

We wish you success and hope that your time with us in Chemistry is rewarding, both academically and personally. You are responsible for reading this handbook thoroughly, but please realize that it is not all-inclusive and department and OSU policies are subject to revisions.

# TABLE OF CONTENTS

1.	General Contact Information	2
2.	Arrival Checklist	3
3.	Facilities	3
4.	Security and Safety	5
5.	OSU Employment	6
6.	International Students	8
7.	Academic and Support Resources	9
8.	Academic Regulations	10
9.	Academic Program Information and Graduate Degree Types	15

# **1. GENERAL CONTACT INFORMATION**

The Chemistry main office is located at 153 GilbertHall.

Mailing address:	Oregon State University Department of Chemistry 153 Gilbert Hall Corvallis, OR 97331
Phone:	541.737.2081
FAX:	541.737.2062
Email:	chemweb@oregonstate.edu

## **1.1. Program Specific Contacts**

Head of Department:	Wei Kong	wei.kong@oregonstate.edu	541.737.6747
Chair of Graduate Academic Committee	May Nyman	may.nyman@oregonstate.edu	541.737.1116
Graduate Program Coordinator	Tara Stacy	tara.stacy@oregonstate.edu	541.737.6708
Office Manager/ Employment	Paula Christie	paula.christie@oregonstate.edu	541.737.1681
GTA Position Coordinator	Margie Haak	margie.haak@oregonstate.edu	541.737.6716
Graduate liaison <sup>1</sup>	Joe Nibler	joseph.nibler@oregonstate.edu	N/A
Graduate liaison <sup>1</sup>	Glenn Evans	glenn.evans@oregonstate.edu	N/A

<sup>1</sup>provide unbiased discussion and support for graduate students negotiating graduate school related challenges

## **1.2. Important Websites**

OSU Chemistry Dept	http://chemistry.oregonstate.edu/
Graduate School*	http://gradschool.oregonstate.edu/
Online Grad School Forms	http://oregonstate.edu/dept/grad_school/forms.php
Academic Regulations	https://catalog.oregonstate.edu/regulations/
Academic Calendar	https://registrar.oregonstate.edu/osu-academic-calendar
OSU Course Catalog	http://catalog.oregonstate.edu/
Department Safety	http://chemsafety.chem.oregonstate.edu/

\* The Graduate School at OSU assures quality and consistent interpretation of Graduate Council policies related to graduate education across all programs. The <u>OSU Catalog</u> is the official source for information regarding OSU graduate education policy and procedures. It is the student's responsibility to refer to the catalog for this information. The Graduate School supports students throughout the academic <u>lifecycle</u>, from admissions to degree completion and in addition it offers an array of professional development opportunities specific to the success of graduate students.

## **1.3 University Emergency Contact**

OSU is dedicated to providing a safe and secure learning and living environment for its community members. <u>The Department of Public Safety</u> provides resources, information, emergency phone numbers, and protocols for maintaining personal safety. Sign up for <u>OSU Alerts</u> to get timely messages delivered right to your phone or inbox regarding university closures and other emergency situations.

## ARRIVAL CHECKLIST

A few things to do when you first arrive at OSU:

- □ Get a University ID Card. The OSU ID Card is the official identification card for students, faculty and staff. It functions as a meal card, library card and more. The ID Center is located in Memorial Union room 103. See <u>https://fa.oregonstate.edu/business-affairs/id-center</u> for additional information. You will need to be registered for classes before getting your ID card. Most people get theirs during the Orientation Week scavenger hunt.
- □ Sign Up for Your Email Account. Set up your ONID (OSU) email as soon as possible. Instructions are available at <u>https://fa.oregonstate.edu/business-affairs/id-center</u>. ONID is the university's official email addressing system and you will miss crucial emails if you do not activate this account.
- Meet with your Major or Temporary Advisor. It is important to meet with an advisor before registering for your classes and to discuss objectives for your first year in the program. A temporary advisor will be assigned if you have not yet reached agreement with a major professor and joined a research group.
- **Register for Classes.** You must register for classes before the first day of the term to avoid late fees. You will register during Orientation Week with the help of your temporary advisor.
- **Get an office assignment.** Ask at the Chemistry Main Office (Gilbert 153)
- **Pick up your keys.** See information below under Facilities. Most people pick up their keys during the Orientation Week scavenger hunt.
- □ **Make sure you have an after-hours permit.** See Tara Stacy in the Chemistry Office if you didn't receive one in your orientation packet. You will need this in the Chemistry buildings at night or on weekends.

# **1. FACILITIES**

## **1.1.** Transportation info links

- Student parking permit <u>https://transportation.oregonstate.edu/parking/about-parking</u>
- Bicycle security
   <u>https://transportation.oregonstate.edu/biking</u>
- Free campus shuttle bus <u>https://transportation.oregonstate.edu/beaver-bus</u>
- Corvallis transit buses (note: CTS buses are fare-free in Corvallis)

http://www.corvallisoregon.gov/index.aspx?page=167

Saferide

http://asosu.oregonstate.edu/saferide

#### Chemistry Graduate Student Handbook: 9/23 1.2. Mail

Campus and U.S. mail can be sent from the Chemistry Office. You may have personal mail delivered to this office until you establish a permanent mail address. The mail address is on the first page of this guide. Incoming mail will be placed in your mailbox. Outgoing U.S. mail with postage already applied can be sent from the Chemistry Office. Graduate student mailboxes are located in the department break room (Gilbert 156). Both campus mail and U.S. mail are delivered to your mailbox along with department notices.

## **1.3. Making Copies**

Copy machines are located in Gilbert 153, Gilbert 329, and LPSC 242. The Chemistry Office staff can provide assistance when needed. Copies for teaching duties are free; personal copies are not allowed on department copiers. The photocopier has a scanning feature and can send digital copies (in PDF, JPG or other formats) directly to your email address.

## 1.4. Fax Machine

The fax machine in the Chemistry Office may be used during office hours. OSU-related FAX are free. The fax number is 541-737-2062. Please ask the office staff for details about receiving/sending international FAX. The department does not allow personal faxes to be sent or received from this machine.

## **1.5.** Campus Phones

University phone numbers have the prefix 737 or 713. When calling from one campus telephone to another, dial only the last five digits of the phone number. When calling a local number, you must first dial 9 to get an outside line, then the area code and number. You will need an authorization code or personal calling card number to make long distance calls. Check with your major advisor for an authorization number.

## 1.6. Student Offices

Your major advisor or the department will provide office space during your graduate studies at OSU. Office space is generally shared with other students. You may receive temporary space before you select a major advisor.

There are departmental break rooms with refrigerators, sinks, and microwaves in Gilbert 156 and LPSC 242. The Refrigerators and these common facilities must be kept clean. Please ask in the Chemistry Office for instructions and rules of use.

## 1.7. Keys

The physical keys, and any electronic lock access that you may require via your smart ID card, must be requested at one of the following links, depending on whether you are located in Gilbert Hall/ALS or LPSC. When you receive a signed key request form, take it to the Key Shop located on 15<sup>th</sup> St. just south of the Kerr Admin Building. Their hours are 12:00–3:00 pm. Separate provisions are made for those requiring access to the Radiation Center.

http://chemistry.oregonstate.edu/key\_request

http://chemistry.oregonstate.edu/LPSCKeyRequest

## **1.8.** Supplies

ChemStores (541.737.2271, <u>chemstores@oregonstate.edu</u>) is located in Gilbert 154 and provides a wide range of chemicals and laboratory supplies. Products routinely stocked include liquid nitrogen, dry ice, and a variety of other chemicals, lab supplies, and office supplies. Prices and locations of all products stocked are listed in notebooks in the store and at the website below. Business hours (subject to change) are Mon-Fri 9:00am-noon; 1:00pm-4:00pm. Specialty chemicals and research supplies can also be ordered; check with your major advisor and then with Chemistry Purchasing (Rusty Root, 541.737.6722, <u>chemistry.purchasing@oregonstate.edu</u>) for more information. The Chemistry Office provides basic supplies (paper, pencils, pens, tape, chalk, erasers, whiteboard markers, etc.) as needed for teaching at no charge.

https://chemstores.chem.oregonstate.edu/

#### **1.9.** Computers

Chemistry recognizes and supports OSU's Network Engineering Acceptable Use Policy. <u>http://oregonstate.edu/aup.htm</u> All student, staff and faculty are responsible for adhering to these policies and those of the College of Science (<u>http://my.science.oregonstate.edu/policies</u>)

Computer support is provided via the UIT Helpdesk (helpdesk request link https://oregonstate.teamdynamix.com/TDClient/1935/Portal/Requests/TicketRequests/NewFor m?ID=Dr9c0T7BaSI\_; phone 541-737-8787; service.desk@oregonstate.edu; physical location 201 Milne Hall; website https://uit.oregonstate.edu). Please report all computer and networking questions and problems directly to UIT. UIT can also assist, or find the right contact, for questions about your personal computer.

#### 1.10. Printers

Department printers are available and printers are also available at various locations on campus. Report any department printer problems to the Chemistry Office. Student Multimedia Services at <a href="http://oregonstate.edu/is/mediaservices/sms/">http://oregonstate.edu/is/mediaservices/sms/</a> provides many useful printing services such as free large-format (poster) printing and thesis printing free. Please do not use printers as copy machines. Large print jobs should be sent to campus Mailing and Printing Services (see Chemistry Office staff for instructions).

## **2. SECURITY AND SAFETY**

## 2.1. Building Security

You are responsible for closing and locking all doors and windows when leaving rooms you have been using. Special care must be taken in this regard when leaving the building at the end of the day or after regular hours. Fire doors and outside doors may not be propped open at any time.

Be aware that university buildings are open to the public. Offices and laboratories with open or unlocked doors are not secure from theft. Be sure to keep all your portable valuable items in locked rooms or cabinets.

Do not let unauthorized persons in the building after hours! If an individual belongs in the building, they should already have a key. Do not prop open outside doors! Keep your after-hours permit with you when you are in the building in the evening or on weekends. If Security comes through the building and you do not have your after-hours permit, you will be required to leave the building. You should receive a permit from the Chemistry Office when you first arrive, and you will need to renew it annually.

## 2.2. Laboratory and General Safety

The department has a safety committee, the Department Safety Advisory Group (DSAG), currently chaired by Michael Burand, and a website "SafetyWeb":

http://chemsafety.chem.oregonstate.edu/

OSU contacts and comprehensive safety policy information are available at:

#### https://ehs.oregonstate.edu/

Safety-related issues should be reported to the chair of DSAG or to the relevant building manager. Laboratory safety rules are posted throughout Gilbert, Gilbert Addition, and the Linus Pauling Science Center.

A laboratory safety workshop is offered during orientation week for incoming graduate students and additional lab safety workshops or seminars may be offered during the year by special arrangement. During winter term, all first year graduate students are required to register for the one-credit hour seminar class CH607 (Section 010; 'Chemical Safety Seminar'). Further details for this class can be found on SafetyWeb.

## 2.3. Insurance

GTAs and GRAs and students on hourly wages are covered by the State Accident Insurance Fund (SAIF) while involved in OSU work. This insurance covers you while working on campus and if you are off campus on OSU business in state vehicles. The coverage includes medical care for job-related accidents. In case of death, there are certain benefits to survivors. This insurance does not cover non-work-related accidents or illnesses. Students not on the OSU payroll are not covered by SAIF. This means that any such student injured in any laboratory, state vehicle, research vessel, etc., generally has no recourse to state insurance.

All GTAs and GRAs are required to have health insurance. PacificSource Insurance is the OSU provider, and offers comprehensive medical, dental and vision plans. All GTAs and GRAs must either enroll in PacificSource or provide proof of comparable coverage. OSU pays 90% of the graduate student's and dependents' monthly premiums and 50% of administration fees. The remaining premium costs will be deducted directly from your paycheck. If you have a break in service, you may be able to continue health insurance with either Graduate Assistant Summer Insurance or the COBRA Continuation Plan.

https://hr.oregonstate.edu/graduate-student-insurance-plans/graduate-assistant-insurance-plan

## **3. OSU EMPLOYMENT**

## 3.1. Assistantships

If you are appointed on an assistantship at 0.35 FTE or more during a term, tuition and other fees will be automatically billed to your account and then paid as indicated by the Department of Chemistry after the second week of classes (tuition at 100%, other fees at 90%). However, you must pay certain of your non-instructional fees. Each term your assistantship is in effect, you will be required to carry health insurance. Please see your advisor or the Chemistry Office about summer pay options, as there are a variety of arrangements possible. The department, college, and OSU have numerous scholarships and fellowships for deserving students.

#### Graduate Teaching Assistantship (GTA)

The dates of appointment for a GTA are:

- Fall term: Sept 16 Dec 15
- Winter term: Dec 16 Mar 15
- Spring term: Mar 16 Jun 15

All GTAs must be physically present in Corvallis and available for preterm work and training by the following dates:

- Fall term: Sept 16
- Winter term: The Thursday before classes begin
- Spring term: The Thursday before classes begin

GTAs are expected to remain in Corvallis and be available for work duties until the Saturday at the

end of Finals Week each term

GTAs teach introductory undergraduate courses or assist faculty in the delivery of upper division and graduate courses. Nearly every graduate student can expect a GTA assignment in year 1. The few exceptions are students with a university or nationally competitive fellowship. While the duties of a GTA will vary, you can expect to be responsible for one or more of the following.

- Teaching or assisting with one or more sections of a course.
- Running laboratory sessions.
- Grading undergraduate student papers and exams.
- Holding regular office hours and meeting with students.
- Conducting study and review sessions.

These tasks require mastery of the course content and also improve communication skills. For students planning a career that includes teaching, a GTA position provides excellent training on pedagogy, lesson planning, and classroom culture and management. GTA positions provide other emergent learning opportunities including oral communication, time management, leadership, and rapid decision-making.

GTAs should pick up required textbooks for instructional assignments for free in the Chemistry Office. The textbooks must be returned at the end of each term. GTAs often need to make copies of assignments and lab materials for their instructional duties. See information above on Making Copies.

New TAs should register for 1 credit of CH607-5 (Teaching Seminar) their first quarter at OSU. The Center for Teaching and Learning (CTL), <u>http://oregonstate.edu/ctl/</u> provides resources for new GTAs and all others involved in instructional activities. CTL supports teaching and learning in the academic curriculum and learning in co-curricular settings. Their services include individual consultations, workshops and seminars, coordinating learning communities, and student orientations. For those interested in further developing teaching skills, the department runs a mentoring program, more information is at <u>http://chemistry.oregonstate.edu/mentor\_program</u>

#### Graduate Research Assistantships (GRAs)

GRAs tuition is paid from faculty grant funds, but students must pay their own fees, deposits, or late fees incurred. Although GRAs are not aligned with the term schedule, they are to be treated with the same attention to the schedule of the university. More information below concerning time off. GRAs are supported by grants and contracts awarded to faculty from proposals to private, state and federal funding agencies. The grants are awarded to perform a specific body of research. When a student is awarded a GRA, it is the student's responsibility to perform the research proposed in the award grant. Although all graduate students are expected to perform independent research, obtaining GRA support for any length of time is a privilege. A GRA allows the student to focus all working time on research, which is important if considering a career that involves research.

Here are a few pointers for being a successful GRA. **NOTE**: *much of this advice is relevant to all students, regardless of the nature of financial support:* 

- Student should ask advisor for a copy of the awarded grant, study it, and read key papers cited in it
- With the help of the advisor, the student should design first hypothesis-based experiments, early in the GRA assignment.
- The student should determine what instrumentation (or software) is necessary to perform research and seek training as soon as possible.
- The student should ask the advisor for the timing of grant milestones, and have those milestones guide completing experiments, writing papers, etc. Milestones can include annual progress reports to the funding agency, meetings with collaborators or the funding agency, and grant renewal.

ADDITIONAL GUIDANCE ON BEING A SUCCESSFUL PHD STUDENT LEADING TO A SUCCESSFUL CAREER (all of these extra activities help build the student's resume and provide other emergent outcomes)

- Seek internships or other temporary opportunities in industry, national labs, and different universities outside of OSU, depending on career goals. Ask your advisor for guidance on these opportunities.
- Consider mentoring an undergraduate—ask your advisor for these opportunities. Faculty are constantly receiving requests from undergraduates to perform research.
- Take leadership roles in the department, the university, and your research group. Ask your advisor for guidance.
- Seek opportunities to go to conferences that are aligned with your future career goals. Financial support can be obtained from the graduate school, the department, and/or your advisor (see more below).
- Learn as many different skills as appropriate to your research—being an expert on different instrumentation, synthetic methods, etc. will often lead to your first job.
- Seek research collaboration in your research group, the department, the university, and other institutes, as appropriate to your project.

## 3.2. Taxes

Salaries paid to graduate assistants are taxable income. However, the tuition remission accompanying a graduate assistantship is not taxable income. Scholarships and fellowship incomes are also taxable on the portion not spent for tuition or course-required educational supplies and fees. When completing a Withholding Allowance Certificate (IRS W4 form), be sure to have a sufficient amount withheld from your monthly check to match your tax liability. There may be IRS penalties for insufficient tax withholding. International students should keep careful records; most non-resident aliens cannot take the standard income tax deduction and are allowed only one exemption and actual itemized deductions. Taxation agreements between the US and certain foreign countries may result in different tax requirements. More information on this may be available via the International Student Advising and Services (ISAS):

#### https://internationalservices.oregonstate.edu/students/staying-here/shipping-finances-taxes

## 5.3 Travel

Participation at professional meetings can be one of the best professional development activities during your graduate studies. You can present your research results to a broader audience, gain valuable feedback, network with scholars in your discipline(s), polish your public speaking skills and confidence, and ultimately make contacts for future employment opportunities. Please discuss with your advisor when is the appropriate time to present your work, and which meetings are best suited for your discipline.

https://fa.oregonstate.edu/fiscal-policy-program/03-140-401-travel

Prior institutional approval is not required for travel within Oregon but check with your major advisor and the Chemistry Office about reimbursements before making plans. For out-of-state travel, submit a Request for Travel Authorization form at least one week prior to the departure date. Approval by your major advisor is required. Foreign travel requests require additional time and must be approved prior to airfare purchase. You will need to indicate departure dates and times, methods of travel, registration fees, anticipated miscellaneous expenses, etc., and provide an index number for the reimbursements and charges. Because of insurance requirements, an approved Request for Travel Authorization form is required even for travel paid by an outside agency.

There are different means to seek financial support for travel: 1) from your advisor's grant money, 2) from various society travel awards, 3) from various OSU awards listed here: https://chemistry.oregonstate.edu/graduate/student-resources, 4) from the Department of Chemistry (via this form: https://oregonstate.qualtrics.com/jfe/form/SV\_8k12SgWFvAhA8Xc).

Each graduate student in good standing can receive up to a total of \$1000 from the Department of Chemistry, over the course of their tenure at OSU. Superannuated graduate students (in the graduate program more than six years) cannot receive travel support from the department of chemistry.

## 5.4. Tenure of Support

Students typically require 2-3 years for the MS degree and 4-6 years for the PhD degree. The Department does not typically offer financial support for MS students - this includes students who change from PhD into the MS program. The department will not normally provide financial support beyond the 6th year of a PhD program. After the 6th year in a PhD program, requests for support can only be considered on a term-by-term basis. Financial support is contingent on continued satisfactory progress towards the degree and is subject to the availability of financial resources of the Department (GTA) and/or advisor (GRA). Continued TA support will require adequate performance in teaching duties and will be evaluated each term.

## 5.5. Coalition of Graduate Employees (CGE)

CGE is a local, member-run labor union recognized by OSU and the State of Oregon as the exclusive representative for OSU graduate assistants on all matters involving wages, benefits, and working conditions. CGE is affiliated with the American Federation of Teachers (AFT). All OSU graduate students are eligible to join CGE. All CGE members have access to various discounts and insurance provided through AFT. CGE offers two levels of membership. Associate membership is optional. Membership forms are available by contacting CGE. The employment rights and benefits of graduate assistants are contained in a contract CGE negotiates with OSU. Please see the collective bargaining agreement for more information:

(https://hr.oregonstate.edu/sites/hr.oregonstate.edu/files/cge\_cba\_2020-2024.pdf).

**Paid time off (PTO)** The CGE defines paid time off for graduate students, see section 8 of the collective bargaining agreement. Graduate students are allowed **fifteen days of PTO**, outside of university holidays. The holiday schedule can be found here: <u>https://hr.oregonstate.edu/benefits/current-employees/time-holidays-protected-leaves/holiday-schedule</u>. Students must plan ahead, and follow this procedure:

- Inform major supervisor, TA Supervisor (if applicable) and Tara Stacy in writing, to be granted approval at least 2 weeks in advance.
- Tara will keep track of individuals' vacation days.
- If you require an exception to the fifteen days PTO per year, please discuss it with the Department Head.

The spreadsheet allows transparency of vacation schedules, and helps the student and department keep track of graduate students' vacation time.

See the following links for information on sick leave, substitution pay, and OSU's timesheet system (Empcenter):

http://mytime.oregonstate.edu/grad-student-training http://hr.oregonstate.edu/sites/hr.oregonstate.edu/files/student-employment/graduate-sickleave-faq.pdf

## **4. INTERNATIONAL STUDENTS**

Additional conditions and regulations govern your stay in the U.S. if you are here on a non-immigrant student visa (F-1 or J-1 visa). It is important to follow these conditions and regulations; failure to do so may have serious consequences. As long as you follow all of the regulations and meet all of the conditions during your stay, your immigration status remains in effect. If you neglect your immigration responsibilities, your visa could be terminated.

https://internationalservices.oregonstate.edu/students

OSU's International Affairs has international student advisors who know immigration regulations,

maintain students' immigration records, and can advise students on appropriate processes and procedures related to immigration. To schedule an appointment with an advisor, call 541-737-6310, email <u>isas.advisor@oregonstate.edu</u> or visit their office in University Plaza, Suite 130. Additional information on the topics covered below, and other important topics, is available by visiting the International Affairs office or the website listed above.

International students on a student visa are required to purchase health insurance that meets both the U.S. government and OSU minimum standards for your visa category. PacificSource should meet these requirements.

As a fully-admitted F-1 and J-1 student, you may engage in part-time employment (up to 20 hours per week) on the OSU campus while classes are in session. You may work on campus full time (more than 20 hours per week) between terms and during the summer as long as you plan to be a full-time student the following term. This includes serving as a graduate teaching or research assistant. F-1 students do not need authorization from International Affairs for on-campus employment, but J-1 students do need authorization from International Affairs.

You may not participate in any type of off-campus employment unless authorized by ISAS and/or U.S. Citizenship and Immigration Services (USCIS). Internships which are required or integral to your program of study must be authorized by International Affairs prior to the internship start date. If you are interested in off-campus employment, you should make an appointment with an ISAS advisor before accepting an employment offer.

You will need a social security number (SSN) to work on campus, application procedures are available at:

#### http://oregonstate.edu/international/sites/default/files/atosu/socialsecurity.pdf

If you are on a GRA or GTA appointment, you can use a copy of your appointment letter as the letter of offer. You may sign up for payroll immediately, but you will need your social security card or receipt from the Social Security Administration in order to complete your payroll paperwork.

If you plan to leave the U.S. and return for any reason, see an ISAS advisor well in advance of your departure. Depending on your country of citizenship, you may be required to get entry visas for the place(s) to which you will be traveling. In addition, your visa to re-enter the U.S. must be valid at the time you plan to return. Allow enough time to take care of all these details before you leave.

You must update your address through your MyOSU account within 10 days of a change of address. This is a federal regulation.

You must maintain full-time enrollment throughout your program of study in the U.S. and enroll for (and complete) at least 9 credits each term during the academic year to satisfy immigration requirements. If you have an assistantship, you must register for 12 credits each term you hold the assistantship. Audited courses do not count toward full-time enrollment for OSU graduate students. Only 3 credits of online or e-campus credits may count toward the full-time enrollment requirement.

If registering for credits beyond degree requirements, it is important that Master's students register for CH503 instead of CH501, and PhD students register for CH603 instead of CH601. The thesis credits are assigned an R grade and will not impact future immigration benefits.

If you have serious academic or medical concerns, you will need to make an appointment with an International Affairs advisor to discuss possible exceptions prior to dropping below full-time status. When you have completed all required coursework and all requirements listed on your specific

graduate program of study you may apply for a "Reduced Enrollment." Reduced Enrollment may be approved up to four terms for a Master's student or six terms for a PhD student.

# **5. ACADEMIC AND SUPPORT RESOURCES**

OSU offers a wide array of academic and support resources designed to meet graduate student needs. Some of the more commonly used resources are included below. For a more complete list, please visit the Graduate School's <u>Student Resources web page</u>. Note that some services are campus-specific. See also <u>OSU Cascades Campus Life</u> and <u>Ecampus Student Services</u> for services specifically provided to graduate students pursuing degrees or certificates via those specific venues.

Campus Safety – Emergency phone numbers, university alerts Career Development Center – Resume/CV, networking, job search strategies Childcare and Family Resources - University childcare centers, childcare assistance Counseling and Psychological Services (CAPS) - Individual and group counseling Cultural Resource Centers - Cultural based community centers, social support Disability Access Services (DAS) – Academic accommodations Equal Opportunity and Access (EOA) – Employment accommodations, discrimination, or bias response Financing your education – Funding options and information, graduate awards Graduate Student Success Center (GSSC) – Lounge, study space, printing, reservable meeting rooms Graduate Writing Center – Writing workshops, groups, and 1:1 writing coaching Health Insurance – Plans for graduate students and graduate employees. Human Services Resource Center (HSRC) - Food pantry, housing and food stamp assistance Institutional Review Board (IRB) – Review for human subjects research International Affairs - Visa and immigration advising. Ombuds Conflict Management Services - Informal, impartial conflict resolution advising Recreational Sports – Dixon Recreation Center, intramural sports Statistics Consulting Service - Graduate student research statistical advising Student Health Services (SHS) – Clinic and pharmacy Student Multimedia Services (SMS) - Poster printing, equipment and laptop loans Transportation Alternatives - Bike, bus, SafeRide Transportation and Parking Services (TAPS) – Parking permits, maps Valley Library – Reference and research assistance, study spaces, research tools GCCUT – Graduate Certificate in College & University Teaching

## 6. ACADEMIC REGULATIONS

## 6.1. Registration

The OSU Schedule of Classes is available online and contains academic regulations and registration procedures that apply to all students in the university, as well as the final examination week schedule. The online <u>course catalog</u> is the source for up-to-date changes for the current and immediately upcoming term. It is your responsibility to register for the appropriate number of credits that may be required for any funding eligibility and/or to meet the requirements of the continuous enrollment

policy. Problems arising from registration procedures, such as late registration, adding or withdrawing from courses after deadlines, or late changes from letter or S/U grading are resolved through the petition for late change in registration filed with the Graduate School. A late registration fee may be applied. Students are responsible for staying current on registration requirements that may supersede the Graduate School requirements (i.e., international, financial aid, veteran's). International students who are concerned with regulations surrounding registration should also see the "International Students" section on p. 9.

Registration requirements for graduate students are established by the Registrar and the Graduate School. "Full-time" status means you have registered for 9–16 credits in a term; "part-time" status means you have registered for less than 9 credits in a term. The Chemistry Department strongly advises all graduate students, except in very special circumstances, to register for 16 credits every term. In part, this helps avoid loss of an assistantship if you withdraw from a course during the term. You must pay additional fees if granted an exception to register for more than 16 credits. In addition to courses, the other credits may include seminars (CH507 or CH607) and thesis research (CH503 or CH603). You do not receive a letter grade for seminar or thesis credits, and you can register for as many thesis credits as needed to make a total of 16 credits for the term. For regular academic year terms where you are appointed as a GTA or GRA, you must register for at least 12 credits (Summer Term registration depends on your situation, typically between 3-6 credits are required, guidance will be offered during spring). This requirement includes international students.

Degree-seeking students must register for at least 3 credits in every term they enroll at OSU. Students must be enrolled (and thus registered for at least 3 credits) during the term of their thesis defense. Contact the Graduate School if you may wish to schedule a thesis defense during a term break to avoid paying tuition for an additional term.

## 6.2. Continuous Enrollment

All graduate students enrolled in a degree program must register continuously for a minimum of 3 graduate credits each term (fall, winter, and spring terms) until all degree requirements are met, regardless of student's location. Students on approved leave are exempt from the continuous enrollment policy for the term(s) they are on leave. Graduate students who use facilities or faculty/staff time during summer session are required to register for a minimum of 3 credits during the summer session. Students defending in the summer term are required to register for a minimum of 3 graduate credits.

Students may appeal the provisions of the continuous graduate enrollment policy if extraordinary circumstances arise by submitting a detailed request in writing to the Dean of the Graduate School. Scheduling difficulties related to the preliminary oral exam or the final oral exam are not considered an extraordinary circumstance.

<u>Graduate assistantship eligibility requires enrollment levels that supersede those contained in this continuous enrollment policy</u>. Various agencies and offices maintain their own registration requirements that also may exceed those specified by this continuous enrollment policy (e.g., those of the Veterans Administration, Immigration and Naturalization Service for international students, and those required for federal financial aid programs.) Therefore, it is the student's responsibility to register for the appropriate number of credits that may be required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

**NOTE**: Students who are pursuing a certificate only are not subject to the continuous enrollment policy.

## 6.3. Leave of Absence

Leave of Absence status is available to eligible students who need to suspend their program of study for good cause. The time the student spends on approved leave will be included in any time limits prescribed by the university relevant to degree completion. Students on approved leave may not a) use any university facilities, b) make demands upon faculty time, c) receive a fellowship or financial aid, or d) take course work of any kind at Oregon State University. Leave of Absence/Intent to Resume Graduate Study Forms must be received by the Graduate School at least 15 working days prior to the first day of the term involved. Family Medical Leave (FML) may be granted at any point during a term. FML inquiries should be directed to medical.leave@oregonstate.edu.

NOTE: Students who are pursuing a certificate only are not subject to the Leave of Absence Policy.

## 6.4. Unauthorized Break in Registration

Degree seeking graduate students who take an unauthorized break in registration relinquish graduate standing at the University.

To have graduate standing reinstated after an unauthorized break, students are required to reapply to their program (complete the online graduate admission application, pay the application fee, and may be required to register for three graduate credits for each term of unauthorized break in registration). It is advisable that students in this situation state that they are applying for readmission in the application packet. A reapplication does not ensure admittance to the program.

## **6.5.** Grievance Procedures

The University Ombuds Office provides informal, impartial, and confidential conflict management services to graduate students. There is more information at <u>http://oregonstate.edu/ombuds/</u>

All students desiring to appeal matters relating to their graduate degree should follow the Grievance Procedures for Graduate Students. These procedures are available at:

http://gradschool.oregonstate.edu/progress/grievance-procedures

Graduate assistants, whose terms and conditions of employment are prescribed by the <u>collective</u> <u>bargaining agreement</u> between OSU and the Coalition of Graduate Employees, American Federation of Teachers Local 6069, should also refer to that document and seek guidance from OSU's Office of Human Resources.

## 6.6. Grade Requirements

A grade-point average of 3.00 is required: 1) for all courses taken as a degree-seeking graduate student, and 2) for courses included in the graduate degree or graduate certificate program of study. The <u>graduate school</u> specifies that grades below C (2.00) cannot be used on a graduate program of study. A grade-point average of 3.00 is required before the final oral or written exam may be undertaken. Enforced graduate-level prerequisite courses must be completed with a minimum grade of C. Programs <u>may</u> have more stringent grade requirements than those above, which are prescribed by the Graduate School; *this is the case for the Chemistry program*.

The Department of Chemistry views grades below B as unsatisfactory performance. Low grades

will result in departmental actions, including retaking the classes, restriction to the Master's degree, or dismissal from the graduate program. W grades are also generally considered unsatisfactory. The Chemistry Department requires that graduate students continue to make satisfactory progress in their program throughout their studies at OSU; this includes convening required meetings, completing all other requirements, and making continuous research progress.

## 6.7. Incomplete Grades

An "I" (incomplete) grade is granted only at the discretion of the instructor. The <u>incomplete</u> that is filed by the instructor at the end of the term must include an alternate/default grade to which the incomplete grade defaults at the end of the specified time period. The time allocated to complete the required tasks for the course may be extended by petition to the University Academic Requirements Committee. You can obtain the form from the Registrar's Office. It is the student's responsibility to see that "I" grades are removed within the allotted time.

## 6.8. Ethics Requirement

OSU requires ethical research training as part of all graduate student programs. All graduate students in Chemistry must complete either the Collaborative Institutional Training Initiative (CITI) course in the Responsible Conduct of Research (RCR) or an RCR course provided by OSU.

The CITI RCR course (http://www.citiprogram.org) contains several learning modules that are taken individually and can be completed online at no cost. You should register for the site (indicating your affiliation with OSU), and complete all the required modules for one of the RCR courses. After completing the RCR course, use the main menu link to download or print a course completion report, and send this report to the Chemistry Office. You do not need to register for CE credits (which are not free) as part of Chemistry Department or OSU requirements. For students who have not yet scheduled their program meetings, the course completion report must be received prior to this meeting. Completion of this course is required prior to your first graduate program meeting.

If your research involves human or animal subjects, you may be required to complete additional training modules on the CITI site. You can discuss the requirements with your major advisor.

#### 6.9. Publishing

Faculty members have a range of policies on publishing results, for example, on where and when to submit results, and on the number and order of the co-authors listed. In some cases, these decisions depend on external factors such as the source of project funding. The best time to clarify any questions is at the beginning of a research project. Bring any concerns or questions about publishing results directly to your major advisor.

## 6.10. Student Conduct and Community Standards

Graduate students enrolled at Oregon State University are expected to conform to basic regulations and policies developed to govern the behavior of students as members of the university community. The Office of Student Conduct and Community Standards (SCCS) is the central coordinating office for student conduct-related matters at Oregon State University.

Choosing to join the Oregon State University community obligates each member to a code of responsible behavior which is outlined in the <u>Student Conduct Code</u>. The assumption upon which

this Code is based is that all persons must treat one another with dignity and respect in order for scholarship to thrive.

Violations of the regulations subject a student to appropriate disciplinary action.

## 6.11. Academic Dishonesty

Academic Dishonesty is defined as an act of deception in which a student seeks to claim credit for the work or effort of another person or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another. It includes:

- CHEATING use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.
- FABRICATION falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.
- ASSISTING helping another commit an act of academic dishonesty. This includes but is
  not limited to paying or bribing someone to acquire a test or assignment, changing
  someone's grades or academic records, taking a test/doing an assignment for someone else
  by any means, including misuse of an electronic device. It is a violation of Oregon state law
  to create and offer to sell part or all of an educational assignment to another person (ORS
  165.114).
- TAMPERING altering or interfering with evaluation instruments or documents.
- PLAGIARISM representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.

Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University's Academic Dishonesty Report Form, and will also be referred to SCCS for action under these rules.

## 6.12. Sexual Harassment

The OSU <u>Office of Equal Opportunity and Access</u> defines sexual harassment as the following: unwelcome\* sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education;
- submission to or rejection of such conduct by an individual is used as the basis for employment of education –related decisions affecting such an individual; or
- such conduct is sufficiently severe or pervasive that is has the effect, intended or unintended, of unreasonably interfering with an individual's work or academic

performance because it has created an intimidating, hostile, or offensive environment and would have such an effect on a reasonable person of that individual's status.

# [\*Employee conduct directed towards a student – whether unwelcome or welcome – can constitute sexual harassment under Oregon Administrative Rules (OAR).]

There are two confidential resources to discuss reporting options: Center Against Rape and Domestic Violence (CARDV) provides 24/7 confidential crisis response at 541-754-0110 or 800-927-0197, and OSU Sexual Assault Support Services is available weekdays at 541-737-7604.

## 6.13. Confidentiality of Student Records

Both federal and state laws permit Oregon State University staff to release directory information (e.g. name, address, degree program, birth date) to the general public without your consent. You can prohibit the release of directory information to the public by signing the Confidentiality Restrictionform available from the Registrar's Office. It will not prohibit the release of directory information to entities of Oregon State University that have a "need to know" to accomplish their required tasks. It further will not prohibit Oregon State University departments from including your name on mailing lists for distribution of materials that are essential to your enrollment at Oregon State University. If you decide to have your directory information officially restricted, please inform staff in the Chemistry Office.

https://catalog.oregonstate.edu/grades-regulations-records/right-to-privacy/

## 6.14. Services for Students with Disabilities

The Chemistry Department supports and complies with the rights of individuals with disabilities under federal law. Students with special needs because of disabilities that can be documented should contact the Chemistry Office as soon as possible. Requirements and/or procedures will be modified on a case-by-case basis as deemed necessary and appropriate. Special accommodation, such as for exams, can only be modified if the need is documented in advance. <u>http://ds.oregonstate.edu/home/</u>

# 7. ACADEMIC PROGRAM INFORMATION AND GRADUATE DEGREE TYPES

## 7.1. Overview of Program, Degree Options, and Expected Learning Outcomes

The Department of Chemistry offers PhD and MS degree programs in Chemistry with concentrations in traditional and non-traditional sub-disciplines of the field within a divisional structure of: Analytical Chemistry, Inorganic/Materials Chemistry, Nuclear Chemistry, Organic Chemistry, and Physical Chemistry. As described below (section 9.6), the individual chemical divisions have some different requirements but the basic process of obtaining a graduate degree in Chemistry is largely the same no matter the area of concentration.

The Chemistry Department has defined learning outcomes for its graduate programs and an assessment plan to evaluate how well the program meets these objectives. The following are the expected learning outcomes from graduate study at the PhD and MS levels, respectively. In each case, prior to beginning their advanced studies, students will have met the objectives for learning outcomes in an undergraduate discipline relevant to their graduate field of study.

## *PhD degree expected graduate learning outcomes*

• PhD graduates will be able to:

- summarize major central issues and current research problems in their field;
- communicate the major tenets of their field and their work orally and in writing;
- explain and identify areas of uncertainty in their field;
- identify areas where ethical issues may arise in their work or discipline and be able to articulate strategies for dealing with such issues; and,
- PhD graduates will have designed, carried out, and presented an original work of research at the leading edge of their discipline that represents the creation of meaningful new knowledge.

#### *MS* degree expected graduate learning outcomes

- MS graduates will be able to:
- summarize major central issues and current research problems in their field; communicate the major tenets of their field and their work orally and in writing;
- identify areas where ethical issues may arise in their work or discipline; and,
- MS graduates will have:
- completed and defended an original manuscript based on either a review and synthesis of the primary literature [for non-thesis/project MS] or their own original research [for thesis MS]

#### 7.2. Role of Major Professor (Advisor) and Process for Selection

Although you will spend a lot of time the first year with classes and teaching, a Chemistry PhD is mainly about research. For most Master's students, research is also a major part of the program. Selecting a major advisor and a research topic is therefore one of the most important decisions that you will make at OSU!

We recommend exploring at least three research groups/opportunities before making your decision. A worksheet to track interactions with potential advisors is available and should be in your Orientation binder. Please hand the completed form in to Tara Stacy before the end of fall term. Once you have reached agreement with a Professor who will serve as your major advisor and joined a research group, become involved in research as soon as possible. Substantial presence in the research laboratory is typically required.

Unless you previously reached agreement with and joined the research group of a major advisor, you will be assigned a temporary advisor when you begin your graduate program. The department strongly recommends that new graduate students explore research opportunities and join a research group by the middle of their second quarter at OSU. Students starting in the Fall Term should therefore have joined a group by early February. By mutual agreement, changes in major advisors can be arranged. In order to change major advisors, you should first meet with the Department Chair.

Adjunct faculty may serve as major advisors; however, these faculty must identify a funding mechanism to support students in the Chemistry program. This funding mechanism must be clearly described in written form and sent to the Department Chair and Program Committee prior to the student's initial program meeting. Adjunct-faculty-advised students are given first priority, *after students with departmental advisors*, for GTA appointments, but the department cannot ensure financial support after 24 months in the graduate program.

Emeritus faculty may serve as major advisors, but normally a co-advisor with active faculty status must be added.

Your major advisor assumes principal responsibility for directing your research activities. They are also your first point of contact regarding research progress and difficulties. You advisor will edit your research proposals and thesis, encourage and facilitate your active participation in seminars, meetings, etc, and also chair your program meeting and the examination portion of the preliminary oral and final exams. Please ask the Grad Coordinator for a copy of the Graduate Compact between Advisors & Students; tara.stacy@oregonstate.edu

Advisors or other faculty also often serve a mentoring role for students, this role is usually informal, and the extent and types of faculty mentoring are flexible. More information about faculty mentoring can be found at <u>http://gradschool.oregonstate.edu/faculty/graduate-mentoring</u>. Note that the department also runs a teaching mentoring program for students interested in teaching as a career goal, more information can be found at <u>http://chemistry.oregonstate.edu/mentor program</u>

## Fall Term Faculty Research Seminars

Department of Chemistry faculty and some affiliated faculty provide a research seminar series each Fall term. Research-active faculty members each present a short overview of their current research projects and interests, with two or three speakers scheduled during each session. This is a unique opportunity to hear about the broad spectrum of research activities associated with our department and it may help you to identify your major advisor. The seminars are **mandatory** for all new graduate students, with an attendance roll taken, and comprise part of the graduate student orientation course, CH607 (Section 003). Additionally, all graduate and undergraduate students, department staff members, and others are welcomed. Look for announcements of the seminar schedule in Fall term.

## 7.3. Graduate Committee Membership

The composition of <u>graduate committees</u> is governed by the policies of the Graduate School and the Department of Chemistry. Your major advisor will help you to select the other committee members, and this selection must be approved by the Graduate School. Typically, all members of the committee are OSU faculty, but adjunct members from other universities or appropriate organizations may serve if approved by both the Chemistry Department and the Graduate School (see below: 'policy on non-OSU committee membership'). At least two members in all types of committees must be regular faculty in Chemistry.

- *Master's with research project committees* must have at least 3 members, including your major advisor, another Chemistry faculty member, and a Chemistry faculty representing the minor field or program emphasis. This third member may be an adjunct Chemistry faculty member.
- *Master's with thesis committees* must have at least 4 members, including your major advisor, another Chemistry faculty member, a faculty member from outside the major program or from the minor field, and a Graduate Council Representative (GCR, see below) selected from a list provided by the Graduate School.
- *PhD committees* must have at least 5 members, including your major advisor, another Chemistry faculty member, and a Graduate Council Representative (GCR, see below) selected from a list provided by the Graduate School.

## Graduate Council Representative (GCR)

A Graduate Council Representative (known as a GCR or 'Grad Rep') is required for all doctoral committees, all M.A.I.S. committees, and all master's degrees involving a thesis. Your GCR represents the OSU Graduate Council and ensures that all rules governing committee procedures are followed. Your GCR must be present at your formal exam(s), and will be responsible for some of the paperwork that the Graduate School requires. Per Graduate School guidelines, the GCR will also lead your committee's roundtable discussion following your final oral exam. Your GCR must be a graduate faculty member outside your major and minor area. The GCR is a full voting member of your graduate committee. Many students select a GCR who can also add disciplinary expertise. The GCR generator on the grad school web site (below) <u>must be used</u> in order to ensure that the GCR is on the graduate school's <u>approved list of faculty</u>. If you run into difficulty finding a GCR to serve on your committee, you can re-generate the list as many times as needed until you find someone approved who can serve.

#### *Policy on non-OSU committee membership*

Your <u>graduate committee</u> guides your course work and research and serves as your final examining committee. It is generally expected that all committee members or approved substitutes must be present for all formal meetings with the student (e.g. final oral exams). If you have a special case in which a committee member may need to participate remotely, you and your committee must ensure that all the conditions for remote participation are met.

If the faculty member is not a member of the <u>Graduate Faculty</u> or is not approved for the role proposed, your major department/program will need to nominate the proposed member to act in those roles using the Nomination to Graduate Faculty form. You can contact Tara Stacy <u>tara.stacy@oregonstate.edu</u> or Paula Christie <u>paula.christie@oregonstate.edu</u> to help you with this process. Committee structure is evaluated when your program of study is received by the Graduate School and when you schedule your formal examination(s).

## 7.4. Program of Study

Graduate students must file a <u>Program of Study form (click for info)</u> with the Graduate School. The first step is to discuss your program with your advisor. The Program of Study document indicates all of the coursework, both classes taken at OSU and transfer credits if appropriate, that must be completed in order to obtain your graduate degree. See the degree program and the required and recommended course sections below for more details on programs specific to degree type and division.

Your program must have a minimum of 50% graduate-level stand-alone courses (i.e. courses other than 400/500 "slash" courses). Blanket-number courses, i.e. those courses with a 0 in the middle of the course number (such as CH501, CH607, CH603), are not slash courses and are included in the total although there are restrictions of how many such classes can be listed. Full instructions are provided when you login to the digital program of study found under <u>forms</u> on the Graduate School's page.

Changes to a Program of Study require the submission of the <u>Change of Degree</u> form. You may submit a petition for any of the following purposes:

- to transfer into a PhD program on completion of the Master's program,
- to change from a PhD program to a Master's program, \*
- to change from one graduate degree program to another.
- \* Note: in addition to filing the Change of Degree form with the Graduate School, students wishing to switch from a PhD to an MS program must submit a completion plan to the Head of

Department. This plan should list all remaining degree components (courses and research) together with the expected dates of completion and provide a projected date of graduation. The

completion plan must be approved and signed by the major advisor. It should be carefully noted that the Department of Chemistry does not generally support MS students via assistantships.
 Process for changing major advisor. The Chemistry Department does not encourage changing advisors without first evaluating the cause of the problem and considering alternative solutions. The student must first discuss the problem with one of the graduate liaisons (see section 1.1), and second with the current advisor (if you feel comfortable doing so). There are other campus resources as well, including <u>Ombuds Conflict Management</u>.

One possible outcome is the student, and all involved parties determine that changing groups is the only possible resolution. In this case, the student must obtain a Change-in-Advisor form from Tara Stacy, which gives further guidelines for this process. The student will return the completed form to Tara, and it will then be routed for signatures.

#### Scheduling program meetings and exams

It is the student's responsibility to reserve rooms for required meetings and exams through the Chemistry Office. Notify the Graduate School of scheduled exams by using the Exam Scheduling form below at least two weeks prior to the exam date. Remind each committee member of the scheduled meeting or exam. Program meetings, preliminary exams, and final exams may be held during any period when school is in session. This excludes the periods between the regularly scheduled quarters and during official vacation periods. Some faculty are on nine-month appointments and are unlikely to be available during the summer.

#### http://oregonstate.edu/dept/grad\_school/forms.php#event

## 7.5. Annual Individual Training and Development Plan Reports

Once each year, between May 1 and May 15, all graduate students must submit an updated Individual Training and Development Plan (IDP) to the Graduate Program Coordinator (Tara Stacy). The report attached to the IDP should include (1) activities and accomplishments during the past year, (2) anticipated results of current research, (3) a program status update, and (4) any impediments to progress and success. The report should be 1-2 pages in length and signed by your major advisor. The purpose of the report is to ensure that all students are making adequate progress in their programs. If there are issues, corrective action can begin immediately. For first-year students, a report can indicate performance in coursework, selection of a major advisor, research plans, and indicate that a Program of Study has been filed. All graduate students must submit a signed IDP in order for summer financial support to be awarded by the department.

## 7.6 Seminar Requirements and Division Specific Coursework Requirements

Within the Chemistry Department, students are associated with a particular division: Analytical, Inorganic/Materials, Organic, or Physical Chemistry. Divisions specify the details of some degree requirements/coursework, but other components are required of all students. These details are summarized below but it is recommended that faculty members within a particular division are consulted for further information and any updates.

#### Seminar Requirements for All Students

Blanket courses entitled "Seminar" and numbered CH607 (for PhD) or CH507 (for MS) with various section numbers, are available to record different kinds of participation in seminar-based activities.

Graduate students should attend all departmental seminars and others occasionally offered by their own division. In addition, all PhD track students will give a seminar to the Department on their thesis

research topic in either Year 2 or 3, an activity recorded by registration in the non-blanket course CH633. Specific seminar course requirements are as follows.

#### Year 1

CH607-001 (Seminar, 1 credit) [Fall, Winter, Spring]: Incoming graduate students should enroll in this Departmental seminar series course each quarter of their first year. A successful outcome for this course requires attendance at Departmental seminars, including those given by visiting professors and CH633 seminars given by other graduate students. CH607-001 is graded as S/U on the basis of attendance record and short written reports. Students should continue taking CH607 (Section 001) for at least three terms and until they are ready to give a Departmental CH633 seminar on their thesis research (see notes on CH633 below).

CH607-004 (Teaching Seminar, 1 credit) [Fall]: All students on a GTA appointment are required to take this course to become familiarized with best practices for being an effective chemical educator at OSU. A optional faculty mentoring seminar (CH607-020) is available for students interested in a teaching career, or those wanting more information and discussion of teaching methods.

CH607-005 (New Graduate Student Orientation, 1 credit) [Fall]: Registration in this course records attendance at the various orientation activities early in Fall term and also participation in the faculty research seminar series which helps new students to select a research advisor.

CH607-010 (Chemical Safety Seminar, 1 credit) [Winter]: Students pursuing any kind of laboratory based research during their studies are required to take this seminar course on laboratory safety during their second term at OSU.

#### Year 2 or 3

CH633-001 (Hypothesis, Evidence, and Argument in Chemistry, 3 credits): After consulting with their research advisor and the current CH633 instructor, Year 2 graduate students should identify an optimal quarter to present a 25 minute seminar to the Department on the subject of their thesis research. This activity will be recorded by enrollment in the required non-blanket graded (A-F) course CH633-001. This seminar requirement may be deferred to Year 3 if insufficient open seminar slots are available or in the event that the major advisor determines that another year of preparation is needed. A grade of B– or higher in CH633 is necessary to satisfy the seminar requirement. A syllabus including the grading rubric is available on the Department website or from the course instructor.

## Required and recommended courses by division

The following requirements and recommendations apply to both Master's and PhD students. Divisional course requirements depend on course offerings and are subject to change, so check with your advisor on the current requirements. All Chemistry graduate students must meet the course requirements for one division or receive their permanent major advisor's written approval for an alternative program. PhD track studies in all divisions are required to meet the CH633 seminar requirement (see above).

#### Analytical Chemistry

required:	CH660, CH661, CH662, and CH697
recommended:	supporting coursework to fulfill academic needs and research background requirements, as approved by the graduate committee. Examples include CH692, ST511, BB590, ENVE531, IE531, CH524, MATS555, MATS570

#### • Inorganic/Materials Chemistry

required:	four of the following: CH511, CH512, CH513, CH614, CH615, CH616
recommended:	CH660/1/2, 696; PH575; CHE544/5, 550/1; ECE511, 613; MATS570/1/8; 580/1/2/4, 671
Organic Chemistry	
required:	CH535, CH630, CH631A&B,* and CH632A&B*
note:	students with a synthetic chemistry emphasis must take BOTH A andB

note:	students with a synthetic chemistry emphasis must take BOTH A and B
	variants of each of CH631 and CH632 (which are offered in alternate
	years); other students may take either A or B versions of CH631 and 632.
	Currently, CH631B is recorded as CH637 and CH632B as CH638.

#### Physical Chemistry

required:	CH550, CH651, CH652, CH553, and CH680	
recommended:	BB581, BB582, BB664, CH511, CH512, CH660, PH585, PH683	

## 7.6. Thesis Preparation

The <u>Graduate School Thesis Guide</u> provides detailed information on proper formatting of your thesis, electronic submission, and submission requirements prior to the final exam. Provide each member of your committee with a draft of the thesis two weeks before the thesis defense. Pretext pages must also be submitted to the Graduate School at the time of scheduling the defense.

# 7.8 Master's Program: Requirements and Milestones for MS Degree in Chemistry

Master's students must fulfill the requirements set by both the Graduate School and the Department of Chemistry. Your major professor, graduate committee, and the department faculty, monitor your progress. Master's programs may be formed either with a research thesis or with a research project. The table below helps to compare the Master's thesis vs. research project options.

Master's with	Master's with Thesis vs. Master's with Research Project		
	Thesis	Research Project	
Format	Typically 75-100 pages, thesis format according to Graduate School requirements.	Typically less than 25 pages, format is choice of student and advisor	
Content	Original work including original questions, data analysis and writing; includes primary data collection by the student.	Original work including original questions, data analysis and writing; may include primary data collection by the student.	
Committee	Advisor, 2 additional committee members, and GCR.	Advisor and 2 additional committee members.	
Assessment	All committee members review the final draft and provide input at the defense.	Advisor reads final draft and assigns a letter grade. Grade must be B or better.	
Role in final exam	After the oral presentation, student is examined primarily on the thesis but also on related coursework.	After the oral presentation, student is examined primarily on coursework but also on the project.	
Significance of degree	ance of Admission to a PhD program or a successful job search often requires evidence of the ability to conduct independent research and clearly communicate results. Either a thesis or a project can indicate these abilities.		

## Master's program meeting

The purpose of your initial program committee meeting is to approve your Program of Study and to outline coursework or research project plans. You must file a Program of Study with the Graduate School at least 15 weeks before your final exam. The Program of Study should be approved before scheduling your final exam. Bring copies of your proposed Program of Study to the meeting.

## Master's program of study requirements

A standard MS <u>Program of Study</u> includes a total of 45 credit hours. There are significant differences between thesis and non-thesis (project or coursework) options which are laid out below. Further instructions are provided on the PoS form itself and representatives from the Graduate School can be consulted should further guidance be required.

(a) Some key features of a **thesis MS** degree program are as follows:

- 45 credit hours are required, 9 of which may be blanket numbers *excluding thecapstone*
- 6-12 credit hours of CH503 Thesis are required for the capstone (CH603 may be taken in lieu of CH503)
- the minimum number of non-blanket credit hours allowable is therefore 24; however, divisional academic programs within Chemistry typically call for at least 27 credithours

- thesis MS graduate committees number four faculty members (one of whom must be your advisor), a graduate council representative (GCR) is required
- the MS thesis must comply with Graduate School regulations and the standards expected by the Department of Chemistry and your advisor/division. If PhD and MS degrees are being pursued concurrently (see section 9.10), it is allowable for the thesis defense to be scheduled on the same day as a PhD candidacy exam ('oral prelim'); however, it is a distinct examination and it might not be feasible to hold both on the same day.

*Note:* an MS thesis defense has the usual public lecture / Q&A component; no part of the PhD candidacy exam is open to the public

(b) Some key features of a **non-thesis MS** degree program are as follows:

- 45 credit hours are required, 9 of which may be blanket numbers *excluding the capstone*
- 3-6 credit hours of CH501-Research, or similar (e.g, CH505) are required for the capstone
- the minimum number of non-blanket credit hours allowable is therefore 30 credits
- thesis credit hours (503 or 603) are not admissible on a non-thesis MS program of study
- non-thesis MS graduate committees number only three faculty members (one of whom must be your advisor), a graduate council representative (GCR) is NOT required
- the format for the final MS oral exam is flexible and determined by your advisor. If PhD and MS degrees are being pursued concurrently (see section 9.10), it can be scheduled to occur on the same day as a PhD candidacy exam ('oral prelim') but it is a distinct examination and should be scheduled for a different time of day (e.g., 2 hours after the oral prelim starts)

The following additional rules apply to all types of MS degree. Again, consult with the Graduate School directly should further guidance be needed.

- Master's students may declare a major and a minor; the minor is optional. If a minor is listed, please consult with the Graduate School about the labels for the areas and your committee make-up.
- if you begin in a PhD program and later change to an Master's degree, up to 6 previouslyearned thesis credits (CH603) can be converted to Master's research credits (CH501) in lieu of thesis.
- a limited number of credit hours from one OSU Master's program can be applied to a different Master's degree. Credit transfer requires department approval.
- Master's coursework can generally be applied to a PhD program within the same department.
- a maximum of 15 credits of graduate coursework from another university may be transferred into your program, but any credits previously used on a Master's program at OSU or elsewhere is not eligible.
- Master's programs must include at least 30 hours of coursework taken at OSU after admission into a graduate program.
- courses taken as S/U (Satisfactory/Unsatisfactory) cannot be used as part of your graduate program, but P/N (Pass/No Credit) courses can be used.
- all work, courses, research, and exams must be completed within 7 years of enrollment
- courses with grades below B– cannot be used as part of the program of study

## Final oral examination for MS degree (/thesis defense)

Master's students do not take a preliminary oral exam, but must pass a final oral exam. In the case of

a thesis MS degree, the first part of the oral exam will be a public defense of the dissertation before you are further examined in private by your Graduate Committee. In the case of a non-thesis MS degree, the format for the final oral exam is flexible and determined by your advisor.

You must have a minimum GPA of 3.00 to schedule the final oral examination. Any incomplete grades on courses on the program must be completed prior to scheduling the final oral examination.

Your advisor will provide you with critical guidance as you prepare for your final exam. Some <u>deadlines</u> for your Master's degree final exam and program completion are as follows:

Four months before the final oral exam:

• submit your approved program of study to the Graduate School for auditing. The audit will confirm whether or not all academic requirements have been met for successful completion of your degree. Should any deficiencies be identified, they must usually be rectified as indicated before the final oral exam can be scheduled

At least one term before final oral exam:

• submit draft of thesis or paper to major professor

At least two weeks before final oral exam:

- coordinate with your committee to set a time and date for your final oral exam
- reserve a room for the exam
- schedule your final oral exam with the Graduate School
- submit a diploma application to the Graduate School
- inform the Chemistry Office so the exam announcement goes out
- for thesis option, distribute a defensible copy of your thesis to your committee bring or email pre-text pages of your thesis to the Graduate School.
- for project option, submit a copy of the project report to the Chemistry Office

Within six weeks after oral examination or 1st day of following term (whichever comes first):

- submit your thesis or final project report as a PDF file to the OSU graduate <u>ScholarsArchive</u>. Detailed and up-to-date instructions on how to do this are provided at the website
- submit an electronic copy to the Chemistry Office, and a copy to your Major Advisor

Prior to leaving campus

- complete the exit survey and check-out form and bring them to the appointment
- complete the <u>exit checklist</u> of the Department of Chemistry. You can get that from Tara Stacy at <u>tara.stacy@oregonstate.edu</u>

# 7.8 Doctoral Program: Requirements and Milestones for PhD Degree in Chemistry

As a PhD student, you must fulfill the requirements of both the Graduate School and the Chemistry Department. The level of work must be consistent with the degree: a PhD degree is granted primarily for substantial, creative and scholarly achievements. Your major professor, graduate committee, and the department faculty monitor your progress. You need to be motivated to work toward the Ph.D. with helpful resources as described in this Handbook, and meet the milestones as clearly communicated with your major advisor and graduate committee members.

## PhD program meeting

The purpose of your initial program committee meeting is to approve your Program of Study and to outline research plans for the coming years. You are responsible for convening a program meeting and filing a study program with the graduate school between May 1 and May 15 or before the end of your 3rd term at OSU. Bring copies of your proposed Program of Study to the meeting.

## PhD Program of Study

A standard Chemistry PhD <u>Program of Study</u> includes a total of 108 course credits, with at least 27 credits from regular (i.e., not blanket-number) courses and at least 36 credits of CH603 (Thesis). You may register for as many credits of CH603 as needed to give the total of 108 credits. In addition, the stipulations listed below must be met. Further instructions are provided on the POS form itself and representatives from the Graduate School can be consulted should further guidance be required.

- no more than 15 credits of blanket-number courses other than CH603 may be included
- there is no limit on the number of graduate credits transferable from another institution to a PhD program at OSU.
- credit from a Master's program at OSU may be used on your PhD program.
- a minimum of 36 credits of graduate work must be completed on-campus, in residence, to meet the residency requirement. courses taken as S/U (Satisfactory/Unsatisfactory) cannot be used as part of your graduate program, but P/N (Pass/No Credit) courses can be used.
- courses with grades below B- cannot be used as part of the study program.

As described below, many PhD students now obtain a concurrent Master's degree (see section 9.10). An application to the Graduate School is required to enroll in concurrent degree programs. The Master's final oral exam may be scheduled on the same day as the PhD preliminary oral exam. However, all coursework for the Master's degree must be completed prior to the MS final oral exam.

## PhD candidacy examination (the 'oral prelim')

To advance to candidacy, PhD students must pass an oral preliminary examination by their doctoral committee near the completion of their coursework. This ca. two-hour exam examines mastery of concepts and preparedness to complete thesis research. The exam may include a presentation of your progress on thesis research, research proposals (generally on topics pre-approved by the major advisor or the committee), and/or general questions about your area of chemistry.

The oral preliminary exam is normally scheduled during the third year of graduate study but some divisions may hold them earlier. At least one complete academic term must elapse between the time

of the preliminary exam and the final defense. Students are responsible for scheduling the

preliminary exam with the Graduate School and with all committee members two weeks in advance. After successfully completing their oral exam, students advance to candidacy for the PhD degree. Depending on the circumstances, students who do not pass the examination might be given the opportunity to be reexamined at a later date, or it may be recommended that study toward the PhD degree be terminated.

## PhD Final Examination / Thesis Defense

After completing their PhD research and preparing their theses, students take a final oral exam/ thesis defense. The meeting is normally 2-3 hours in length and begins with an oral presentation of the thesis research that is open to the public. This is followed by a closed-door exam by the committee focusing on your thesis work and your field of specialization. Schedule this exam with the Graduate School and your committee as a 3-hour meeting at least two weeks in advance. The final exam must be scheduled at least one full academic term, but no more than five years, after completion of the preliminary exam.

Some <u>deadlines</u> for your final exam and PhD completion are as follows:

Four months before the final oral exam:

• submit your approved program of study to the Graduate School for auditing. The audit will confirm whether or not all academic requirements have been met for successful completion of your degree. Should any deficiencies be identified, they must usually be rectified as indicated before the final oral exam can be scheduled

At least one term before final oral exam:

• submit draft of thesis to major professor

At least two weeks before final oral exam:

- coordinate with your committee to set a time and date for your final oral exam
- reserve a room for the exam
- schedule your final oral exam with the Graduate School
- submit a diploma application to the Graduate School
- inform the Chemistry Office so the exam announcement goes out
- submit pre-text thesis pages to the Graduate School for review and editing
- bring or email pre-text pages of your thesis to the Graduate School.
- distribute a defendable thesis copy to your committee.

Within six weeks after oral examination or 1st day of following term (whichever comes first):

• submit your thesis as a PDF file to the OSU graduate <u>ScholarsArchive</u>. Detailed and upto-date instructions on how to do this are provided on the <u>Student Thesis Guide</u> page.

• submit an electronic copy to the Chemistry Office, and a copy to your majoradvisor Prior to leaving campus.

- complete the exit survey and check-out form and bring them to the appointment.
- complete the <u>exit checklist</u> of the Department of Chemistry. You can get this from Tara Stacy at <u>tara.stacy@oregonstate.edu</u>

## 7.7. Concurrent Pursuit of MS and PhD Degrees

OSU encourages PhD track graduate students to obtain an MS degree in their discipline en route to the PhD degree. This is permitted providing that the student does not already hold an MS degree in that subject from a US-based institution. To incentivize the concurrent pursuit of MS and PhD degrees among our graduate students, the Department of Chemistry has adopted the following policy:

- for all PhD track graduate students who started after 2015 and who have not previously been awarded an MS degree in Chemistry from a US institution, a filed MS program of study will be required to qualify for consideration for:
- (a) departmental matching funds for qualifying travel or professional development, and
- (b) first priority for summer and academic year department scholarships/fellowships

Obtaining an MS degree in Chemistry en route to a PhD degree in Chemistry at OSU is easy to achieve from a procedural standpoint. For some students it may require taking one or two additional classes, but many students will already have enough classes in their PhD programs to also satisfy the requirements for an MS degree. To pursue this option, you must file a program of study for the kind of MS degree of interest (either non-thesis or thesis), in addition to having a PhD program of study on file and make the Graduate School aware that MS and PhD degrees are being pursued concurrently. Before going ahead, please talk to your advisor about the best option for you and consult with the Graduate School for any further guidance. Guidelines for preparing program of studies are found above (sections 9.8 and 9.9).