course. In the event of extenuating circumstances preventing the timely resolution of the IN grade before the deadline to add the next course, the student may petition the Department Chair to allow an exception. Such petitions must be received 3 days before the add-drop deadline to allow for appropriate consultation to occur. The Department Chair will consult with the student, prerequisite course faculty member, and the Dean for the Student Experience to make an informed decision about whether to allow the exception. With the exception of transfer students, a Chemistry course taken off-campus must be transferred in as the actual course equivalent (e.g., CHEM 120) to serve as a prerequisite for the subsequent Allegheny course. Off-campus courses transferring in as electives (e.g., CHEM 1TE) are insufficient for continuing in the Chemistry curriculum at Allegheny. Students who take an off-campus course with a 1TE or 2TE designation, but who strongly believe the course has prepared them for success in the subsequent Allegheny course, may appeal to the Chair of Chemistry to continue in the curriculum by means of a placement exam. The placement exam is a final exam from the relevant Allegheny course that has been approved by the department as representative of the expected course competency. The exam must be taken at least three days before the first day of classes, and a score of 73% (C) must be achieved to proceed to the next course. The results of the placement exam are final; a second placement exam is not possible.

B. Governance:

1. Department meetings. Department meetings are run by consensus and are generally held on every other Tuesday from 12:30-1:20. The agenda for each department meeting is set by the chair of the department and includes any items submitted by other faculty members. All continuing faculty members are expected to attend all departmental meetings.
2. Grievances. Any complaints, either first hand or second hand, about a faculty or staff member should be referred to the Chair, who will discuss the grievance with all parties and attempt to resolve the issue. If the issue cannot be resolved satisfactorily, the chair may ask the Provost or Associate Dean to help mediate the situation. If the complaint concerns the chair of the department, the complaint should be referred to the Provost. Faculty who find themselves in the position of referring a grievance may find it helpful to consult with the Director of Faculty Development before proceeding.

C. Departmental Service

1. Search Committees. In the event that an open faculty position needs to be filled, the department generally discusses the job description and ad language in a department meeting. Once applications are received a subcommittee (made up of volunteers) of 2-3 faculty members will narrow the applications down to 12-16 applicants. The entire department and any outside members of the search committee will then read these files. An

approval straw vote is conducted at a department meeting following the close of the application deadline and any candidates that rise to the top in that vote are discussed in detail. The rest of the process follows the Faculty Handbook guidelines for recruiting.

Applicant files are kept in the building coordinator's office and the building coordinator maintains the files and the search logs. Files should not leave the building.

2. Student Club advising. There are two student chemistry clubs whose advisors are volunteers from the regular continuing faculty members of the department.
 - a) the American Chemical Society Affiliates Club, Chemii; and
 - b) the Chemistry Honor Society, Beta Chi.
3. Lord Lecture. The coordination of the Lord Lecture is carried out by a volunteer from the department. The Lord Lecture is typically a multi-year commitment, since continuity in the role is important.
4. Department seminar series. A Google calendar for departmental seminars is shared with all continuing and visiting members of the Chemistry department faculty. Faculty members are encouraged to invite speakers and add them to the departmental seminar calendar. When possible, the agreed upon seminar time (this is variable depending on course scheduling for a given semester) should be used to book these speakers. All faculty members are encouraged to meet with the seminar speakers, as schedules allow, during their visit.

Please note that this is not an exhaustive list of service roles in the department.

D. Departmental Honors and Awards

Early in the spring semester the building coordinator requests a release of grade records from all chemistry majors. These records are used to help decide student honors and awards. Each year the department awards the following honors and awards (nomination deadline in parentheses):

1. Awards based on specific classes
 - The **Freshman Chemistry Award** is provided by the ACS Erie Section and is presented to an outstanding student in freshman chemistry. This award is listed in the Honors Convocation program. *Deadline: late March.*
 - The **CRC Handbook Award** is presented to an outstanding freshman chemistry student. This award is listed in the Honors Convocation program. *Deadline: late April.*
 - The **POLYED Undergraduate Organic Chemistry Award** is given for outstanding performance by an undergraduate chemistry major in the two-semester organic sequence. The program is administered through UW Steven's Point (<http://www.uwsp.edu/cols-ap/polyed/Pages/awardApplication.aspx>). *Deadline: late June.*
 - The **ACS Analytical Award** is given to the most outstanding student in analytical chemistry. Plans should include a career in chemistry. *Deadline: late June.*

- The **ACS Inorganic Award** is decided based on excellence in inorganic chemistry as demonstrated by any combination of research, course work, dedication, and motivation. Plans should include a career in chemistry. *Deadline: late June.*

2. Awards for majors

- The **Balmer Scholarship** is a need-based scholarship for an academically promising junior student. A list of eligible students is provided by the Registrar. *Deadline: November.*
- The **Richard E. Lee Scholarship** is presented to an outstanding junior chemistry major with financial need. A list of eligible students is provided by Financial Aid.
- The **Dr. Ruth Ann Verell Scholarship** to Oak Ridge National Laboratory is awarded to a junior student who displays excellent potential for independent research. *Deadline: early December.*
- The **Roha Scholarship** is awarded to the best Chemistry major planning a career in Chemistry.
- The **Outstanding Junior Major Award** is presented to the most outstanding junior Chemistry major. The award is announced at Honors Convocation. *Deadline: late April.*
- The **Society for Analytical Chemists of Pittsburgh (SACP) Award** is given to the outstanding senior Chemistry major. The award is announced at Honors Convocation. *Deadline: late February.*
- The **Society for Applied Spectroscopy (SAS) Undergraduate Student Award** is given to an outstanding senior doing research relating to an aspect of spectroscopy. The award is not given every year. *Deadline: mid-February.*
- The **ACS Organic Division Undergraduate Award** is given to a top graduating senior student majoring in either chemistry or biochemistry who has demonstrated excellence in organic chemistry based on a combination of research experience, coursework and a desire to pursue a career in chemistry. *Deadline: mid-March.*

E. Technology, Equipment and Departmental Technicians

1. Laboratory preparation and instrumentation use. Faculty teaching labs during a given semester typically utilize our stock room manager for routine laboratory preparation. It is the instructor's responsibility to provide the stockroom manager with a list of all labs for the semester including; necessary solutions, solvents and reagents, and glassware or other items needed at least 2-3 weeks prior to the start of classes. This type of prior communication is important so that the stockroom manager can plan for each week and ensure that all labs are prepped prior to the date they will be performed by students. A list of all instruments and equipment necessary and the dates of anticipated use for the semester should be submitted to the instrument technician. This allows us to identify any conflicts of instrument scheduling and to find compromises prior to the start of the semester.
2. Classroom technology and reservation of rooms. Rooms are reserved with the building coordinator. All classrooms (not all labs) have the technology that is standard across campus. Support for technology in classrooms and offices is obtained through User Services by filling out a work order or by e-mailing help@allegheny.edu

3. New equipment, instrumentation or technology. Early in the fall semester the departmental instrument list will be reviewed during a department meeting. During this discussion any instrumentation that should be updated or replaced is identified. In addition, any potential requests for updates or replacements to classroom technology or renovations to teaching spaces are also identified. Any requests for new instrumentation not covered by an extramural grant will also be discussed. In general new instruments for a particular faculty members' research have low priority for institutional funds, and faculty members are encouraged to seek other funding for those purposes. Capital instrument, technology and renovation requests are prioritized by the department and ultimately submitted to the college budget process by the chair of the department.

F. Miscellaneous

1. Faculty Files. Each faculty member is responsible for the upkeep of his/her departmental and Provost's Office file. The departmental files are maintained by the building coordinator and can be accessed by any tenured member of the department. Untenured members of the department may request to see their file at any time. Any confidential letters of recommendation will be removed by the chair prior to surrendering the file. Files should not leave the building.

reviewed and approved the Chemistry Department <date>