



Graduate Student Handbook

Last revision: September 2021

Overview of the SJSU Chemistry Graduate Program

Chemistry Department Faculty

Tenured or Tenure-track Faculty: Brook, Cheruzel, Dirlam, Eggers, Esker, Grazioli, Kelly, Miller Conrad, Muller, Okuda, Radlauer, Rascón, Singmaster, Terrill, Van Wyngarden, Wang, and Wolcott.

Graduate Programs Offered

The Department offers graduate work leading to either an MS or an MA degree in Chemistry. The program is designed to give breadth in chemical topics by providing coursework options from five areas. Specialization in analytical, biochemistry, inorganic, organic, or physical chemistry is achieved by selection of coursework and individual thesis or project topics. A total of 30 units is required for either the MS or MA degree.

The purpose of each degree is described below. The degree may be obtained by “Plan A” which requires a formal thesis that must be approved by the Department before submission to Graduate Studies in the Office of Graduate and Undergraduate Programs (GUP).

Master of Science Degree in Chemistry

(Graduate Advisor: Dr. Lionel Cheruzel)

Purpose: This degree is designed for persons who seek greater competency in chemical research, or for those who want an introduction to graduate work before starting a program for the Ph.D. degree. Emphasis is placed upon, but not limited to, application of instrumentation, data acquisition and interpretation, and strategies involved in designing and conducting research in chemistry.

Master of Arts Degree in Chemistry

(Graduate Advisor: Dr. Lionel Cheruzel)

Purpose: This degree is designed for persons who seek to augment and enhance their knowledge of chemistry beyond the Bachelor’s level. It is intended for those who are interested in teaching chemistry at community colleges, high school teachers who are currently certified and have teaching experience, those who are interested in chemical sales, technical librarianship, and scientific writing, or for those who already have a significant amount of research experience. The MA Degree is more course-intensive and not recommended to those who wish to conduct chemical research and have no previous research experience in the private sector.

Application Process

The process is two-fold. The applicant must apply to and be admitted by both San Jose State University and the Chemistry Department. The University and the Chemistry Department have different minimum requirements that the student must fulfill for admission. Check the [Graduate Admissions and Program Evaluations](#) website (GAPE) and the [Chemistry Department](#) website for the most up-to-date instructions.

Admission by the University

Students are admitted to the program by the Graduate Advisor after they have been admitted to the Graduate School by the University. University Requirements (CSU Eligibility Requirements) include a 4-year Bachelor's degree (or equivalent), a minimum 2.5 GPA, and good standing at the last college or university attended. Most foreign students must take the TOEFL exam and obtain a minimum score, as posted on the [Graduate Program Test Requirements](#) webpage.

Admission to the Chemistry Department

The Chemistry Department requires further that the bachelor's degree be in chemistry or an intimately related science (*e.g.*, chemical physics, molecular biology, *etc.*). In all cases, however, incoming students must have had the equivalent of 40 semester units of undergraduate chemistry including at least 10 units of general chemistry, 10 units of organic chemistry, 4 units of analytical chemistry, and 4 units of physical chemistry. If your transcript does not specifically describe the content of the coursework taken, you must also provide official course descriptions. We prefer that the grade point average for the chemistry classes be 3.0 or higher. Further, we also require the general GRE scores and at least two, but preferably three, letters of recommendation. The letters of recommendation must be sent to the Chemistry Department by email. See instructions on the [Chemistry Department](#) website for Prospective Graduate Students.

Admission Status

Admission may be with Graduate Classified standing which means that the student is deemed qualified to enroll in the graduate curriculum. In some cases, students are admitted with Conditionally Classified standing which means that they must complete specified remedial work and/or graduate work with acceptable grades before they can be moved to Classified Status. *Students with Conditionally Classified Status should complete the conditions of their acceptance as early as possible.* Such students may take graduate courses at the same time they are fulfilling the conditions. Remedial work is assigned for one or more of the following reasons: 1) low Chemistry GPA in undergraduate work, 2) insufficient number of undergraduate units in Chemistry, or 3) lack of coursework in particular areas of study. In order to change from Conditionally Classified to Classified Standing a student must 1) fulfill the conditions, and 2) obtain the Graduate Advisor's signature on the Change of Classification form. *Only students in Classified Standing may petition for advancement to graduate candidacy, a requirement for graduation.*

Admission to the MA Program

The same process for admission to the MS program applies to the MA. Applicants must specify that they are applying to the MA program. The applicant should describe in their prepared statement why they are seeking admission to the MA program.

Admission by Special Action

Students who are denied admission by the University may be admitted by the Graduate Advisor by Special Action. Admission in such cases is always with Conditionally Classified standing, and must be approved by the University.

Requirements for a Master's Degree in Chemistry

1. General Program Information

General information about the program is provided in the SJSU catalog and this Handbook. Note that most items are applicable generally to both the MA and the MS degree. Where appropriate, hyperlinks to information posted on the Department website or other University websites are provided in this document.

2. Units

Thirty units of approved coursework are required for the Master's degree. A minimum of 18 units must be in graded coursework. A *maximum* of six units may be transferred into the program from SJSU Continuing Education, another U.S. University, or a combination of the two. Only units for graduate courses from another U.S. University can be transferred and must be approved by Graduate Studies, the Graduate Advisor and the Research Advisor; appropriate forms may be obtained from Graduate Studies. **Starting in the Fall semester of 2020, completion of Chem 100W counts toward the 30-unit degree.** Elective units may be taken in other SJSU Departments, but the student should obtain approval from the Research Advisor and the Graduate Advisor prior to enrollment. Not included in the 30-unit Program of Study are remedial courses, electives taken without prior approval, Chem 184, and excess units in Chem 285, 297/298 or 299.

Selection of courses other than 200-level chemistry courses *must be approved* by the Research Advisor and by the Graduate Advisor prior to enrolling in such courses, as only designated ones can be counted toward the MS or MA degree. Chem 120S and a program-dependent number of units in Chem 285 are also required. Upper division undergraduate courses deemed as remedial for a particular emphasis cannot be used as electives. The University also requires that 18 of the units be graded (A, B, C, *etc.*) coursework; credit/no-credit classes cannot be counted toward the 18 units. This means that at least one of the elective courses must be letter graded.

3. Program for the Chemistry MS Degree

The Program of Study consists of 30.0 units, which must be approved by Graduate Studies. A minimum of 18 units must be letter-graded.

<u>Required Courses</u>		<u>Units/Section</u>	<u>Required Units</u>
Chem 100W*	Writing Workshop	3.0	3
Chem 120S	Chemical Safety†	1.0	1
Chem 200-level	Chemistry Courses	3.0	12
Chem 285	Department Seminar	0.5	2-3
Chem 298	Research†	(variable)	4-10
Chem 299	Thesis†	1.0 or 2.0	2
Other	Approved Electives	(variable)	<u>0-6</u>
			30 total

* Chem 100W must be taken at SJSU. If the student completed Chem 100W as an undergraduate student at SJSU, the course is waived but the units must be replaced with an elective course. See Sec.7 for enrollment requirements for Chem 100W.

† These courses do not receive letter grades (Credit/No Credit).

Lecture Coursework (12 units of 200-level chemistry lecture courses)

- Any combination of course offerings may be used, as categorized by subdiscipline below (see the SJSU Catalog for general course descriptions). *Note:* Chem 270 and 270L are not associated with any specific subdiscipline of chemistry and are repeatable for credit if the topics do not overlap (maximum of 10 units for Chem 270 and 4 units for Chem 270L).

Organic	Biochemistry	Inorganic	Analytical	Physical
210	231	237	250	261
212	232	245	259	262
216	233		277	263
218	234			264
	235			265
	236			268
	237			276

Approved Electives

- Any 200-level chemistry course. *Note:* excess Chem 285, 298 and 299 units are not allowed.
- Any one of the following upper division chemistry courses, upon approval by the Graduate Advisor (courses that are considered remedial for the area of interest will not be approved): Chem 101, 114, 121S, 126, 127, 130A, 130B, 130C, 131A, 131B, 135, 145, 146, 155, 159, 173.
- Upper division and graduate courses from Departments other than Chemistry (courses must be approved by the Graduate Advisor prior to enrollment in such courses).

4. Program for the Chemistry MA Degree

The Program of Study consists of 30.0 units, which must be approved by Graduate Studies. A minimum of 18 units must be letter-graded.

<u>Required Courses</u>	<u>Units/Section</u>	<u>Required Units</u>
Chem 100W* Writing Workshop	3.0	3
Chem 120S Chemical Safety†	1.0	1
Chem 200-level Chemistry Courses	3.0	15
Chem 285 Department Seminar	0.5	2
Chem 297 MA Project†	1-3	3
Chem 299 Thesis†	1-2	2
Other Advanced Chem Lab Coursework	(variable)	2-4
Other Approved Electives	(variable)	<u>0-2</u>
		30 total

* Chem 100W must be taken at SJSU. If the student completed Chem 100W as an undergraduate student at SJSU, the course is waived but the units must be replaced with an elective course. See Sec.7 for enrollment requirements for Chem 100W.

† These courses do not receive letter grades (Credit/No Credit).

Lecture Coursework (15 units of 200-level chemistry lecture courses)

- See table of course offerings in previous section for Chemistry MS Degree.

Advanced Laboratory Coursework

- 2-4 units of advanced laboratory may be selected from the following courses: Chem 114, 131A, 131B, 146, 155, 162L, 270L, and 298 (if switching from MS to MA degree).

Approved Electives

- Any 200-level chemistry lecture course. *Note:* excess Chem 285, 297 and 299 units are not allowed.
- Any one of the following upper division chemistry courses (Requires approval of the Graduate Advisor. Courses that are considered remedial for the area of interest will not be approved): Chem 101, 114, 121S, 126, 127, 130A, 130B, 130C, 131A, 131B, 135, 145, 146, 155, 159, 173.
- Upper division and graduate courses from Departments other than Chemistry (courses must be approved by the Graduate Advisor prior to enrollment in such courses).

5. Academic Standing

The student's first and foremost obligation is to maintain a minimum overall GPA of 3.0. This is required in order to maintain good standing in the program and to receive the degree. If the overall GPA falls below 3.0, a student is placed on academic probation. The student must demonstrate that they are capable of raising their GPA to 3.0 or higher during the next semester in residence. This requires a semester GPA of 3.01 or higher. This can only be accomplished by obtaining grades in letter-graded courses; CR/NC classes do not alter the GPA. Failure to raise the GPA will result in disqualification from the program. Reinstatement requires that the student take six units of upper division chemistry courses (approved in advance by the Graduate Advisor) in one semester, receive a B+ or better grade in each course, and petition the University for reinstatement. These units may not be included as electives in the approved program.

6. Clearance of Conditional Status

Students are expected to complete all conditional requirements as soon as possible after being admitted to the program. These conditions are outlined on the Graduate Standing Form that the student received along with their acceptance letter. After completion of all conditional requirements, the student must notify the Graduate Advisor to obtain a signature on the Change of Classification form (found on the Forms page of the Department and GAPE websites). In the case where extensive remedial coursework is required, choosing a research advisor and beginning Chem 298 or 297 is strongly discouraged until after remedial work is completed.

7. English Competence

All SJSU students are required to demonstrate competency in written English as a requirement for graduation. All graduate students must take the Writing Skill Test (WST) near the beginning of their program (unless they completed this requirement as an undergraduate at SJSU or another CSU campus). A passing grade on the WST enables one to enroll in Chem 100W, the Department's Graduate Writing Assessment Requirement (GWAR). A failing grade on the WST requires that the student take and pass a remedial English course before enrolling in Chem 100W. *All students must complete Chem 100W before filing the Petition for Advancement to Graduate Candidacy.* Link: [WST Information](#).

A student may petition the Graduate Advisor to substitute a writing course from another university for Chem 100W. However, such petitions require a transcript with the course grade, the course syllabus, and a writing sample (a term paper worth at least 30% of grade with instructor feedback). The Graduate Advisor must then forward the petition to the Associate Dean

of Graduate Studies for final approval. One should check the most recent SJSU Catalog under “Graduate Policies and Procedures” for the most recent information on the GVAR.

8. Choosing the Research Advisor

Students are encouraged to interview and to choose a Research Advisor as soon as possible. The Research Advisor should be selected no later than the end of the first semester. Acceptance to any particular laboratory is by mutual agreement between the particular Research Advisor and the student. A student’s first choice is not guaranteed, as limitations in space as well as human and financial resources may dictate availability of openings in any one laboratory. The student is ultimately responsible for finding an MA/MS Advisor among the faculty. A student who is unable to find an advisor will be unable to complete the program. The Department will make all efforts, within reason, to accommodate students in this respect. Research should be started while taking courses (assuming any remedial work is completed).

9. Procedure for MS/MA Advisor Selection

- a) From the list of chemistry faculty, choose those with whom you are interested in doing research. You may choose as many names as you wish, but the minimum number is three.
- b) Make an appointment with each of the faculty on your list for an interview concerning a potential research project. At the end of the interview, have the faculty member sign and date the Research Advisor & Committee Form, available on the Department’s [Forms](#) page.
- c) After completing your interviews, ask a specific advisor for entrance into his/her group. If you obtain his/her consent, inform the other faculty members on your list of the decision. *Note:* faculty are not obligated to accept you or any other graduate student into their lab. Many factors can influence a faculty member’s decision, including available research funding, current lab group size, match of student’s educational background, *etc.*
- d) As soon as the Research Advisor is chosen, the student and the Research Advisor should discuss the choice of two additional faculty to serve on the MA/MS Committee. One faculty member should come from the student’s field of interest (*e.g.*, biochemistry, organic, *etc.*), and the other from any other area within the department. The student must then obtain the consent of each committee member to serve and obtain their signature on the Research Advisor/Committee Form. The cross-disciplinary nature of some projects conducted off campus may warrant the inclusion of the student’s off campus supervisor. In each of these cases, the choice must be approved by both the Research Advisor and Graduate Advisor, and the additional member represents a fourth committee member.
- e) The Research Advisor & Committee Form must also be signed by the Graduate Advisor. This form should be turned in to the Chemistry Department by the student in the first semester or early in the second semester of enrollment. The student and designated Research Advisor should keep a copy of this form before submitting the original to the Chemistry Office.

10. Preliminary Seminar

After the Research Advisor is chosen, the student should start preparing for the Preliminary Seminar. This is primarily a literature seminar based upon the MS research or MA project that the student plans to pursue, and the seminar should be given before the student has completed a significant amount of work on the project. The seminar date, time, and location should be announced to the Chemistry faculty a week before the event by an email from the Research Advisor. The announcement should include an abstract written by the student. The MA/MS Committee (or their designees) must be in attendance at the seminar and will evaluate the

student's performance in terms of "Pass," "Provisional Pass," or "Fail." The Preliminary Seminar should include the proposed research project, the underlying background literature, and the experimental design including proposed techniques, anticipated obstacles, and expected results (*i.e.*, type of data to be obtained). The Preliminary Seminar must be given at least one semester prior to the Final Seminar presentation. For further details, see the "Preliminary Seminar Guidelines and Evaluation Form" on the [Forms](#) page of the Department website.

In the case of a "Provisional Pass," the committee will assign some follow-up work to the student and a deadline for completion of the work. If the work is satisfactorily completed by the deadline, then the committee will sign the form indicating a "Pass." If the deadline is not met, then a "Fail" will be recorded. In the event that a student fails the preliminary seminar, the preliminary seminar may be repeated one time only. If the preliminary seminar requirement is not successfully completed within 4 semesters of the first attempt, the student may be disqualified from the MS/MA program. At the discretion of the research advisor, a candidate who fails the Preliminary Seminar may be prohibited from conducting further laboratory research and from registering for Chem 297/298 units until such time as the student has passed the exam. If the repeated seminar is also deemed to be unacceptable, the student will be referred to the Departmental Graduate Committee for possible disqualification under Title 5 of the California State University Education Code. It is the student's responsibility to ensure that all committee members (or an appropriate proxy) are present at the seminar. The student's Research Advisor will verify that the seminar was presented and should forward the committee's evaluation to the Chemistry Office for filing.

11. Seminar Course Requirements

A minimum of 2 units (four semesters) of Chem 285 are required for the MS degree and exactly 2 units are required for the MA degree. All students are encouraged to continue their participation in the Chem 285 seminar series after meeting their minimum degree requirements, regardless of their registration status. In some cases, students pursuing the MS degree may want to take a total of 3 units of Chem 285 in order to meet the 18-unit requirement of graded coursework.

12. Suppressed Code Registration

All sections of Chem 297, 298 and 299 have suppressed class codes. In order to register for a particular section (course, units, and instructor), the student must ask their Research Advisor for the permit code. The student should let the Research Advisor know in advance if more than one unit of any supervision course is needed since this may require opening a new section of the course. Supervisory course units are proportional to student effort, as set by the Research Advisor. It is the student's responsibility to complete the registration process by the University deadline for the particular semester.

Chem 297/298 Registration

All MA students are required to include three units of Chem 297 (MA Project) on their approved program. All MS students who have selected a Research Advisor are expected to enroll for at least one unit of Chem 298 each semester that they are in residence (Fall and Spring). Continuing students may pursue their Project/Thesis work during the Winter and Summer intersessions without further payment of fees. Completion of an online safety module and quiz is a prerequisite for enrolling in Chem 297/298 and for working in any laboratory as a researcher or TA. Bioinformatics projects may be exempt (ask research advisor). The safety training request

form is found as a link on the Department's webpage. It is recommended that students pursuing the MA/MS degree also enroll and complete Chem 120S as early as possible.

Chemistry 299 Registration

Students who are candidates for the MS/MA degree must have two units of Chem 299 on their approved program. This may be accomplished by enrolling in one two-unit section or two one-unit sections (in two consecutive semesters). Chem 299 may be taken only during the regular semesters (Fall and Spring). The student must fulfill the English Competence requirement before Advancement to Candidacy and before enrolling in Chem 299. *If a student does not complete the thesis during the semester in which they are enrolled in their final unit of Chem 299, the student will receive a grade of NC (No Credit) or RP (Report in Progress) and will be required to continue paying registration fees until the thesis is completed to the satisfaction of the Research Advisor* (see important details under Sec. 16, The Thesis). Continuous enrollment is required until the final thesis is submitted to Graduate Studies.

13. MS/MA Candidacy

Normally, after completing two semesters and a minimum of nine units of 200-level graded coursework in Chemistry, the student may apply for Graduate Candidacy. Prior to this application, the student should have completed the Preliminary Seminar and satisfied the English Competence requirements (see Sec.7). In addition, the student must have Classified standing. The 30-unit Proposed Graduate Degree Program is written by the Graduate Advisor in consultation with the student and describes completed coursework and coursework planned for the future, including the minimum of 18 units of graded coursework. This information is entered on the "Petition for Advancement to Graduate Candidacy" form which must be approved and signed by the student's Research Advisor, returned to the Graduate Advisor for signature, and forwarded to Graduate Studies for final approval. Link: [Candidacy Petition](#) (fillable pdf form).

The student is advised that the Petition for Advancement to Graduate Candidacy must be submitted by the appropriate University deadline to ensure graduation at the end of a particular semester. The deadline is early in the semester prior to that in which the student plans to graduate. *It is the student's responsibility to make sure that the deadline is met and that adequate time is given for the Graduate Advisor to review the document.* The student and the Graduate Advisor are notified in writing by Graduate Studies when the program is approved or denied. Students cannot enroll in Chem 299 (Thesis) or apply for graduation until they are official Candidates for a degree.

Circumstances may arise that require a change in an approved program (*e.g.* the student wishes to substitute a class for one on the approved program). Requests for such changes are made through the Graduate Advisor and must be re-approved by Graduate Studies.

14. GPA Graduation Requirements

In order to graduate, the 3.0 GPA minimum applies to all coursework taken at SJSU since the Bachelor's degree was granted. Courses become invalid after seven years, but the earned grade remains included in the student's GPA. A course that expires and which is on an approved program can be replaced by a course taken more recently, or it can be revalidated after written approval by Graduate Studies and reexamination by the original course instructor. A maximum of ten units may be revalidated in this manner. All revalidation must be pre-approved by the Graduate Advisor. Link: [Request for Revalidation](#) (fillable pdf form).

15. University Deadlines & Applying for Graduation

The Research Advisor and the student should keep in mind that Graduate Studies has several deadlines that must be met in order to graduate in a specific semester. Link: [Candidacy & Graduation Deadlines](#). When a student is ready to graduate, they must submit an “Application for Award of Masters Degree” form with Graduate Studies. Please note that the student must have an approved Petition for Advancement to Graduate Candidacy form on file before applying for graduation, otherwise the application will be denied. Link: [Application for Award of Master’s Degree](#) (fillable pdf form).

There is no fee for the initial application for graduation, but, if a student fails to graduate in their intended semester, they must file a [Graduation Date Change Request](#) for Award of Masters Degree form and pay a fee to the Bursar's Office (currently \$10). The deadline to submit the Graduation Date Change Request form is the same as the dates listed for the submission of the initial graduation application. An online payment option is available on the [GAPE Forms](#) page.

Normally, the coursework requirements are completed and MS/MA candidacy is granted before the Project/Thesis is completed. *Note:* if a student is actively performing research in a given semester, the student must be registered for Chem 297/298 in the corresponding semester, regardless of whether they have completed the required minimum units of Chem 297/298 for their degree program.

16. The Thesis and RP Status

Graduate Studies has specific guidelines and formatting rules for all submitted theses. Students should consult the Graduate Studies website for the most up-to-date information on [Thesis Requirements](#). The Research Advisor may need to read and edit multiple drafts of the thesis before it is submitted to the other MS/MA Committee members for review. The thesis review is an integral part of the Final Oral Exam (see Sec.18 below) and, therefore, a student should be aware of the [Thesis Deadlines](#) when determining the target semester for graduation and when scheduling the Final Oral Exam. The Research Advisor and the MS/MA Committee members must sign the Thesis Committee Approval Form as part of the thesis submission package to Graduate Studies. Link: [Thesis Forms and Documents](#)

If the thesis is not completed and submitted to Graduate Studies in the same semester as enrollment in the last unit of Chem 299, the Research Advisor must withhold credit by assigning a grade of NC (No Credit) or RP (Report in Progress). These grade designations do not affect the student’s GPA, *but failure to obtain credit for Chem 299 obligates the student to re-enroll and pay registration fees in the following semester*. Students receiving a grade of NC in Chem 299 must re-enroll in the subsequent semester and pay regular registration fees.

Students receiving a grade of RP in Chem 299 (RP status) are eligible to register in a 1-unit supervisory course, Chem 1290R, allowing the student to maintain continuous enrollment through Extended Studies Special Sessions. The registration fee is less expensive through Extended Studies, but it is only available to students who (1) received an RP grade in Chem 299, and (2) require no other courses for completion of their degree. The Registrar’s Office will notify eligible students with registration instructions via a MySJSU message. This notification will occur about three weeks into the new semester, following the last date to add courses through regular sessions. Students with RP status may then register online through MySJSU; no permission or add code is needed. Failure to register will result in a hold on graduation until the

unit is retroactively added, and a late fee will be associated with the retroactive action. Link: [RP Policy](#)

Further registration through Extended Studies is required in subsequent semesters until the thesis is submitted to Graduate Studies and credit is given for Chem 299. The Research Advisor must file a Petition for Grade Change form, available from the Department Chair's Office, in order to change the Chem 299 grade from RP to CR. Approval of the thesis by Graduate Studies is required for graduation by Plan A, and the thesis must be delivered by specific dates in order to graduate in a particular semester. A student with RP status will likely need to submit a Graduation Date Change Request form (see Sec.15 above).

Upon notification of final approval, the student must submit their thesis electronically to the ETD administrator, as instructed by Graduate Studies. A digital copy of the thesis is sent to the MLK Library's institutional repository, depending on the conditions set by the student when filling out the SJSU License Agreement form. Each student should consult with their Research Advisor before completing the License Agreement form; in some instances, the Research Advisor may want to place an embargo on publication of the thesis to protect a planned journal article based on the same work.

17. Final Seminar

As a portion of the culminating experience, all MS/MA Candidates are required to present a departmental seminar based on their research or MA project. This seminar is scheduled through the department seminar coordinator for Chem 285. Students who anticipate giving their final seminar must contact the Chem 285 coordinator in the semester that precedes their intended presentation in order to be placed on a "Tentative Chem 285 Speaker List" for the following semester. Once the 285 coordinator is assigned by the Department Chair for the next semester, s/he will obtain the tentative speaker list from the previous coordinator and contact all graduate students on the list. The coordinator will try to accommodate all students on the tentative list prior to inviting other speakers to fill out the seminar slots. *Students who want to give their final seminar but did not place their names on the Tentative Speaker List in the previous semester will be given last priority and may have to schedule their presentation in a different semester.* Scheduling is done in consultation with the Research Advisor, and in accordance with the policies and procedures established by the Graduate Committee. A student may petition the Graduate Committee to request a Final Seminar date outside of the Chem 285 seminar meetings in the case of special or unusual circumstances.

All members of the Research Committee must be in attendance and shall determine whether the presentation was satisfactory or must be repeated at a later date. It is the student's responsibility to ensure that all committee members (or an appropriate proxy) are present at the seminar. The committee's evaluation is recorded on the Final Seminar Report Form which should be submitted to the Chemistry Office for filing. It is the student's responsibility to ensure that his/her seminar is given on the arranged date. If the student must cancel the final thesis seminar, s/he is still responsible for presenting a seminar during that time period. This policy was adopted by the graduate committee (AY93-94) and is as follows: *A student who reserves a time to present a Final Seminar in Chem 285 and is unable to finish the thesis in due time shall be responsible for delivery of an acceptable presentation at the reserved time; the topic shall be chosen with the advice and consent of the student's Advisor and the Chem 285 Coordinator and may be on the thesis work or on a different topic. Such presentation shall not in any way satisfy the normal seminar requirements.*

The final draft of the thesis need not be complete by the final seminar date. However, it is highly recommended that a draft is in progress at the time of the presentation. If the student plans to take their Final Oral Exam on the same day as the Final Seminar, the final draft of the thesis must be submitted to the MS/MA Committee at least two weeks prior to the presentation date. The Committee can require the Candidate to arrange another seminar date if they are given less than two weeks to evaluate the thesis prior to the seminar.

18. Final Oral Exam

As a portion of the culminating experience, all MS/MA candidates are required to pass a Final Oral Exam based on their research or MA project. The final draft of the thesis must be submitted to the MS/MA committee at least two weeks prior to the oral exam date. The committee can require the candidate to arrange another examination date if they are given less than two weeks to evaluate the thesis prior to the exam. The student is responsible for arranging the date of the exam, for reserving an appropriate room on campus, and for ensuring that all committee members are present.

The examination committee consists only of the student's thesis research committee. During the examination period, the student will be queried regarding details of their research, thesis, and any related topic, as deemed pertinent by the committee members. Typically, the committee will provide the candidate with constructive feedback on the thesis and may request changes before signing the Thesis Project Committee Approval Form. The Research Advisor informs the Chemistry Office of the committee's evaluation through submission of the Final Oral Exam Report Form, found on the Department's [Forms](#) page.

19. Departmental Verification of Culminating Experience

Before Graduate Studies can authorize the granting of a degree, the "Departmental Verification of Culminating Experience" must be submitted. This memo is generated by the Chemistry Office after all paperwork is received. The memo is signed by the Graduate Advisor and forwarded to Graduate Studies who will then check to see that all of the University graduation requirements have been met, such as completion of the approved program, satisfactory academic standing, application for graduation, *etc.* In order for the Graduate Advisor to sign and submit the Departmental Verification of Culminating Experience memo, the candidate must notify the Chemistry Office when all items on the [MS or MA Program Checklist](#) are complete, including:

- a) Thesis Clearance. The student must submit a copy of the "SJSU Thesis/Creative Project Committee Approval Form" with signatures to the Chemistry Office. This serves to verify that the thesis has been accepted by the department.
- b) Seminar and Oral Exam Clearance. The Final Seminar and Final Oral Exam Report Forms should be in the student's file in the Chemistry Office.
- c) Service Center Clearance. The student must check out of the laboratory and reconcile all accounts with the Service Center. A clearance form will then be signed by a senior representative of the Service Center which the student must forward to the Chemistry Office. This document may be printed from the Department's [Forms](#) page. All students must obtain a clearance, even if the research was performed off campus or if the student had no Service Center account.
- d) Key Return Form. According to policy (Executive Committee, Spring 1993), the student must submit a validated Key Return Form. This document may be printed from the Department's [Forms](#) page. The keys and keyless card must then be returned

to the University Lock Shop. The Lock Shop will verify on the form that all items have been returned.

20. Student Files

The files of all active students are maintained by the Chemistry Department Office. These files are available for inspection by the faculty. It is wise for a student to retain copies of all signed forms in case a document is lost or misfiled.

21. Leave of Absence

The University allows a student only one semester of non-registration while completing all course requirements for the program. Two consecutive semesters without registration will result in the student being dropped by the University. In this case, the student is required to re-apply for admission. The University does allow a leave of absence for particular circumstances (*e.g.*, health issue, military). Link: [Leave of Absence Petition](#) (fillable pdf form).

22. Readmission Requirements

The student must re-apply to both the University and the Department. Providing that the student left the program in good standing, the following must accompany the student's application to the Department:

- 1) Documentation of professional activities during the leave
 - a) Transcripts of any educational work attempted after leaving the program.
 - b) Reference letter from employer documenting activities.
 - c) A personal statement documenting activities.
- 2) Memo from Research Advisor.
 - a) If the student had a Research Advisor prior to leaving the program, memo from the Research Advisor agreeing to sponsor the student.

23. Grievance Procedure

A student can request arbitration of unresolved faculty/student disputes. The Graduate Committee will conduct such arbitration only after referral by the Graduate Advisor.

Appendix

SJSU Chemistry Faculty, Degrees & Research Interests

(click on name for link to biography or research website, if available)

[Brook, David, Ph.D.](#), University of Colorado, Boulder. (Organic and Inorganic Chemistry. Synthesis and coordination chemistry of stable free radicals, magnetochemistry, self assembly and supramolecular chemistry, molecular devices). Office: SCI 166, Ph#: 408-924-4994

[Cheruzel, Lionel, Ph.D.](#), University of Louisville. (Inorganic and Bio-inorganic Chemistry. Development of hybrid P450 enzymes, photocatalytic chemistry, development of microspherical polymers). Office: DH 281, Ph#: 408-924-5283

[Dirlam, Philip, Ph.D.](#), University of Arizona. (Organic Chemistry). Office: DH 516, Ph#: 408-924-4998

[Eggers, Daryl K., Ph.D.](#), University of California, San Francisco. (Biochemistry, Biophysical Chemistry. Effects of crowding and solvation on protein folding, CD spectroscopy, biocalorimetry, microscale thermophoresis). Office: DH 604, Ph#: 408-924-4960

[Esker, Nicholas, Ph.D.](#), University of California, Berkeley. (Radiochemistry). Office: DH 501, Ph#: 408-924-4950

[Grazioli, Gianmarc, Ph.D.](#), University of California, Irvine. (Computational Chemistry. Development of computer simulation methods and AI-driven automated discovery methods for chemistry and biophysics). Office DH 417, Ph#: 408-924-4968

[Kelly, Resa M., Ph.D.](#), University of Northern Colorado. (Chemical Education. How animations of microscopic chemistry concepts affect student learning and influence the correction and creation of misconceptions). Office: DH 418, Ph#: 408-924-4940

[Miller Conrad, Laura, Ph.D.](#), University of California, Berkeley. (Chemical Biology, Organic Chemistry, Biochemistry. Quorum sensing, blocking of virulence factors). Office: DH 608, Ph#: 408-924-4957

[Muller, Gilles, Ph.D.](#), University of Lausanne, Switzerland. (Inorganic Chemistry and Chemical Biology). Office DH 412A, Ph#: 408-924-2632

[Okuda, Roy K., Ph.D.](#), University of Hawaii. (Organic and Bio-organic Chemistry. Marine natural products and enzyme applications). Office: DH 009A, Ph#: 408-924-2525

[Radlauer, Madalyn, Ph.D.](#), California Institute of Technology. (Inorganic Chemistry. Polymer synthesis for organometallic catalysis). Office: DH 517, Ph#: 408-924-5482

[Rascón, Alberto, Ph.D.](#), University of Arizona. (Biochemistry, Molecular Biology. Expression, characterization, and inhibition of mosquito proteases). Office: DH 612, Ph#: 408-924-4969

[Singmaster, Karen A., Ph.D.](#), University of California, Berkeley. (Physical Chemistry. Photochemical reactions in cryogenic matrices and on surfaces). Office: DH 016, Ph#: 408-924-4980

[Terrill, Roger Ph.D.](#), University of North Carolina at Chapel Hill. (Analytical Chemistry. Surface, interfacial, and thin film chemistry). Office: DH 004B, Ph#: 408-924-4970

[Wang, Ningkun, Ph.D.](#), University of Michigan. (Biochemistry and Chemical Biology. Protein structure, protein-protein interactions, allosteric regulation). Office: DH 607, Ph#: 408-924-4955

[Van Wyngarden, Annalise, Ph.D.](#), University of California, Berkeley. (Physical Chemistry. Formation and optical properties of organic coatings on atmospheric aerosols, chemical transformations and photochemistry in aerosols). Office: DH 002, Ph#: 408-924-5282

[Wolcott, Abraham, Ph.D.](#), University of California, Santa Cruz. (Physical Chemistry. Application of nanotechnology and nanodiamonds in neurobiology). Office: DH 005A, Ph#: 408-924-5449