



San Diego State  
University

## **MS Student Handbook for the SDSU Department of Chemistry**

Together, the College of Graduate Studies' Master's Student Handbook and this Department of Chemistry Handbook seek to provide you with the policies governing the MS Degree Program, and to equip you with resources and guidance for successfully completing your MS degree. Note that the SDSU's College of Graduate Studies Master's Student Handbook contains critical university-mandated information that will not be reiterated here, including information on TA-ships, finances, university-level program requirements, and more. Instead, we provide here additional information specific to the Chemistry MS Degree Program. Please also make sure to review the resources in the Chem Grad Student Google Drive, visit <https://grad.sdsu.edu/current-students> regularly for updates, deadlines, FAQs, and more, and check your SDSU email regularly. Note, some of the links in this handbook will not be available to you until you have arrived on campus and have been added to our Department's listserv.

We congratulate you for undertaking this prestigious degree that will open new doors for you, and we are honored to support you in your journey! We see in each of you your tremendous potential, and we want to empower you to strive to do your very best as you work towards your important scientific and career goals.

## Table of Contents

<b>Table of Contents</b> .....	<b>2</b>
<b>I. Degree Requirements</b> .....	<b>4</b>
A. Unit requirements. ....	4
B. Plan A thesis for the MS degree .....	6
C. Brief course descriptions .....	7
D. Guidance on how to enroll in 797, 792, 799A, and 799B .....	8
E. Typical MS program length .....	9
<b>II. MS Milestones</b> .....	<b>11</b>
A. Milestone overview.....	11
B. Selecting a research lab and research mentor .....	12
C. Status change from Conditionally Classified to Classified .....	13
C. Selection of Thesis Committee and present in CHEM 791 .....	15
F. Complete your official Program of Study (POS) and Advance to Candidacy.....	15
G. Submit your Thesis Committee form .....	17
H. Registration for Culminating experience (CHEM 799A).....	17
I. File application for graduation .....	18
J. Thesis preparation and submission to Thesis committee, public defense, and thesis submission to Montezuma Publishing.....	19
K. Remaining an active student in good standing .....	21
<b>III. Brief TA Guidelines</b> .....	<b>23</b>
<b>IV. Code of Conduct</b> .....	<b>24</b>
A. The Commitment from the Department of Chemistry.....	24
B. The Commitment to a Productive Mentoring Partnership.....	25
C. Codes and resources for students.....	26
D. General best practices for students .....	27
E. Graduate student use of Artificial Intelligence (AI) and related data processing.....	31
<b>V. Resources</b> .....	<b>35</b>
A. College of Graduate Studies links.....	35

**B. Departmental links and resources .....36**

# I. Degree Requirements

## A. Unit requirements.

Master's students (both MS and MA) must complete a graduate program composed of 30 units, which includes at least 24 units in Chemistry courses indicated in the [Course Catalog](#) as being acceptable for our master's degree programs. Courses must provide qualification in 2 of the 6 designated disciplines of chemistry (Analytical Chemistry, Biochemistry, Chemical Education, Inorganic Chemistry, Organic Chemistry, and Physical Chemistry) if this was not achieved via passing orientation exam(s). Note, there are regular changes to course offerings, and so the onus is on the student to ensure full degree compliance.

Of the required 30 units:

- At least 15 of these units must be 600- and 700-level courses.
  - Of these units, CHEM 790, CHEM 791, CHEM 792, and CHEM 799A are required.
  - CHEM 695 is very strongly recommended. The student must receive special permission and approval from the MS/MA Graduate Advisor if they request to not take CHEM 695.
  - No more than 9 units can come from Credit/No-Credit courses (for example, a student might take 6 units of CHEM 797 and 3 units of CHEM 799A).
  - A minimum of 6 units must be graded courses (for example, a student might take CHEM 790 (1 unit), CHEM 791 (1 unit), CHEM 792 (1 unit), CHEM 695 (3 units), and 700-level graduate courses like 711).
- A maximum of 15 graded units can come from 500-level courses.
  - 500-level courses often fulfill requirements for students who did not pass orientation exam(s).
- A maximum of 9 semester credit hours may be transferred from other universities or taken as SDSU Global Campus only if they meet the basic requirements for the master's degree.
  - All non-CHEM courses require approval of the MS/MA Graduate Advisor prior to submission of your Plan of Study (POS), and by the Graduate College.
  - Three and four quarter credit hours are transferred as two semester credit hours. Calculation details are provided by the Graduate College (see the [FAQ](#)).
- A maximum of 6 units may include electives outside the Chemistry Department at the 500-level or higher.
  - There must be clear and convincing relevance to your thesis work. If this is the case, these requests are typically accepted.

- These courses are usually within the College of Sciences, but students have also periodically taken courses in Engineering and Public Health.
- All non-CHEM courses require approval of the MS/MA Graduate Advisor and by the College of Graduate Studies prior to enrollment in the course in the form of a PAAR (Petition for Adjustment of Academic Requirements) form. See the Form Guide in [Forms and Form Guidelines](#) Folder in the Chem Grad Student Google Drive.

There are grade point average (GPA) requirements for these required 30 units for graduate students per the College of Graduate Studies:

1. A minimum grade of C for every course used towards the degree, though some courses require higher grades.
2. The post-baccalaureate SDSU cumulative GPA<sup>1,2</sup> must be 3.00 or higher.
3. The post-baccalaureate overall cumulative GPA<sup>1,3</sup> must be 3.00 or higher.
4. The SDSU Program of Study (POS) GPA<sup>2</sup> must be 3.00 or higher.
5. The overall POS GPA<sup>3</sup> must be 3.00 or higher.

Note:

- **Good Academic Standing** is maintained by requirements 2 and 3. Failing to do so results in [academic probation](#).
- **Advancement to Candidacy** requires all grade requirements listed above, with a minimum of 12 minimum POS units.
- **To graduate**, all grade requirements above must be met.

---

<sup>1</sup> The post-baccalaureate cumulative GPA (often referred to as simply “cumulative GPA”) is calculated using all graded courses listed on the SDSU transcripts after the student has earned a Bachelor’s degree, regardless of whether or not the courses are applied towards the degree the student is currently pursuing. It includes courses taken through Global Campus prior to admission. All SDSU courses taken after they have earned their Bachelor's degree will be included in the graduate transcripts post-baccalaureate GPA (even if the course is numbered 499 or less). The post-baccalaureate cumulative GPA does not reset when a degree is awarded, the degree objective is changed, or the student is readmitted through Cal State Apply to a different SDSU program.

<sup>2</sup> The SDSU GPA (sometimes called “campus GPA”) calculations use all SDSU courses: San Diego Main Campus, Imperial Valley Campus, Global Campus Special Sessions, and Open University.

<sup>3</sup> The overall GPA calculations are calculated using all SDSU courses, plus transfer courses that have been formally recognized by the SDSU College of Graduate Studies and appear on the SDSU transcripts. Note, transfer or extension courses may not be used to improve the GPA of units completed at SDSU.

- Regarding #2 and #3: The “post-baccalaureate SDSU cumulative GPA” and “post-baccalaureate overall cumulative GPA” are usually identical, and are both referred to as “the cumulative GPA” by most campus staff and faculty.
- Whenever possible, take 700 level graduate classes, as they are offered on a less frequent basis than 500 level courses. Plus, they have been developed especially for graduate students!

In addition to the College of Graduate Studies requirements, the Department of Chemistry mandates that your GPA must be at least 3.0 (B) in the following:

- Courses listed in the **Official Program of Study (POS)**
- Courses required to complete undergraduate deficiencies.
- All courses taken at the 300-level and above concurrently to the earliest course listed in the **Official Program of Study**, including courses accepted for transfer credit.

## **B. Plan A thesis for the MS degree**

Importantly, the 30 required units are only one component of the MS degree. MS students must also complete a body of novel research of appropriate breadth and depth that is undertaken during their SDSU MS degree. This thesis is written as a MS [Plan A thesis](#) and must be publicly defended at the MS thesis defense. Both the thesis and the oral defense must be deemed satisfactory/passing by the student’s thesis committee. This work cannot include research efforts already applied to another completed degree (e.g. BS/BA or non-SDSU MS/MA). This research work is nearly always the rate-limiting step and requires the most effort of the features of the MS degree. Writing and defending a Plan A thesis is critical for demonstrating the critical thinking, written and oral communication skills, familiarity and understanding of your research field, technical ability, and more, that scientists around the world expect to see in scientists holding the MS degree. It is typically the component of your degree that makes you the most competitive as you apply for roles in the next step in your scientific career.

Specific formatting details come from [Montezuma Publishing](#). If you use AI for editing purposes, **you must submit your draft prior to any AI use**, and then the draft after AI use. The pre-AI draft must be also formally submitted (in document form, not PDF) to the faculty mentor alongside the final thesis. Your research mentor may have additional requirements regarding AI, and you will need to review and follow the AI regulations in the Code of Conduct section below.

## C. Brief course descriptions

Brief descriptions of a subset of courses are described here. Please see details in the [Course Catalog](#):

*CHEM 695 – Graduate Education in Chemistry.* Offered only in the Fall. Skills and knowledge needed for success in a chemistry graduate program and development as a scientist. 3 units, letter-graded, cannot be repeated.

*CHEM 790 – Seminar.* An intensive study in advanced chemistry. You'll learn to read scientific literature and build effective presentations. 1 unit, letter graded.

*CHEM 791 – Research Seminar.* Presentation of current research by students working towards MS degrees as a thesis proposal. Must be completed before end of second year of study. You need to have selected your committee and invite them to attend your presentation. 1 unit, letter graded, cannot be repeated for additional credit.

*CHEM 792 – Bibliography.* Drafting and outlining your master's project or thesis. 1 unit, letter graded.

*CHEM 795 – Chemistry Seminar.* Advanced study in all fields of chemistry. Basically, you're attending Friday seminars (which you should be doing anyway!). 1 unit, letter graded.

*CHEM 797 – Research.* Research in one of the fields of chemistry. 1-3 units, with a maximum of 6 total units applicable to MS degree.

*CHEM 798 – Special Study.* Individual study. This is for MA students, not MS students.

*CHEM 799A – Thesis.* Preparation of a project or thesis for the master's degree. You must have an officially appointed thesis committee and advanced to candidacy. 3 units, graded as RP, CR, or NC. Cannot be repeated for additional credit.

*Additional notes on CHEM 799A:* Registration in 799A (Thesis) is required for students to complete their Master's thesis, and a 799A grade of C (Credit) is required to award the degree.

- 799A registration/enrollment should happen prior to the start of the graduating term.
- The Thesis Committee Form must be approved by the College of Graduate Studies prior to enrolling in 799A.
- Students may request 799A registration permission and information by emailing the College of Graduate Studies at [gra@sdsu.edu](mailto:gra@sdsu.edu). Assuming that an approved Thesis Committee Form is on file, review and processing should be completed within 7-10 business days.
- Our MS program, rather than the College of Graduate Studies, oversees the processes for thesis defense, thesis committee review, and thesis committee approval. Students should discuss these requirements with their thesis chair and the MS/MA Graduate Advisor.

- Montezuma Publishing *does require and will verify* 799A registration when students submit their approved and formatted thesis for review.
- Thesis submission deadlines for each semester are posted on the [College of Graduate Studies Deadlines page](#).

*CHEM 799B – Thesis Extension.* Student must have prior registration in 799A with an assigned grade symbol of RP (Report in Progress grade). Note, the student must be registered in either 799A or 799B when the completed thesis is granted final approval. 799B is 0 units, graded as RP, CR, or NC. Cannot be repeated for additional credit.

*Additional notes on 799B (Thesis Extension):* If a student registered in 799A is unable to submit their thesis to Montezuma Publishing before the last day of the semester, they will need to enroll in Thesis Extension 799B in a future term.

- 799A registration will only happen one time; subsequent registration(s) will be 799B only.
- 799B registration may be through main campus or SDSU Global Campus, although Global Campus registration may make students ineligible for Financial Aid and/or TA-ships and/or may affect international/visa status so do your research before enrolling via Global Campus. Please refer to the online [Catalog](#) for more information on thesis and thesis extension courses.
- Students may request 799B registration permission and information by emailing the College of Graduate Studies at [gra@sdsu.edu](mailto:gra@sdsu.edu). Review and processing should be completed within 7-10 business days.
- Montezuma Publishing *will require and verify* a student's 799A or 799B registration when students submit their approved and formatted thesis for review.
- Thesis submission deadlines for each semester are posted on the [Graduate Studies Deadlines page](#).

#### **D. Guidance on how to enroll in 797, 792, 799A, and 799B**

Enrollment in 797, 792, 799A, and 799B have different processes than typical didactic coursework.

**CHEM 797** (research units): **Enrollment via your research mentor.** Your research mentor will need to ensure this course has been created for them in my.SDSU. They will need to add you to the roster and provide the section and class number to you. You may then add the class for up to 3 units. If you need more than 3 units, your research mentor will need to request a second 797 course and add you to this roster, too.

**CHEM 792** (bibliography): **Enrollment via your research mentor.** Unlike CHEM 797, this course is often not automatically created for each faculty member. Your research mentor must check if this course has been created for them in my.SDSU. They will then need to add you to the roster and provide the section and class number to you. You may then add the class.

**799A** (plan A thesis): **Enrollment via College of Graduate Studies permission.** You need to enroll in this course just prior to your last semester/term at SDSU. To enroll in this course, you must be advanced to candidacy and have an approved Appointment of Thesis/Project Committee Packet on file with the College of Graduate Studies. See the Form Guide in the [Forms and Form Guidelines folder](#) in the Chem Grad Student Google Drive, and [info from the College of Graduate Studies](#) for details. COMPLETE THESE FORMS AT LEAST 1 MONTH PRIOR TO NEEDING TO ENROLL IN YOUR LAST TERM/SEMESTER! Once the Appointment of Thesis/Project Committee Packet is completed and approved, you must request 799A registration permission and information by emailing Graduate Studies at [gra@sdsu.edu](mailto:gra@sdsu.edu). Assuming that an approved Thesis Committee Form is on file, review and processing should be completed within 7-10 business days (see details [here](#)). This course triggers full time enrollment, but if you are TAing or have other requirements for enrollment units (international student, financial aid, etc.), you will enroll in additional units of your choosing.

**799B** (plan A thesis): **Enrollment via College of Graduate Studies permission.** If you end up not defending and completing your degree in your 799A semester, you can enroll in 799B the following term. Students can enroll in 799B from Global Campus (cheaper because no mandatory campus fees), or via Main Campus (*select this if you are receiving financial aid, have/need a TA/GA appointment, or need access to the campus services and facilities that are included in the campus fees*). You must request 799A registration permission and information by emailing Graduate Studies at [gra@sdsu.edu](mailto:gra@sdsu.edu). Assuming that an approved Thesis Committee Form is on file, review and processing should be completed within 7-10 business days (see details [here](#)). This course triggers full time enrollment, but if you are TAing or have other requirements for enrollment units (international student, financial aid, etc), you will enroll in additional units of your choice.

## **E. Typical MS program length**

Most of our MS students complete their degree within our department's goal of 2.5 or 3 years. Remember, completion of units is only one component; research is often the rate-limiting step. Completing a body of work that a student successfully defends in both oral and written formats means a large, sustained commitment to the lab.

As MS students usually support themselves by serving as Teaching Associates (TAs), they receive part-time tuition waivers, typically equal to 6 units per semester. Thus, many MS students enroll in 6 units per semester, though there may be other reasons (residency or visa status, scholarships, aid, etc.) why a student may need to enroll in more units. You are responsible for determining how many units you should be enrolled in per semester to stay matriculated in the Master's program while also meeting any additional requirements unique to your situation.

Below are two examples of the most common degree program lengths for an MS student (2.5 years and 3 years). Note, a 2-year (4 semesters) or 2.3-year (4 semesters plus a summer term) plan requires out-of-pocket expenses that a TA waiver will not cover. A confounding issue is that more units taken mean less time for research, so even if 30 units are completed, often the student cannot yet graduate because they cannot complete their research project within this timeframe. As a result of these issues, students often do not opt for or are unable to complete the 2-year or 2.3-year options. When a student does complete a degree in less than 2.5 years, they are more likely on the 2.3-year plan, as they typically require an August graduation (rather than spring) to complete their thesis work.

**2.5-Year Sample Plan (note, not all form requirements are listed)**

SEMESTER	COURSE (UNITS)	NOTE
1 (Fall)	CHEM 695 (3) CHEM 500/600/700 (3)	May need to meet qualifier course requirements
2 (Spring)	CHEM 500/600/700 (3) (CHEM) 500/600/700 (3)  Status change from conditional classified to classified	May need to meet qualifier course requirements Some students consider a limited number of courses outside of CHEM Dept.
3 (Fall)	CHEM 790 (1) CHEM 791 (1) CHEM 795 (1) (CHEM) 500/600/700 (3)	Required Required
4 (Spring)	(CHEM) 500/600/700 (3) CHEM 797 (2) CHEM 792 (1) Submit POS, Appointment of Thesis/Project Committee Packet Apply for Graduation by the start of Fall	Required
5 (Fall)	CHEM 799A (3) CHEM 797 (3)	Neither option needs 799B enrollment for a 6 <sup>th</sup> term provided deadlines are met.

	<p><u>Option 1:</u> by ~early Oct, complete thesis defense; thesis submission to Montezuma for Oct. deadline (Fall MS degree)</p> <p><u>Option 2:</u> by ~late Nov, complete thesis defense; thesis submission to Montezuma for Dec. deadline (next Spring MS degree)</p>	
--	---	--

### 3-Year Sample Plan (note, not all form requirements are listed)

SEMESTER	COURSE (UNITS)	NOTE
1 (Fall)	CHEM 695 (3) CHEM 500/600/700 (3)	May need to meet qualifier course requirements
2 (Spring)	CHEM 500/600/700 (3) (CHEM) 500/600/700 (3)  Status change from conditional classified to classified	May need to meet qualifier course requirements Some students consider a limited number of courses outside of CHEM Dept.
3 (Fall)	CHEM 790 (1) CHEM 791 (1) CHEM 795 (1) (CHEM) 500/600/700 (3)	Required Required
4 (Spring)	(CHEM) 500/600/700 (3) CHEM 797 (2) CHEM 792 (1)	Required
5 (Fall)	(CHEM) 500/600/700 (3) CHEM 797 (3)  Submit POS, Appointment of Thesis/Project Committee Packet Apply for Graduation by the start of Spring	
6 (Spring)	CHEM 799A (3) (CHEM) 500/600/700 (3)  <u>Option 1:</u> by ~early Mar, complete thesis defense; thesis submission to Montezuma for Mar. deadline (Spring MS degree) <u>Option 2:</u> by ~mid-Apr, complete thesis defense; thesis submission to Montezuma for May deadline (next Fall MS degree)	Considered full-time enrollment If 6 units are required  Neither option needs 799B enrollment for a 6 <sup>th</sup> term provided deadlines are met.

## II. MS Milestones

### A. Milestone overview

An MS student has important, time-sensitive milestones during their program, many of which require forms that need to be approved by the MS/MA Graduate Advisor and the College of Graduate Studies. See the MS-MA Form Guide, located in the [Forms Folder](#) in the Chem Grad Student Google Drive, for specific instructions on how to launch the forms required for many of these milestones.

The milestones you will accomplish over your MS degree include:

- Select a research lab and research mentor
- Complete a status change from Conditionally Classified to Classified
- Select your Thesis Committee
- Present your proposed work for your committee in CHEM 791
- Complete your official Program of Study (POS) and Advance to Candidacy documents
- Submit your Thesis Committee form
- Register for Culminating experience (CHEM 799A)
- File an application for graduation
- Write and submit your thesis to your Thesis Committee
- Publicly defend your thesis
- Submit your final thesis to Montezuma Publishing

## **B. Selecting a research lab and research mentor**

One of the most important decisions you'll make as an MS student is the selection of a research mentor. To ensure you feel empowered to make a well-informed decision, we offer lab rotations that take place in the Fall semester of your first year. You can find the current Rotation Policy/Format in the [Rotations Folder](#) in the Chem Grad Student Google Drive. To help you decide the labs in which you'd like to rotate, you will attend informal research talks with faculty, which are typically via zoom in the Spring/early Summer prior to your arrival at SDSU, and you will participate in our Department's Researchpalooza, which is typically held just prior to the start of the Fall semester.

In CHEM 695, you will be provided with resources on the selection of an effective research mentor. As you interact with faculty whose research is of interest to you, you may consider asking:

- Can you tell me about the current research going on in your lab?
- What kind of technical skills and professional development skills can I expect to learn?
- What are projects that you are wanting new students to undertake?
- How is your lab currently funded? How do you support your lab with reagents/supplies, student travel to conferences, etc.?
- What is your mentorship style? What is your management style?

- Are you taking MS students? What if they are planning to apply to the JDP, would you have grant funding to support this?
- What kind of techniques does your lab use?
- What kind of opportunities do students have for professional development?
- How often do you meet with students? If I have questions, what would be my process for meeting with you to ask them?
- What means does your lab use to communicate?
- Do you have regular research meetings?
- Where are some of your MS and PhD student alumni now?
- What kind of collaborations do you have?
- What do you like most about your job as a professor?
- What would a successful rotation look like in terms of milestones/progress/hours worked/etc.?

Please note, students conducting research involving human subjects are required to apply for review through the Institutional Review Board (IRB), and animal research through the Institutional Animal Care and Use Committee (IACUC) **prior** to beginning any research. Please ensure you and your research mentor have completed IRB or IACUC authorization and training before beginning your research in your first semester of study.

### **C. Status change from Conditionally Classified to Classified**

Master's students are accepted into our program as a conditionally classified student. By the end of their second semester, MS students must complete the following requirements to have a status change to classified:

- Take at least 4 orientation exams prior to enrollment in your first semester of graduate school to identify strengths and areas for growth. These exams are given once annually, in August. Note, failure of these exams does not endanger your status in the program.
- Complete 12 didactic (i.e. no 79X courses) Program of Study units with 3 units, usually including 695, and earn a minimum GPA of 3.00.
- Qualify in 2 chemistry subdivisions of your choice through earning a B or higher in allowed coursework (see courses below) or orientation exam score (a score  $\geq$  50<sup>th</sup> percentile per ACS National norms for that particular exam topic and exam year).
- Earn a C or higher in all program courses.

The approved courses for the 6 divisions include (note not every course is offered every semester):

*Analytical Chemistry*: 550, 750, 751, 752, 753, 736\*, 761\* courses, or score  $\geq$  50<sup>th</sup> percentile level based on national averages for the Analytical Chemistry ACS exam.

*Biochemistry*: 560, 562, 563, 564, 761\*, 763, 765 courses, or score  $\geq$  50<sup>th</sup> percentile level based on national averages for the Biochemistry ACS exam.

*Chemical Education*: 781

*Inorganic Chemistry*: 520A, 520B courses, or score  $\geq$  50<sup>th</sup> percentile level based on national averages for the Inorganic Chemistry ACS exam.

*Organic Chemistry*: 432, 538, 730, 731, 732, 734, 736\* courses, or score  $\geq$  50<sup>th</sup> percentile level based on national averages for the Organic Chemistry ACS exam.

*Physical Chemistry*: 510, 711, 712, 713, 714 courses, or score  $\geq$  50<sup>th</sup> percentile level based on national averages for the Physical chemistry ACS exam.

*\* Though starred courses meet qualification requirements for more than one subdivision, you are not allowed to use a single course for more than one qualification requirement.*

As you plan your coursework, we encourage you to begin working on your preliminary Program of Study (POS) spreadsheet. You can find a planning template in the [Planning your Program folder](#) in the Chem Grad Student Google Drive. As new courses are developed in our program, it is possible that additional courses not listed here may fulfill qualification requirements. Inquire with the MS/MA Graduate Advisor before enrollment in the course to ensure the course is suitable for qualification. If you do not meet this requirement within the first year, a registration hold will be placed on you and a petition for an extension must be filed and approved before you can start your third semester. This will require a meeting with the Graduate MS/MA Advisor to approve a plan to meet this requirement.

Usually towards the end of the spring semester, the MS/MA Graduate Advisor will initiate a Status Change form on your behalf. If you have not been notified that a form has been submitted and you have completed these requirements, submit the appropriate google form requesting that the MS/MA Graduate Advisor submit a Status Change form on your behalf (see the Form Guide in the [Forms and Form Guidelines Folder](#) in the Chem Grad Student Google Drive). Do not initiate this petition for status change form with the College of Graduate Studies on your own. If you do not see confirmation of your expected status change by early May, email the MS/MA Graduate Advisor immediately.

### **Reminders:**

- No 79X courses may be used to count towards the status change in Year 1. Save these courses for after your second semester!
- Rarely, a course may be considered outside this group to be suitable for qualification (usually only newly developed courses not yet formally approved for qualification). You will need MS/MA Graduate Advisor permission AND College of Graduate Studies permission (via a Petition for Adjustment of Academic Requirements, or PAAR form)

prior to enrollment if you intend to use a different qualifier course. Permission is not guaranteed.

- Students often request a non-CHEM course to count towards the Program of Study (POS) as part of their electives. In the case of an elective, you will still need MS/MA Graduate Advisor permission AND College of Graduate Studies permission (via a PAAR) prior to enrollment in that course to use it as part of your POS. Permission is not guaranteed, but is typically honored when it supports your research area.
- Check out the university catalog [here](#). Check out this searching for classes guide [here](#).

### **C. Selection of Thesis Committee and present in CHEM 791**

You will select your MS Thesis Committee members in the summer after your first year in the program, though you will not yet file your Thesis/Project Committee Packet at this time. Your Thesis Committee will have at least three members, including the Thesis Chair. The Chair of the committee is your research advisor. The second committee member is from the Department of Chemistry. The third and final required member must be outside of the Chemistry Department. It is possible to have a fourth member that is not associated with SDSU, is retired (emeritus) or beginning retirement (FERP), or is an adjunct faculty or lecturer. You will need to verify that all members will serve until the completion of your degree.

By your third semester of study, you should have a well-established research project. At that time, you should present your Chem 791 Research Seminar that details the goals of your research, reviews the background literature, summarizes progress to date, and outlines proposed future research to conclude this project. If significant research problems are encountered, you may postpone this seminar, but this will likely delay your graduation. It is expected that you will invite your full committee to your presentation in CHEM 791. These seminars are announced in advance and are open to the general public.

### **F. Complete your official Program of Study (POS) and Advance to Candidacy**

After you have passed the qualifier exam requirements and attained Classified Graduate Standing, you can submit an Official Program of Study (POS) and Advancement to Candidacy for an Advanced Degree. Your Official POS lists all courses that you have taken or plan to take to meet your MS degree requirements (see above in this Handbook for unit requirements). As you prepare your Official POS, you should perform a degree audit in my.SDSU, refer to your preliminary POS template, and review guidance in the [MS\\_MA Program Folder](#) in the Chem Grad Student Google Drive. Your overall GPA must be at least a 3.00 to submit your POS. **You are expected to submit your Official POS in**

**November or December in your third semester.** At a minimum, your Official POS must be approved at least one semester before your anticipated graduation date. Approval of your POS may require 2-4 weeks.

During the preparation of your Official POS, you will need to ensure you have met the following requirements to Advance to Candidacy. To be eligible to Advance to Candidacy, you must:

- 1) Meet the following GPA requirements:
  - a) A minimum grade of a C (2.0) in every course used towards your degree
  - b) SDSU graduate GPA must be a 3.00 or higher
  - c) Overall graduate GPA must be a 3.00 or higher
  - d) SDSU Program of Study GPA must be 3.00 or higher
  - e) Overall Program of Study GPA must be 3.00 or higher
- 2) Complete at least 12 Program of Study (POS) units with a minimum 3.00 GPA (and all program courses obtained a grade of C or better)
- 3) Pass orientation examinations or complete coursework that fulfill this requirement (see requirements for the status change from conditionally classified to classified) and thus completed a status change from conditionally classified to classified.
- 4) Ensure all necessary Petition to Adjust Academic Requirements (PAAR) form requests have been submitted and approved.

The set of requirements specified in the Graduate Bulletin at the time your Official POS is approved will be in effect for your degree. Any change for an elective class option to your Official POS after it has been approved must be made on a PAAR form. If the change affects a specific degree requirement, Chem 790, 791, 792 or 799A, versus an elective option, it must also be made using a PAAR. To request a PAAR to be submitted on your behalf by the MS/MA Graduate Advisor, see instructions in the latest Form Guide in the Chem Grad Student Google Drive). We prefer that you do not submit a PAAR to the College of Graduate Studies on your own.

**Generally, you will request to be advanced to candidacy at the same time your Official POS is approved, though your advancement MUST happen prior to registration in your final semester.** Often, this is in May/June after semester 4 for the 2.5-year plan, or early January for the 3-year plan. If you are ineligible to advance before your planned final semester, degree completion will be delayed by at least one term, and you will need to complete additional paperwork/costs (see Request to Postpone Graduate Application section). Any deficiencies that prevent advancement to candidacy at this point will result in the review of your status at the end of each semester by the Graduate Division.

**A reminder if you want to apply any UCSD courses to your official POS:** you can take classes at UCSD provided they complement courses offered here. However, they must be part of your program of study for the MS degree. You must be in good academic standing. A 4-unit class at UCSD converts to a 2-unit class at SDSU. The corresponding fees for those four-unit classes are equivalent to a 3-unit class at SDSU. You need to begin a PAAR request to take classes at UCSD at least 1.5 months before the start of the quarter at UCSD. To request a PAAR to be submitted on your behalf by the MS/MA Graduate Advisor, see instructions in the latest Form Guide in the Chem Grad Student Google Drive). Note there are limits to the number of courses not taken at the SDSU campus that may be transferred towards your degree. We prefer that you do not submit a PAAR to the College of Graduate Studies on your own.

### **G. Submit your Thesis Committee form**

Though you formed your MS Thesis Committee in the summer after your first year, you must be advanced to candidacy before you will be allowed to officially submit the paperwork declaring your thesis committee. Once you have submitted your Official POS and had your Advancement to Candidacy forms approved, you may submit an online google form requesting that the MA/MS Advisor submits the Appointment of Thesis/Project Committee form on your behalf. To make this request, see instructions in the Form Guide in the [Forms and Form Guidelines folder](#) in the Chem Grad Student Google Drive. Do not submit an Appointment of Thesis/Project Committee to the College of Graduate Studies on your own. Note, the Appointment of Thesis/Project Committee form requires verification that any research involving humans or animals (if applicable) has been pre-approved by the appropriate committees. Students conducting research involving human subjects are required to apply for review through the Institutional Review Board (IRB), and animal research through the Institutional Animal Care and Use Committee (IACUC) prior to any research. Note, you should have completed IRB or IACUC authorization before beginning your research in your first semester of study. You will also have to certify any proper use of Artificial Intelligence (AI).

The review and processing of the Thesis Committee Packet form by the College of Graduate Studies can take 7-10 business days, and you will receive an email confirming the approval of the committee. After the form has been approved, you may request enrollment information for Chem 799A.

### **H. Registration for Culminating experience (CHEM 799A)**

You can only register for CHEM 799A after you have completed all of the above requirements and the Graduate Division has approved your Thesis Committee. You must

register for CHEM 799A in the semester that you plan to submit your thesis and graduate – so you should be nearly done with your thesis work. Typically, a MS thesis takes 3-4 months to complete. The first fall, spring, or summer term that you register for 799, you must register for 799A through SDSU. The 799B thesis extension can be taken through Global campus for less cost than registering through SDSU, but this can affect your eligibility for a TA-ship or any residency/visa or scholarship requirements, so make sure you determine if it is appropriate to enroll in 799B via the Global campus mechanism. See details [here](#). You must be enrolled in 799A or 799B the semester that your thesis is submitted to Montezuma for Thesis Review. **If you require additional semester(s) after your 799A enrollment, you must be enrolled in 799B during all subsequent semester(s) to remain in active status. If you lose active status, you will subsequently be removed from the program.**

Contact the Graduate Division to obtain the schedule number for Chem 799A or 799B, even if you plan on enrolling through Global campus. Make sure to meet College of Graduate Studies-dictated deadlines for course registration (see registration dates [here](#)). 799A is a 3-unit class, while 799B has 0-units, however, you will be charged for this class. Both 799A and 799B are considered full time and you don't need to register for additional courses if you have completed your program of study unless you are planning to TA, and/or have residency/visa or benefits/scholarships requirements requiring you to have more units. In those cases, students will typically register for CHEM 797 units.

You should start writing early -- you do not need to be registered in 799A/B to write your thesis, have it approved by your research advisor, present your work at your thesis oral defense, or have your thesis signed by your committee. However, you must be registered in 799A or 799B when it is submitted to Montezuma Publishing, and you need to be a student with active status. Discuss organization and details with your research advisor and submit regular drafts to your advisor and other mentors/colleagues for edits prior to submission to your committee. You may want to consider visiting the SDSU Writing Center if you are having difficulties putting your thesis together.

## **I. File application for graduation**

You must apply for graduation, since this is not automatic. Please review FAQs from the College of Graduate Studies [here](#). The application is due 3-6 months before the official diploma date and must be done through your my.SDSU account. Deadlines are posted [here](#).

A registration hold may prevent you from applying to graduate and you will need to resolve it. See guidance [here](#). If you have missed the deadline for graduation applications, contact the Graduate Studies office at [gra@sdsu.edu](mailto:gra@sdsu.edu) to determine whether it is possible to

petition for a late application. But please **don't miss this deadline!** If you plan to participate in Commencement, review deadlines, checklist, and other important information [here](#).

## **J. Thesis preparation and submission to Thesis committee, public defense, and thesis submission to Montezuma Publishing**

### **Writing your Plan B thesis.**

**Preparing for your oral defense:** An oral presentation of your thesis work must be presented after you have finished writing your thesis and all members of the thesis committee, including your chair, have read a draft that is deemed acceptable for the defense to occur. Before your defense can be scheduled, check with all committee members for their availability. They should be given a copy of your thesis **no fewer than two weeks in advance** of the defense date. You must provide your defense time, location, and title to the Departmental front office so that they may announce and post the event the week prior to your presentation. Your defense is public (i.e. open to all). The thesis defense consists of an oral public presentation where you will present and defend the findings and conclusions of your thesis project. The defense must occur before the thesis committee who grants final approval for your thesis. We recommend a celebration after a defense!

The format of your thesis defense typically resembles the oral presentation of a scientific paper. The presentation usually lasts 30 minutes to 1 hour, including public questions. After the public session, the audience is dismissed and your committee asks more detailed questions and discusses any thesis edits. Attending other students' defenses can help you prepare for this important and exciting day. Keep in mind that much of your audience may know little or nothing about your specific topic. Your goal is to clearly explain your research area and scientific contribution. A strong, clear introduction is especially important. Although your thesis is written for specialists, your defense should engage both specialists and generalists.

The level of detail in a defense is usually less than in the thesis. Excessive detail can obscure your main points. The volume of information in your project may also exceed the available time. Focus on key questions, datasets, and findings. You may briefly note omitted material so the audience can ask about it later. If your research narrative is straightforward, do not feel obligated to complicate it. An effective defense describes focused objectives, effective methods, and clear results. The audience understands what was previously known in the field, the rationale of why you undertook this work, what your key results were, and how your work advanced the field forward. Images on your slides should differ from those in

your written thesis. Simply copying figures or tables from your manuscript may not work well. Formats suitable for print are often ineffective on slides; for example, tables may be illegible when pasted into a presentation. Use large fonts and clear visuals to ensure readability.

**Suggested defense timelines to meet Montezuma submission and publishing timelines:** For a Fall graduation using Montezuma’s first/early thesis publishing [deadlines](#) (which ARE firm deadlines), we recommend you complete your defense by the 1<sup>st</sup> week of October. For a Spring graduation using Montezuma’s first/early thesis publishing [deadlines](#) (which ARE firm deadlines), we recommend you complete your defense by the 1<sup>st</sup> week of March. Though these defense recommendations are not firm deadlines, they will ensure you can make all the corrections to your thesis and meet Montezuma’s firm thesis submission deadlines. These first/early deadlines represent the “Option 1” deadlines In our Department’s MS\_graduation\_Timelines pdf found in the Planning your Program [folder](#).

Sometimes, a MS student doesn’t submit their completed thesis to Montezuma Publishing by the first/early deadlines in the term that they enroll in 799A. To avoid enrolling in 799B in the next term, you must meet the [deadline](#) listed as “Thesis submission to Montezuma Publishing for a future degree without 799B re-enrollment”. For a Spring graduation using the late deadline, we recommend you complete your defense by the end of Nov, and for a Spring graduation, we recommend you complete your defense by mid-April. Though these defense recommendations are not firm deadlines, they will ensure you can make all the corrections to your thesis and meet Montezuma’s late thesis publishing [deadlines](#) (which ARE firm deadlines). These second/late deadlines represent the “Option 2” deadlines In our Department’s MS\_graduation\_Timelines pdf found in the Planning your Program [folder](#).

Rarely, a MS student doesn’t submit their completed thesis to Montezuma Publishing by the early or late deadlines in the term that they enroll in 799A. This is a problem, but it can be fixed. You must submit (and have approved) a “Request to Postpone Graduate Application” through my.SDSU (see the Form Guide in the [Forms folder](#)). Only then will you be able to remove the block on your enrollment. Please then contact the College of Graduate Studies for enrollment in CHEM 799B, which is the thesis extension course. This allows you to continue working on your thesis and then submit it to Montezuma Publishing, but you still must meet their published [deadline](#).

**Preparing for submission to Montezuma:** Typically, the thesis committee determines that the thesis is satisfactory, and they sign the title page you provide, usually via Adobe Sign. See the Departmental front office for help and guidance with these forms. Your committee’s signatures indicate approval of both the thesis and the recommendation for an

MS degree. Approval must be unanimous. If one or more members decline to sign, it may indicate that the defense was premature or that previously undetected flaws were identified. The committee will determine the steps needed to address any issues. Members may delay signing until required revisions are completed. All edits must be completed before the thesis can be submitted to Montezuma Publishing for Thesis Review.

It is essential that your thesis be as error-free as possible prior to submission. You can format your thesis yourself, hire a professional editor or use Montezuma Publishing to do the editing. Regardless, you are responsible to meet the policies, requirements, and formatting dictated by your thesis committee, the College of Graduate Studies, and Montezuma Publishing. See guidelines from Montezuma Publishing [here](#). Plan to attend a Montezuma Q&A session offered typically each February and September.

Remember, you must be enrolled in 799A or 799B when you submit the thesis for review, and you must meet the strict deadlines held by the College of Graduate Studies and Montezuma Publishing (see current dates [here](#)).

**Other Important Information:** It is very important that you make suitable progress towards your master's degree if you are supported at a teaching assistantship or are awarded a nonresident tuition waiver (NRTW). You must be registered for at least 6 units of classes each semester that are included in your program of study. Failure to make suitable academic and/or research progress or maintain a 3.0 GPA may result in the loss of your TA-ship and NRTW. Not all students may be awarded NRTWs due to the limited number provided by SDSU to our department. NRTWs are limited to 5 semesters. You are responsible for your fees when not enough NRTWs are available and when you request an NRTW beyond these time limits.

## **K. Remaining an active student in good standing**

Per [university policy](#) and College of Graduate Studies [policy](#) and [resources](#), to remain in Good Standing with the College of Graduate Studies, students must:

1. Maintain good academic standing with the university based on overall cumulative and SDSU cumulative GPA are both at least a 3.00,
2. Are in good judicial standing (as defined by the Center for Student Rights and Responsibilities),
3. Make continued good progress toward the degree each semester (as defined by the graduate program),
4. Maintain matriculation (enroll in classes or file Leave of Absence, each Fall and Spring semester).

Thus, you need to remain enrolled and taking classes each semester until you have completed **all** degree requirements and filed for graduation. Occasionally, students need to take time off from their studies for a variety of reasons. To remain active, you must apply and have approved a Leave of Absence (LOA). You must submit a LOA request when you cannot attend a Fall or Spring term for any of the following reasons: medical, educational, financial, military, and/or personal. The LOA is necessary to maintain your active status "matriculation" when there are no courses during a particular fall or spring term. This is an important tool to help you finish your degree in times of difficulty. Please inform your research advisor and the MS/MA graduate advisor that you are applying for an LOA. You do not need to disclose details to them, but they need to be aware of your plans.

You are eligible for a LOA if:

- you have already finished your first semester at SDSU
- you are in good academic standing (not on academic probation)
- you do not have any of the following pending holds: judicial hold, eligibility hold, degree application hold, disqualification hold
- you have not exceeded the maximum four leave of absences

To request an LOA:

1. Log into my.SDSU and select the Academic Records tile.
2. Select Student Records Forms.
3. Select the Leave of Absence form.
4. Complete the form with the intended term for Leave of Absence and type of leave requested.
5. Submit form, once submitted a confirmation email will be sent.
6. Allow 5–7 business days for processing.
7. Students will be notified via their SDSU email once the request has been processed.

To cancel a previously submitted LOA request, complete the same form and select the **Cancel Leave of Absence** option.

Although approvals are not guaranteed, an exception to the maximum allowed LOA policy can be requested by submitting the Leave of Absence Form. Graduate students who are not in good academic standing will have their LOA requests automatically reviewed for a possible exception. Graduate students in their first semester at SDSU cannot take a LOA. If students do not enroll during their 1st semester as a matriculated student, they will be considered a "no-show" and will have to apply for readmission.

### III. Brief TA Guidelines

Being a TA is an important and rewarding experience – you play a key role in shaping how undergraduates feel about chemistry (is it relevant to their lives? If they work hard, can they learn important chemistry principles, or is this simply a discipline to be feared?) Undergraduates sometimes are inspired to undertake research at SDSU after hearing more about their TA's research. You play a critical role as an educator and mentor for your undergraduates. If you find yourself nervous before your class, or uncertain that you have enough knowledge to teach a course, this is common. We are committed to providing you with the resources you need, and with appropriate preparation on your part, we know you will be successful.

Most of the TA resources and information is provided in the College of Graduate Studies's Master's Student Handbook and will not be reiterated here. Please also review carefully the information found in the current Chemistry & Biochemistry Department Academic Student Employee (ASE) policies. The latest version can be obtained from the Chem Grad Student Google Drive and/or from the Chemistry front office.

A typical workload assignment of 0.4 corresponds to 16 hours per week of work. All duties required for your assignment will be detailed in a Description of Duties form provided to you at the time of hiring.

Primary duties may consist of one of the following assignment types:

- Two lab section assignments (TA)
- Four discussion section assignments (TA)
- One lab and two discussion sections assignments (TA)
- Assisting a large enrollment lecture instructor (ISA)

Additional duties can include:

- Attending department TA/ISA training before the first day of classes
- Attending weekly TA/ISA meetings
- Preparing course materials relevant to your assignment
- Holding office hours or tutoring sessions
- Grading student work from their section or others
- Proctoring exams for their students or other sections
- Attending course lectures

Initial contracts will only cover a single semester and reappointment is based on department needs and satisfactory completion of duties. No ASE can begin working without a contract in place and any work performed without a contract cannot be compensated. To support all cohorts of Master's students and to promote timely completion to degree, a master's student might stop being offered TA contracts after completing 3 years in our master's programs. Unsatisfactory performance of assigned job duties may result in reassignment or revision of duties at any time during the term of appointment, which will result in the department issuing a revised Description of Duties form.

**Additional resources:**

[SDSU Center for Teaching and Learning resources](#)

[First Day of Class Tips](#)

[Tips for New Teaching Assistants](#)

[Learning to Teach: 10 Tips for Professors](#)

[SDSU Canvas main page](#)

[SDSU Canvas Support Homeroom.](#)

[Introduction to teaching with Canvas - Self Paced Course](#)

## **IV. Code of Conduct**

### **A. The Commitment from the Department of Chemistry**

SDSU and the Department of Chemistry and Biochemistry are committed to fostering a supportive, inclusive, intellectually stimulating environment that enables all of our students to thrive as they develop as scientists. Thus, we strive to:

- provide each student an opportunity to successfully complete their degree to the standard required by the degree program
- sustain a respectful, collegial, engaging, and active educational atmosphere
- safeguard the health, safety, welfare, property, and human rights of all members of the university community
- uphold the academic integrity of the program

These standards align with San Diego State University Policies defined in the [University Catalog](#), the [Academic Senate Policy File](#), and with [university policy](#).

## **B. The Commitment to a Productive Mentoring Partnership**

We view mentoring as a two-way partnership where the research mentor and the graduate student share ownership in the goal of supporting the graduate student in reaching goals they've defined together. The success of these partnerships stems not just from the goals themselves, but the ongoing effort to build and sustain a relationship where both sides stay engaged, accountable, and invested in the outcome. All faculty mentors are expected to foster a collaborative and professional environment by always maintaining a respectful and professional attitude.

Through mentorship of students at the lab and department levels, we seek to help graduate students: 1) experience a rewarding and productive educational journey; 2) seek their maximal potential; 3) grow into rigorous, independent researchers; 4) be competitive in the job market of their selection; 5) be proud representatives and advocates for our Department during their time here and as alumni.

We see effective communication, mutual respect, and commitment to professional and technical development as key attributes of an effective mentor. As the graduate student seeks to become competitive on a global job market, supporting student mental health and well-being and reinforcing accountability for meeting professional goals is vital. A shared understanding of expectations and responsibilities of the mentor and mentee, which evolve over the student's professional and technical development, is an important hallmark of success. Our Department strives to practice culturally competent mentoring, or the "ongoing process of gathering and utilizing knowledge, information, and data from and about a mentee, their family, their peers, and their community...that is integrated and serves to transform specific skills and strategies that exchange the quality and effectiveness of the mentoring relationship." [K-Town Youth Empowerment Network]

The Department is committed to providing MS students with dedicated time during their first semester to explore research labs of their interest (based on availability), so that they may feel empowered to help drive the assignment of their research mentor by providing rankings. We strive to honor the first or second choice of the student, though we acknowledge that space, funding, and other considerations can affect this goal.

The research mentor is committed to the technical and professional development of the student, to provide reasonable access via informal and formal meetings, and to provide regular feedback on student's deliverables (data, thesis, abstracts, etc.). The research mentor is committed to modeling excellence in research, teaching, and service.

The MS student will also have a committee of faculty who serve as additional resources in their technical and professional development, and who are committed to providing feedback on their thesis project. We strongly encourage the MS student to nurture mentoring relationships with their committee members in addition to their research mentor. A student may seek periodically additional support from the Departmental Chair or the MS/MA Graduate Advisor.

Resources detailed elsewhere in this manual and in the Chem Grad Students Google Drive are in place for guiding the student and the mentor if the mentoring partnership is not meeting expectations.

### **C. Codes and resources for students**

Graduate students at SDSU are expected to adhere to the highest standards of professionalism, academic integrity, and ethical behavior throughout their time in the program. This commitment extends to all professional activities, both on and off campus, including conference and meeting travel, where students represent their program, department, and the university.

Academic dishonesty and class/lab disruption is not tolerated in the Department of Chemistry and Biochemistry. Academic Dishonesty includes: cheating that is intended to gain unfair academic advantage; plagiarism that is intended to gain unfair academic advantage; other forms of academic dishonesty that are intended to gain unfair academic advantage; furnishing false information to a university official, faculty member, or campus office; forgery, alteration, or misuse of a university document, key, or identification instrument; misrepresenting oneself to be an authorized agent of the university or one of its auxiliaries; unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose; misuse of computer facilities or resources; encouraging, permitting, or assisting another to do any act that could subject them to discipline.

Plagiarism shall be defined as the act of incorporating ideas, words, or specific substance of another, whether purchased, borrowed, or otherwise obtained, and submitting same to the university as one's own work to fulfill academic requirements without giving credit to the appropriate source. Plagiarism shall include but not be limited to (a) submitting work, either in part or in whole, completed by another; (b) omitting footnotes for ideas, statements, facts, or conclusions that belong to another; (c) omitting quotation marks when quoting directly from another, whether it be a paragraph, sentence, or part thereof; (d) close

and lengthy paraphrasing of the writings of another; (e) submitting another person's artistic works, such as musical compositions, photographs, paintings, drawings, or sculptures; (f) submitting as one's own work papers purchased from research companies; and (g) representing work produced by generative artificial intelligence (AI) as one's own.

Lab/classroom disruption includes: willful, material and substantial disruption or obstruction of a university-related activity, or any on-campus activity; participating in an activity that substantially and materially disrupts the normal operations of the university, or infringes on the rights of members of the university community; failure to comply with directions of, or interference with, any university official or any public safety officer while acting in the performance of their duties.

The Department of Chemistry and Biochemistry refers graduate students to College of Graduate Studies and/or SDSU for the following important guidelines and policy:

[Matriculation/Remaining in Good Standing/Enrollment Requirements](#)

[Electronic Forms](#) (see also the Form Guide in the [Forms and Form Guidelines folder](#) in the Chem Grad Student Google Drive)

[Leave of Absence policy](#)

[Academic Probation and Disqualification](#)

[Withdrawals](#)

[Student Code of Conduct](#)

[Principles of Community](#)

[Time, Place and Manner/Free Speech](#)

[Inclusive SDSU](#)

## **D. General best practices for students**

To help you progress successfully through your program, we recommend the following best practices:

1. **Work towards becoming an effective, efficient problem-solver.** You will want to:
  - a. Take responsibility: of your progress, your project, your motivation, your goals, and your future.
  - b. Build trouble-shooting and resiliency skills.
  - c. Communicate clearly.
  - d. Be organized.
  - e. Be ethical and respectful.
  - f. Learn from others and teach others. Make sure you provide space for others to contribute, and ensure you are taking space to contribute.
  - g. Leverage your strengths and build on your areas for growth.

2. **Meet regularly and consistently with your research advisor, and come to these meetings prepared.** You will want to:
  - a. Ensure alignment in priorities, deadlines, and project goals.
  - b. Work with your mentor to create space to troubleshoot to develop your critical thinking skills without losing focus from project goals or unnecessarily reinventing wheels.
  - c. Empower your research advisor to mentor you effectively by communicating respectfully but honestly. They may or may not be able to accommodate your requests, but self-advocacy is an important skill to develop regardless.
  - d. Seek out mentors beyond your research advisor. This can include your committee members.
  
3. **Develop technical depth and breadth.** By the end of your MS degree, you are expected to be the world's expert on your project. At the same time, you will need to apply your critical thinking and technical skills to new challenges in the next stage of your career.
  - a. Master the fundamentals and fill knowledge gaps early, as core concepts compound.
  - b. Aim to deeply understand assignments, protocols, methodology, and instrumentation, as well as your hypotheses, project rationale, significance, and impact of your research.
  - c. Stay up to date with scientific literature, and consider leveraging tools like AI, Zotero/Endnote, etc. in an ethical and appropriate way to help you be organized and efficient in your reading.
  - d. Attend our Departmental Seminars and ask questions!
  
4. **Treat research + TAing like a full-time job.** Remember, science is a world-wide enterprise, and you will ultimately be competing for jobs and opportunities among the best and brightest, just like you. You will want to:
  - a. Be organized and efficient in planning your days ahead of time. We suggest using an online- or paper-based calendar to help you allot time for research, classes, TAing, meetings, seminars, etc.
  - b. Maintain consistent work hours.
  - c. Strive for your personal best; try not to get too hung up on your perceived success or failure of others.
  - d. Set goals and track your progress.

- e. Keep your lab notebooks up to date, all data organized and backed up, your trainings current, etc.
  - f. Be a good lab citizen: take care of lab and departmental equipment and resources, only use equipment after proper training, and be a collaborative and kind colleague.
5. **Work on your written and oral communication skills.** Be sure to:
- a. Write early and often.
  - b. Strive for clarity.
  - c. Practice describing your research to specialists and non-specialists.
  - d. Present your work at as many opportunities as you can, and for a wide variety of audiences.
  - e. Prepare written drafts early so you can receive ample feedback.
  - f. Do not wait until the end to begin writing your thesis. Outline as you go.
  - g. Work on a short, big picture elevator pitch highlighting your skills to prepare for networking opportunities.
6. **Take advantage of professional development opportunities.** You will want to:
- a. Practice your collaboration, networking, and project management skills.
  - b. Build leadership/mentoring/managing skills.
  - c. Participate in outreach opportunities.
  - d. Take advantage of free trainings/certifications available at SDSU if they align with your career goals or areas needing growth.
7. **Define your immediate, short-term, medium-term, and long-term goals, and evaluate them and your progress regularly.** As much as you can, align your coursework, technical skills, and professional development skills with these goals. Individual Development Plans ([IDPs](#)) can be very helpful! We recommend you share your goals with your research mentor.
8. **Maintain your well-being.** Be sure to:
- a. Commit to sleep, exercise, eating a well-rounded diet, social connection, and activities that reinvigorate/replenish your joy or relaxation, not just science! These things are performance tools, not luxuries, and they keep you productive and creative.
  - b. Don't hesitate to use campus mental health resources. Remember, they are not JUST for acute issues/crises, but also for building tools to help you enjoy life! You can find details on resources in the [SDSU Resources and Mental](#)

[Health and Wellness Resources folder](#) in the Chem Grad Student Google Drive and info [here](#). Don't forget to also check out the Wellness room in GMCS 212! You will find guidelines for room usage and the keypad code for entry in the [SDSU Resources and Mental Health and Wellness Resources folder](#) in the Chem Grad Student Google Drive.

- c. Develop bonds with your peers. Attend CGSA events, invite a lab mate for a coffee, arrange a hike with a neighboring lab, etc.

**9. Be organized and proactive with the bureaucratic elements of your degree progression.** Make sure you:

- a. Perform regular degree audits/evaluations using my.SDSU.
- b. Review the resources from the Chemistry Department and the College of Graduate Studies to stay organized and on track.
- c. Be proactive in submitting forms.
- d. Remember that you are responsible for ensuring degree progress, including meeting milestones/timelines/deadlines.
- e. Check your email regularly.
- f. Respond to the semester check-in surveys sent out by the MS/MA Graduate Advisor.
- g. Get help when you are experiencing issues or barriers. Don't let them endanger degree completion.

**10. Seek funding support and other opportunities in consultation with your research mentor.** Consider:

- a. Applying for fellowships and travel grants.
- b. Pursue internships, but only after consultation and permission from your research mentor.
- c. Take on short/abbreviated roles that allow you to develop skills you value (e.g. leadership, mentoring, etc.)

**11. Protect your time and finish strong!** Be sure to:

- a. Remember your values and your "whys" for undertaking this degree. This can keep you motivated and reignite your enthusiasm.
- b. Remember that you are here to learn; no one knows everything! You are in this program because we know you have what it takes to be a successful MS scientist. Your field needs you! You have your own unique perspectives, skills, and background that allow us to tackle the world's toughest scientific problems.

- c. Schedule uninterrupted deep-work time.
- d. Be efficient in administrative tasks.
- e. Don't let procrastination/perfectionism derail your progress.

## **E. Graduate student use of Artificial Intelligence (AI) and related data processing**

Artificial Intelligence (AI), including generative tools such as ChatGPT and other large language models (LLMs), is rapidly evolving and widely used in academic, business, and everyday settings. These resources have tremendous value, and you should learn to use them with careful, informed, and ethical engagement. AI tools may create generative or predictive content. However, they may produce inaccurate, biased, plagiarized, or fabricated (“hallucinated”) material. You are responsible for their own competence when using AI, including the ability to verify the accuracy and reliability of any AI-assisted work.

**Master's thesis documents and other materials you produce over the course of your master's degree must always fully reflect your original contribution.** You must clearly and transparently distinguish your own work from that of prior scholars, and from that of AI. Using AI does not exempt you from plagiarism or academic honesty standards. Any use of AI tools must be transparent. You are fully responsible for maintaining integrity and properly acknowledging the original source of an intellectual contribution, and for speaking with your research advisor for any additional regulations they might have regarding AI.

Submitting original data or writing to AI systems carries risks to confidentiality and loss of intellectual property. Information entered may be stored, reused for model training, and later appear in responses to other users. You must consider these risks before sharing sensitive or original material. Please review this [library web page](#) that provides students with guidelines and resource links, including AI definition, and guidance for AI use in the academic setting. Please review SDSU's AAI (Academic Applications of Artificial Intelligence) and Information Technology's AI resources on [this web site](#).

The following are **permitted** uses of AI in our Department of Chemistry:

- Idea development: brainstorming research questions, conceptual frameworks, methodological approaches, and topics for further inquiry.
- General research assistance: locating publicly available information, searching the chemical literature, identifying relevant subject areas, or summarizing existing literature for the student's review and verification.

- Editorial support: improving grammar, spelling, punctuation, sentence and paragraph structure, and the overall clarity of student-written text. AI use in this category must not alter the intellectual content or introduce new substantive material.

The following are **prohibited** uses of AI in our Department of Chemistry:

- Generation of academic content: producing text, paragraphs, or sections of any milestone document, including proposals, exam materials, or thesis chapters.
- Creation of visual or analytical materials: generating figures, diagrams, schematics, graphical elements, or data visualizations.
- Reference generation: producing citations, bibliographies, or reference lists.
- Data analysis or interpretation: drawing conclusions, interpreting experimental data, or performing analytical reasoning, except with the research advisor's approval and only after the student has performed and documented their own interpretation and shared this interpretation with the advisor.
- Use of sensitive research materials: uploading or processing unpublished data, proprietary information, laboratory results, or any confidential research materials without explicit prior approval from the student's research advisor.

When AI is used for permitted purposes, students must:

1. Retain the original draft: submit the initial draft of the document (before AI-assisted editing) alongside the final submission.
2. Disclose AI use: include a brief declaration within the milestone document stating which AI tool(s) were used and for what specific, permitted purpose. Example: "ChatGPT 5.1 was used solely for grammar, spelling, and clarity editing. No AI-generated text, figures, or references are included in this document."
3. Explicitly check all references/citations in the thesis. AI can "hallucinate" or misrepresent articles, and it is the student's responsibility to ensure all references/citations are actual peer-reviewed articles and that you have accurately portrayed their findings in your thesis.

Students are responsible for consulting their research mentor prior to using AI in cases where appropriate use is not explicitly stated as acceptable. Research advisor approval is mandatory before entering any unpublished or confidential research materials into AI tools. Unauthorized or undisclosed use of AI, including the incorporation of AI-generated text, figures, or references, constitutes a violation of academic integrity and will be addressed in accordance with Departmental and University policies on academic misconduct. The Department encourages the responsible use of AI tools where they enhance efficiency, complete other search tools for scientific information, and support the

writing process. However, the central intellectual contributions of milestone documents must originate from the student, who bears the ultimate responsibility for the content of these documents. These expectations uphold the scholarly standards of the Chemistry discipline and reflect emerging norms across leading research institutions.

## F. Grievances

If you have experienced conduct that may constitute discrimination, harassment (including sexual harassment), retaliation, dating violence, domestic violence, sexual exploitation, or stalking, it is important to report the information to the Center for Prevention of Harassment and Discrimination (CPHD). Reports can be made using the forms provided [here](#). You may also report information in person, by email, or by phone. To do so, contact CPHD at:

**Email:** [cphd@sdsu.edu](mailto:cphd@sdsu.edu)

**Phone:** 619-594-6464

**Physical Location:** Administration 228

These issues are not handled by the Department of Chemistry as we are not trained in these areas. The individuals in the CPHD are professionals ready to assist you in these serious issues.

At SDSU, most employees, including faculty, staff, and administrators, are considered “[Responsible Employees](#)” or mandated reporters. This means that we have a duty to report to the Title IX Coordinator/DHR Administrator when we learn about or see prohibited conduct such as sexual harassment, sexual misconduct, dating violence, domestic violence, stalking, sexual exploitation, prohibited consensual relationships, discrimination based on a protected status, harassment based on a protected status, and retaliation. Responsible employees do not include physicians, psychotherapists, professional licensed counselors, licensed clinical social workers, and clergy who work on or off campus, acting solely in their roles or capacities as part of their employment, in the provision of medical or mental health treatment or counseling; or sexual assault and domestic violence counselors and advocates who work or volunteer on or off campus in sexual assault centers, victim advocacy offices, women’s centers, and health centers and who are acting solely in that role in the provision of counseling or advocacy services.

For personnel issues that do not or do not appear to involve the conduct outlined above, our Department has created resources for you. For issues with your research mentor, your first step is to talk to them directly to try to communicate the issues you are having.

Often mentoring styles, misguided mentoring strategies, etc., once the research mentor is aware of their ineffectiveness with you, can be modified and the relationship is improved. What we learn is effective for one student rarely translates fully to another, and most PIs will highly value an honest, fair, respectful, and professional discussion of what you need and what isn't working for you. Self-advocacy is also a critical skill to hone, and this is the time to grow that skill. There are also skills to learn to be more effectively mentored; a holistic approach is usually best in resolving issues.

If speaking with your mentor is unsuccessful or you feel uncomfortable doing so, you can get help from the SDSU Chemistry Graduate Committee, a group of faculty members that volunteer to serve and represent each division. To launch this confidential request for conflict resolution or mediation for a serious issue related to your research lab/research lab mentor, use this [link](#).

Your issue may also simply be a mismatch with no issues/grievances with your current research mentor. Perhaps you've already worked out your new lab home and your current and future research mentor are on board. Please fill out the same [link](#) so we have record of this and to ensure all the details are resolved.

We take these issues seriously, and we are committed to reaching an effective resolution for all involved. This can range from working with you and your research mentor on specific goals, or exploring options for finding a new lab home. Here is a workflow that will help you decide your appropriate steps:

# V. Resources

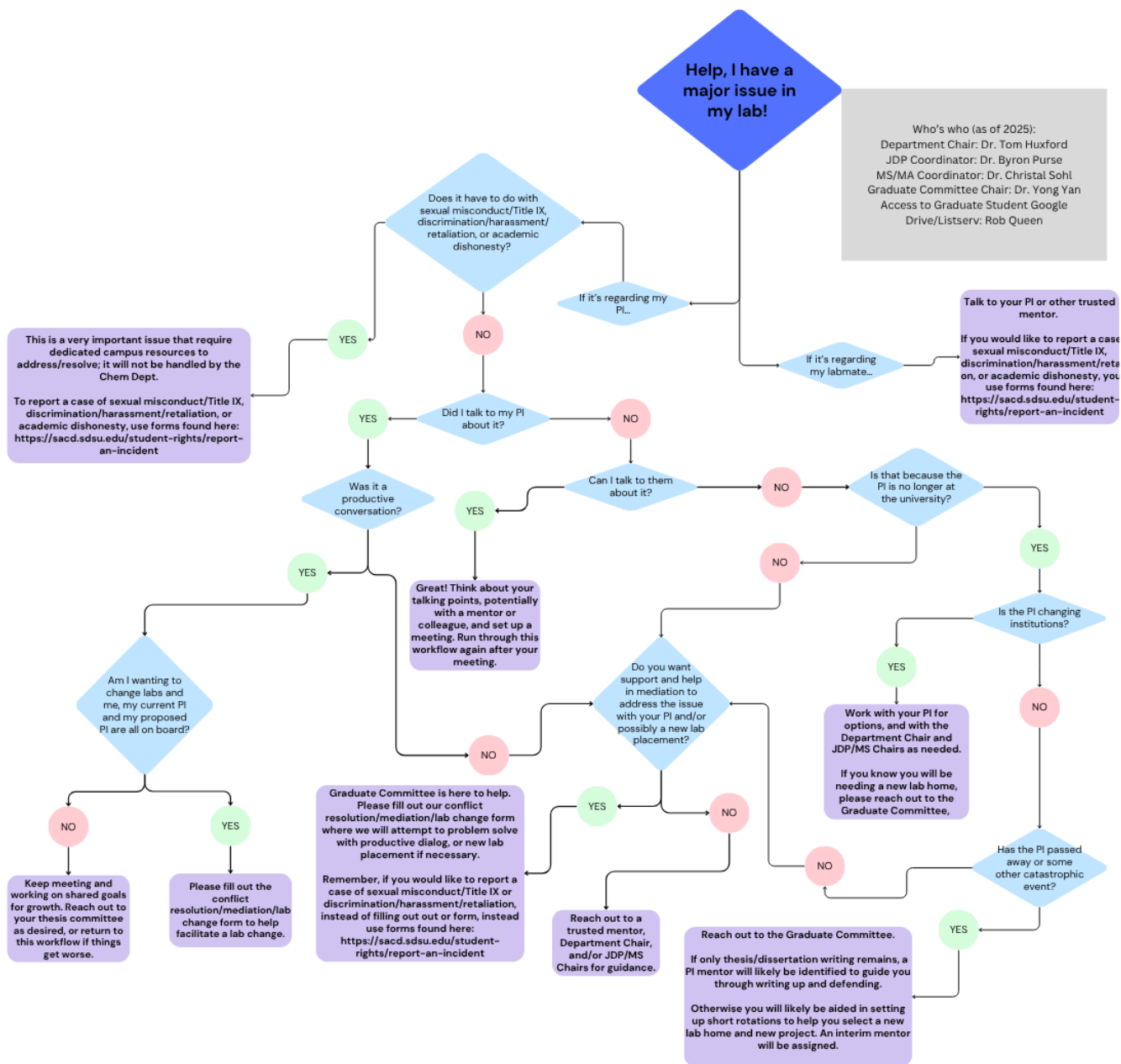
## A. College of Graduate Studies links

[All Things Graduate Life Resources](#)

[Key Deadlines](#) (see both “Registration” deadlines and “Graduation” deadlines)

[Degree Requirements](#)

[E-Form help](#)



[FAQs](#)

[Financial Support](#)

[Employment \(TAs, GAs, ISAs\)](#)

[Graduate Student Experience Program \(GSEP\) explanation with opt-out form link](#)

## **B. Departmental links and resources**

- Current College of Graduate Studies and Department of Chemistry MS/MA Handbooks and Policies are [here](#) in the Chem Grad Student Google Drive (reach out to Rob Queen at [roqueen@sdsu.edu](mailto:roqueen@sdsu.edu) if you do not have access to the Chem Grad Student Google Drive).
- Forms and form guidelines in the [Forms folder](#) in the Chem Grad Student Google Drive
- Program planning [here](#) in the Chem Grad Student Google Drive
- Various resources are housed in this [Resources folder](#) in the Chem Grad Student Google Drive. This includes Funding/Scholarships, Leave (Parental, Medical, etc.), Mediation request/Conflict resolution, and SDSU-specific resources including mental health and wellness, sexual misconduct response and prevention, economic and economic crisis resources, etc.
- Chemistry Grad Students listserv ([chemgrad@sdsu.edu](mailto:chemgrad@sdsu.edu); reach out to Rob Queen at [roqueen@sdsu.edu](mailto:roqueen@sdsu.edu) if you have not been added).
- Chemistry Graduate Student Homeroom in Canvas (reach out to Dr. Christal Sohl at [chem.ms-advisor@sdsu.edu](mailto:chem.ms-advisor@sdsu.edu) if you do not have access)
- MS degree catalog requirements info [here](#)
- MA degree catalog requirements info [here](#)
- Link to [Prof. Sohl's appointment booking](#), please select only MS/MA appointments.
- As a new Graduate student, be sure to work with the front office and your research advisor to ensure key and key card access. To pick up keys, visit the Key Issue office next to Peterson Gym. [Key Issue office hours and location](#).

## **C. Departmental communication**

You will be given two SDSU email addresses, one as a student and the other as a TA. We recommend you use your student account for all research matters. Important SDSU communications will be sent via email, so be sure to check and read all SDSU and departmental communications. You will also be added to the Chemistry Department listserv ([chemgrad@sdsu.edu](mailto:chemgrad@sdsu.edu)), which will also allow you to access our Chem Grad Student Google Drive. This listserv is used to communicate department announcements to all students, including seminars, upcoming events, internships, and job opportunities. Finally, you will be added to the Chemistry MS Program Canvas Homeroom page. This page holds important information about student resources, scholarships, career pathways, and department contacts. Announcements for internships and job opportunities are also posted on Canvas and we recommend checking announcements regularly.

#### D. Department contact info:

Prof. Tom Huxford, Department Chair: [thuxford@sdsu.edu](mailto:thuxford@sdsu.edu)

Prof. Christal Sohl, MS/MA Graduate Advisor: [chem.ms-advisor@sdsu.edu](mailto:chem.ms-advisor@sdsu.edu)

Prof. Byron Purse, JDP Director and Graduate Admissions Coordinator: [bpurse@sdsu.edu](mailto:bpurse@sdsu.edu)

Prof. Regis Komperda, Associate Chair for Curriculum Management: [rkomperda@sdsu.edu](mailto:rkomperda@sdsu.edu)

Rob Queen, Departmental coordinator: [roqueen@sdsu.edu](mailto:roqueen@sdsu.edu)

The Chemistry Graduate Student Association (CGSA): [sdsu.cgsa@gmail.com](mailto:sdsu.cgsa@gmail.com)

For Questions about....	Contact...
Financial Aid and Billing	<a href="#">Cal Coast Student Financial Center</a>
The Graduate Student Health Insurance Program (GSHIP)	Email <a href="mailto:gship@sdsu.edu">gship@sdsu.edu</a> / visit <a href="https://sdsu.edu/gship">sdsu.edu/gship</a>
Scholarships and fellowships facilitated through the College of Graduate Studies	Email <a href="mailto:grad.scholarships@sdsu.edu">grad.scholarships@sdsu.edu</a> / visit <a href="https://grad.sdsu.edu/financial-support">https://grad.sdsu.edu/financial-support</a>
TA assignments	Email Dr. Regis Komperda, Rob Queen, and Dr. Tom Huxford
TA contracts, TA waivers	Email Rob Queen
Questions about unit 11 (TA/GA/ISA) hiring	Email <a href="mailto:grad.employmentspecialist@sdsu.edu">grad.employmentspecialist@sdsu.edu</a> / visit <a href="https://grad.sdsu.edu/current-students/graduate-student-employment">https://grad.sdsu.edu/current-students/graduate-student-employment</a>
Slate: Supplemental Graduate Application questions	Email Dr. Byron Purse
Degree requirements and degree completion	MS/MA students: email Dr. Christal Sohl JDP students: email Dr. Byron Purse

Departmental issues	Email Department Chair Dr. Tom Huxford
All other non-departmental graduate matters	Email <a href="mailto:gra@sdsu.edu">gra@sdsu.edu</a>
Regularly check out <a href="#">Deadlines and due dates</a> on <a href="#">CGS's website</a>	