Table of Contents

1. INTRODUCTION .................................................................................................................. 2-4
   1.1. Purpose of the handbook ................................................................................................. 2
   1.2. Channel of communication .............................................................................................. 2
   1.3. Graduate programs in Chemistry and Biochemistry ....................................................... 2
   1.4. Course / unit requirements .............................................................................................. 2
   1.5. Outline of the Master’s degree program ......................................................................... 4

2. PROFESSIONAL CONDUCT ................................................................................................. 5
   2.1. Misconduct in science ....................................................................................................... 5
   2.2. Use of university and departmental facilities ................................................................. 5
   2.3. Instructor-student conduct .............................................................................................. 5
   2.4. The workplace ................................................................................................................ 5

3. TEACHING .......................................................................................................................... 5-6
   3.1. Financial support ............................................................................................................ 5
   3.2. Teaching responsibilities and evaluations ...................................................................... 6

4. CONDITIONALLY CLASSIFIED STATUS .......................................................................... 6-10
   4.1. Proficiency exams or course work for MS Biochemistry students seeking classified status................................................................. 6
   4.2. Proficiency exams or course work for MS Chemistry students seeking classified status.................................................................................................................. 8
   4.3. 12-unit rule ..................................................................................................................... 9
   4.4. Course work ................................................................................................................... 9
   4.5. Course and program advisement .................................................................................... 10
   4.6. Selection of a Thesis Advisor ....................................................................................... 10
   4.7. Continuation in a lab where undergraduate research was performed ....................... 10

5. CLASSIFIED STATUS .......................................................................................................... 11-12
   5.1. Literature seminar .......................................................................................................... 11
   5.2. Course work – units required before and after classified status ................................ 11
   5.3. Thesis work and committee - CHEM 696/698 ............................................................. 12

6. ADVANCEMENT TO CANDIDACY AND GRADUATION ...................................................... 12-13
   6.1. Research progress presentation to committee .............................................................. 12
   6.2. Thesis preparation ......................................................................................................... 12
   6.3. Thesis seminar and defense ........................................................................................ 13
   6.4. Final thesis submission ............................................................................................... 13

7. APPENDICIES ...................................................................................................................... 14-17
   7.1. M.S Chemistry / Biochemistry progress checklist ....................................................... 14
   7.2. Graduate student enrollment agreement for 300-level courses .................................. 15
   7.3. Sample “Request for Classification” form (university form OGS 2) .............................. 16
   7.4. Selection of Thesis Advisor (departmental form CHEM 1) ........................................ 17
1. INTRODUCTION

1.1. Purpose of the Handbook

This handbook is intended to be a reference which can be used to answer various questions about the Chemistry and Biochemistry graduate program. In essence this handbook is also our “rule book,” and we distribute it to all students and faculty to be sure that everyone is operating by the same rules. The intent is to describe the programs in some detail and to explain the rationale behind them, to delineate the responsibilities of students, faculty committees, faculty members and the administration of the Department, to promote consistency in procedures and standards, and to provide a basis for communication between students, the graduate coordinator, and the Chemistry and Biochemistry faculty. The procedural aspects and bureaucratic forms (see appendices) may appear to be a bother, which they certainly are, but they will prevent difficulties which arise from poor record-keeping and if unattended can present even larger problems.

In addition to the Departmental guidelines outlined in this document, the academic regulations and procedures of the University are described in the guidelines published by the Office of Graduate Studies, Research, and International Programs (http://www.csun.edu/research-graduate-studies/graduate-policies). These should be followed by all graduate students.

Also, please note that the Departmental degree requirements may be modified to suit individual situations upon petition to the Graduate Coordinator and approval by the Chemistry and Biochemistry graduate committee.

1.2. Channel of Communication

a. All communications from the students and faculty to the Department administration concerning this handbook should be addressed to the Graduate Coordinator.

b. All course and program advisement must be done in consultation with the Graduate Coordinator. The Thesis Advisor is not permitted to release registration holds for students.

c. All communications from the students concerning teaching assistantship, tuition waiver, and office space should be addressed to the Department Chair.

d. Any conflict between the graduate student and the Thesis Advisor should be brought to the attention of the Department Chair.

1.3. Graduate Programs in Chemistry and Biochemistry

The Chemistry and Biochemistry Department currently offers Master of Science Degrees in Chemistry and Biochemistry. The Master of Science in Chemistry allows specialization in the areas of organic, inorganic, physical and analytical chemistry. It is primarily intended for students desiring research-oriented careers in the chemical industry, community college teaching or entry into a Ph.D. program in traditional areas of Chemistry. The Master of Science in Biochemistry prepares students for research-oriented careers in the biotechnology industry, teaching or entry into a Ph.D. program in Biochemistry or related fields.

1.4. Course / Unit Requirements

Both programs require 30 units of graduate study, including the literature seminar, research project and a thesis. The details of such requirements for both programs are as follows (see next page).
## COURSE/UNIT REQUIREMENTS

### M.S. IN CHEMISTRY

**For the Degree:**

1. A minimum of 30 units of graduate work including a thesis to be completed within five years of attaining classified status. At least 21 units must be completed in 500- or 600-level Chemistry courses at CSUN.

   **a. Required Courses (6 – 12 units)**
   - CHEM 691 Literature seminar 1
   - CHEM 692 Thesis seminar 1
   - CHEM 696 Directed Grad. Res. 3-7
   - CHEM 698 Thesis 1-3

   **b. Electives (18 – 24 units)**
   These should be selected with the approval of the Graduate Coordinator from 400- and 500- level courses, and must include at least one course which has a laboratory component. A maximum of 9 units of 400- level courses may be applied toward the 30 units required for the degree.

2. Oral defense of the thesis.

3. Formal approval by the Thesis Committee

### M.S. IN BIOCHEMISTRY

**For the Degree:**

1. A minimum of 30 units of graduate work including a thesis to be completed within five years of attaining classified status. At least 21 units must be completed in 500- or 600-level Chemistry or Biochemistry CSUN courses. Up to 6 units may be earned in areas outside of Chemistry with the approval of the Graduate Coordinator.

   **a. Required Courses (12 – 18 units)**
   - 500-level Biochemistry courses 6
   - CHEM 691 Literature seminar 1
   - CHEM 692 Thesis Seminar 1
   - CHEM 696 Directed Grad. Res. 3-7
   - CHEM 698 Thesis 1-3

   **b. Electives (12 – 18 units)**
   These should be selected with the approval of the Graduate Coordinator from 400- and 500- level Chemistry and Biochemistry or Biology courses (max 6 units), and must include at least one course that has a laboratory component. A maximum of 9 units of 400- level courses may be applied toward the 30 units required for the degree.

2. Oral defense of the thesis.

3. Formal approval by the Thesis Committee
1.5. Outline of the Master’s Degree Program
All credits earned by unclassified, post-baccalaureate students are subject to evaluation for acceptance for graduate credits in our Department. Of the 30 units required for the degree, at least 21 must be in residence at CSUN. An outline describing various stages of progress toward the MS degree is given below and more details can be found in sections 4 and 5 of the handbook.

1. **Conditionally Classified:**

   This is the status at which most students enter our program. “Conditional” means that there are several conditions that must be satisfied before becoming a “genuine” graduate student (Classified). Those conditions are given below.

   a. **Proficiencies:**
      A student must demonstrate satisfactory facility with organic, physical, analytical, inorganic and biochemistry, by either passing the proficiency exams or taking a course in an appropriate area as arranged with the Graduate Coordinator (for more details, see sections 4.1 and 4.2).

   b. **GRE:**
      If a student’s undergraduate grade point average is less than 3.0, then that student must take the general GRE exam and get a score in the 50th percentile or higher on at least one section.

   c. **Upper Division Writing Proficiency Exam (UDWPE):**
      If an entering student did not receive his/her bachelor’s degree from CSUN, then he/she must pass the UDWPE at this campus. Details on this examination are available at the Undergraduate Studies webpage (http://www.csun.edu/undergraduate-studies/UDWPE). You should sign up for this exam as soon as possible.

   d. **Selection of Thesis Advisor:**
      Every student will need to choose a (full time) faculty member with whom that student will do his/her thesis research. The student should inform the Graduate Coordinator of his/her decision after a Thesis Advisor has been selected (see section 4.6 for more details).

2. **Classified:**
   After all the conditions noted above are satisfied, a student is advanced to the classified status. Please note that a student must be classified and have selected a research advisor before he/she is allowed to register for any 600-level course (CHEM 691, 692, 696 or 698).

3. **Advanced to Candidacy and Graduation:**
   Every student will need to give a presentation to his/her Thesis Committee about a year before he/she expects to finish (see section 6.1 for further details). The student should also regularly monitor his/her online Degree Progress Report (DPR) to ensure the degree requirements are on track and the courses being taken are correctly credited toward the degree. Finally, an application for graduation and a diploma fee must be filed the semester prior to the one in which the degree is to be granted. This document can be obtained through the Forms page on the Graduate Studies website (http://www.csun.edu/research-graduate-studies/graduate-studies-forms).
2. PROFESSIONAL CONDUCT

All graduate students are expected to act as responsible citizens of the University and the Chemistry and Biochemistry Department. This responsibility is expected in the conduct of research, teaching, and the use of University facilities.

2.1. Misconduct in Science
The National Academy of Sciences has defined misconduct in science as “fabrication, falsification, or plagiarism in proposing, performing or reporting research. Misconduct in science does not include errors of judgment, errors in the recording, selection, or analysis of data, differences in opinions involving the interpretation of data, or misconduct unrelated to the research process.”

Any direct culpable involvement by a graduate student in any act of academic dishonesty or misconduct defined above will irrevocably impair the trust that exists between the faculty and the graduate student, and can lead to further investigation of such misconduct and appropriate actions by the Department and the University.

2.2. Use of University and Departmental Facilities
University and Departmental resources are not for personal use. These resources include departmental instrumentation, chemicals and other consumables, telephones, copying equipment, and electronic services such as computers, computer accounts and online services.

2.3. Instructor-Student Conduct
Since many graduate students are both instructors and students in the University they have a particularly unique responsibility with respect to proper professional conduct. The University has various guidelines and policies regarding instructor-student relationships. Copies of these guidelines are available from appropriate campus offices. Such guidelines are summarized as follows:

*In evaluating and assigning grades for credit, instructors act on behalf of the University faculty and with its authority. Personal relationships with students compromise the objectivity and integrity with which an instructor discharges this responsibility and are out of place and prohibited. Examples include romantic, sexual, or financial relationships.*

2.4. The Workplace
All graduate students have the right to a workplace free of harassment (sexual, racial, etc.). Violations of this principle can be reported to the Chair or the Graduate Coordinator, and appropriate actions will be taken.

3. TEACHING

3.1. Financial Support
Financial support in the form of teaching assistantship is available to qualified candidates. Decisions on teaching assistantships are made by the Chair of the Chemistry and Biochemistry Department in consultation with the Graduate Coordinator. Every teaching assistant is required to take CHEM 500 the first time the course is offered during a student’s tenure as a graduate student at CSUN. In the first year, performance in the proficiency exams and the course work are normally the criteria used to
award teaching assistantships. In later years, the student’s performance as a Teaching Assistant (based on student evaluations of the previous teaching assignments and evaluation by the course coordinator), along with performance in course work and literature seminar are considered. Since the source of funds for this support is not under the control of the Department, the award of teaching assistantships is subject to the availability of funds. If available, support may be extended to any student, at the discretion of the Chair. Additionally, a few tuition awards are sometimes available through the Office of Graduate Studies. Decisions on these tuition awards are made by the Department Chair in consultation with the Graduate Coordinator.

It is the Department policy that it will normally support graduate students with a teaching assistantship for NO MORE THAN THREE years after they are enrolled in the graduate program.

3.2. Teaching Responsibilities and Evaluations
Teaching is an important professional responsibility and all Teaching Assistants (TAs) are expected to take this assignment seriously. The responsibilities include:

a. The TA must know the concepts and course material well. To achieve this purpose, the instructor may require the TA to attend lectures, do experiments, and read additional information.
b. The TA must treat students with uniform courtesy regardless of gender, race or ethnicity.
c. The TA must be reliable: 100% attendance is expected in class and staff meetings. If, under extreme circumstances, the TA is unable to teach on a particular day, it is the TA’s responsibility to find a qualified substitute (who has experience teaching that specific course).
d. The TA must be familiar with and adhere to the course standards.
e. The TA must grade consistently, fairly, promptly, and adhere to the course standards.
f. Lab TAs are responsible for the safety of their students and must enforce safety standards set by the Chemistry and Biochemistry Department.

4. CONDITIONALLY CLASSIFIED STATUS

Most of our graduate students enter our graduate program as a conditionally classified student. It means that there are several conditions which must be satisfied before a student becomes a classified or a “genuine” graduate student. These conditions include satisfying the requirements of the proficiency exams, taking GRE (if required), Upper Division Writing Proficiency Exams, and selecting a Thesis Advisor.

4.1. Proficiency Exams or Course Work for MS Biochemistry Students Seeking Classified Status

a. Entering graduate students who have obtained their Bachelor’s degree from a university other than CSUN must take proficiency exams to demonstrate competency in undergraduate preparation. The students in the MS Biochemistry program must demonstrate proficiency in biochemistry and organic chemistry, as well as (one of) physical, analytical or inorganic chemistry either through satisfactory scores on the Departmental proficiency exams or through course work in these areas. Any entering student may defer taking one or all of the proficiency exams if he/she agrees to enroll in the respective preparatory undergraduate courses as recommended by the Graduate Coordinator. Considering that a one-semester course in organic, physical, analytical chemistry or biochemistry does not cover all the material which will be tested in the proficiency exam, it is the responsibility of the student to study on his/her own in preparation for the proficiency exam (if the student decides to take the exam).

b. Entering graduate students who have obtained their Bachelor of Science degree in Chemistry or
Biochemistry from CSUN, if obtained within a year of entering the graduate program, are required to take the proficiency exams only if the grades in CHEM 334 and CHEM 461/462 (average grade from both courses) or CHEM 464, as well as (one of) CHEM 351 or 352, CHEM 401 or CHEM 422 are less than B in the respective areas. See details about exam requirements in section 4.1.a above.

c. A MS Biochemistry student who enters the graduate program and fails the organic chemistry proficiency exam must take CHEM 334. A grade of B or better in CHEM 334 will satisfy this (organic) proficiency requirement. Please note that graduate students are not permitted to formally enroll in any 300-level courses if they are supported by financial aid or by the university. A student may enter into an audit agreement with a professor, however, for purposes of demonstrating proficiency in that subject (if the professor is willing to participate). See Appendix for the “Graduate student enrollment agreement for 300-level courses” form.

d. A MS Biochemistry student who enters the graduate program in the Fall semester and fails the biochemistry proficiency exam must take CHEM 461 or 464. If that student gets a grade of B or better in CHEM 461 or 464, then that student satisfies the biochemistry requirement. A student who enters the M.S. Biochemistry program in the Spring semester, and fails the biochemistry proficiency exam must take 464, and a grade of B or better in CHEM 464 will satisfy the biochemistry proficiency requirement.

e. A student who enters the graduate program in the Fall semester and fails the physical chemistry proficiency exam will be strongly advised to take CHEM 351. A grade of B or better in CHEM 351 will satisfy the physical chemistry proficiency requirement. Otherwise, the student will be asked to take and pass the proficiency exam when it is offered next time or take CHEM 352 and get a grade of B or better to satisfy the proficiency requirement in physical chemistry. A student who enters the graduate program in the Spring semester and fails the physical chemistry proficiency exam will be strongly advised to take CHEM 352 and will adhere to similar criteria for course grade and proficiency exams as described above. Please note that graduate students are not permitted to formally enroll in any 300-level courses if they are supported by financial aid or by the university. A student may enter into an audit agreement with a professor, however, for purposes of demonstrating proficiency in that subject (if the professor is willing to participate). See Appendix for the “Graduate student enrollment agreement for 300-level courses” form.

f. A student who enters the graduate program in the Fall or Spring semester and fails the inorganic chemistry proficiency exam will be advised to take CHEM 401 in the Spring semester. If that student gets a grade of B or better in CHEM 401, then that student satisfies the inorganic chemistry proficiency requirement.

g. A student who enters the graduate program in the Fall or Spring semester and fails the analytical chemistry proficiency exam will be advised to take CHEM 422. A grade of B or better in CHEM 422 will satisfy this (analytical) proficiency requirement.

h. A student who fails any proficiency exam twice will be disqualified from the program. A student who fails the proficiency exam once and then takes the associated course will only be permitted to take that course twice in an effort to obtain a grade of B of higher; if he/she is unable to achieve the required grade after the second attempt in the course, then he/she will be disqualified from the program.
i. There is a two-year time limit during which a student must become classified, or else he/she will be disqualified from the program. This time limit applies only if the 12-unit rule (see section 4.3) has not already been exceeded.

4.2. Proficiency Exams or Course Work for MS Chemistry Students Seeking Classified Status

a. Entering graduate students who have obtained their Bachelor’s degree from a university other than CSUN must take proficiency exams to demonstrate competency in undergraduate preparation. The students in the MS Chemistry program must demonstrate proficiency in any three of organic, physical, analytical, biochemistry and inorganic chemistry either through satisfactory scores on the Departmental proficiency exams or through course work in these areas. One of those subjects should include the subdiscipline in which the student intends to perform research. Any entering student may defer taking one or all of the proficiency exams if he/she agrees to enroll in the respective preparatory undergraduate courses as recommended by the Graduate Coordinator. Considering that a one-semester course in organic, physical, analytical chemistry or biochemistry does not cover all the material which will be tested in the proficiency exam, it is the responsibility of the student to study on his/her own in preparation for the proficiency exam (if the student decides to take the exam).

b. Entering graduate students who have obtained their Bachelor of Science degree in Chemistry or Biochemistry from CSUN, if obtained within a year from entering the graduate program, are required to take the proficiency exams only if the grades in (any three of) CHEM 334, CHEM 351 or 352, CHEM 401, CHEM 422, and CHEM 461/462 (average grade from both courses) or CHEM 464 are less than B in the respective areas. See details about exam requirements in section 4.2.a above.

c. A MS Chemistry student who enters the graduate program and fails the organic chemistry proficiency exam will be advised to take CHEM 334. A grade of B or better in CHEM 334 will satisfy this (organic) proficiency requirement. Please note that graduate students are not permitted to formally enroll in any 300-level courses if they are supported by financial aid or by the university. A student may enter into an audit agreement with a professor, however, for purposes of demonstrating proficiency in that subject (if the professor is willing to participate). See Appendix for the “Graduate student enrollment agreement for 300-level courses” form.

d. A MS Chemistry student who enters the graduate program in the Fall or Spring semester and fails the biochemistry proficiency exam will be advised to take CHEM 464. If that student gets a grade of B or better in 464, then that student satisfies the biochemistry proficiency requirement.

e. A student who enters the graduate program in the Fall semester and fails the physical chemistry proficiency exam will be strongly advised to take CHEM 351. A grade of B or better in CHEM 351 will satisfy the physical chemistry proficiency requirement. Otherwise, the student will be asked to take and pass the proficiency exam when it is offered next time or take CHEM 352 and get a grade of B or better to satisfy the proficiency requirement in physical chemistry. A student who enters the graduate program in the Spring semester and fails the physical chemistry proficiency exam will be strongly advised to take CHEM 352 and will adhere to similar criteria for course grade and proficiency exams as described above. Please note that graduate students are not permitted to formally enroll in any 300-level courses if they are supported by financial aid or by the university. A student may enter into an audit agreement with a professor, however, for purposes of demonstrating proficiency in that subject (if the professor
is willing to participate). See Appendix for the “Graduate student enrollment agreement for 300-level courses” form.

f. A student who enters the graduate program in the Fall or Spring semester and fails the inorganic chemistry proficiency exam will be advised to take CHEM 401 in the Spring semester. If that student gets a grade of B or better in CHEM 401, then that student satisfies the inorganic chemistry proficiency requirement.

g. A student who enters the graduate program in the Fall or Spring semester and fails the analytical chemistry proficiency exam will be advised to take CHEM 422. A grade of B or better in CHEM 422 will satisfy this (analytical) proficiency requirement.

h. A student who fails any proficiency exam twice will be disqualified from the program. A student who fails the proficiency exam in any subject once and then takes the associated course will only be permitted to take that course twice in an effort to obtain a grade of B or higher; if he/she is unable to achieve the required grade after the second attempt in the course, then he/she will be disqualified from the program.

i. There is a two-year time limit during which a student must become classified, or he/she will be disqualified from the program. This time limit applies only if the 12-unit rule (see section 4.3) has not already been exceeded.

4.3. 12-Unit Rule

It is required for graduate students to achieve full classified standing prior to completing more than 12 units of graduate coursework on the program of study. No more than 12 units of work taken prior to attaining fully classified status will be applied to a master’s degree program. Graduate Studies has indicated that students that are beyond those 12 units will be blocked from enrolling in courses starting in Spring 2018.

4.4. Course Work

All credit earned by unclassified, post-baccalaureate students is subject to evaluation for acceptance for graduate credit in our program. Of the 30 units required for the degree, at least 21 must be earned in residence at CSUN. A graduate student in the department is generally considered to be full-time if he/she enrolls in 6 units per semester (which may include a combination of coursework and research/thesis units), with the understanding that most time outside of coursework or teaching will be spent in the research lab, whether or not the student is enrolled in research units during that semester.

Elective courses should be selected with the approval of the Graduate Coordinator from 400- and 500-level courses and must include at least one course which has a laboratory component. A maximum of nine units of 400-level courses may be applied toward the 30 units required for the degree.

Students must maintain a minimum 3.0 GPA (B average) in the formal program and the cumulative grade point average once admitted to the program. No grade below a “C” can be counted in the formal program. Any grade of “C-” or below in the formal program must be repeated after an approved course repeat form has been filed (obtain triplicate form from department office). If the student does not receive “C” or better on the second attempt, the student will be disqualified from the program. A maximum of 6 units in the formal program may be repeated at the graduate level. The repeat grade will appear on the
transcript.

4.5. Course and Program Advisement

All MS Chemistry and MS Biochemistry program students will have a registration hold on their account before each new semester. After discussing your planned courses with your Thesis Advisor, make an appointment for advisement with the Graduate Coordinator. Only the Graduate Coordinator can release your registration hold; please plan accordingly. Note that your Thesis Advisor is frequently not fully aware of all the rules for the graduate program. Your advisement session with the Graduate coordinator must therefore be considered the final word on advisement for that semester, as it will take into account both your Thesis Advisor’s suggestions and the graduate program requirements. This advisement is an opportunity to get both course and program advisement, so you are encouraged to take advantage of your appointment to plan out multiple semesters and ask lots of questions.

4.6. Selection of Thesis Advisor

A student’s Thesis Advisor is the faculty member with whom the student chooses to work for his/her thesis research. New students are asked to inform themselves about the research interests of those faculty members whose research work appears to be of interest to the student. It can be accomplished by visiting their web pages, requesting reprints from them, and by visiting those professors. Selection of a Thesis Advisor can be completed as early as the end of the student’s first semester at CSUN but no later than the end of the second semester of enrollment in the graduate program. The student must interview at least three faculty members and select a Thesis Advisor after those interviews (even if the student has already worked with a faculty member as an undergraduate and plans to continue in that lab). When a student has selected a faculty member as the Thesis Advisor, and the faculty member has agreed to accept that student, the CHEM1 form should be submitted to the departmental office after obtaining signatures from the interviewed faculty and the faculty member selected as the Thesis Advisor.

At the time a faculty member is selected as the Thesis Advisor, the student should have an in-depth discussion with that faculty member about the nature and scope of the research project, the research work to be performed that will constitute the Master’s thesis research, and other expectations the Advisor has for the student.

The student and Thesis Advisor normally work together very closely, and each has a vital interest in the progress of their collaboration. It is not surprising, however, that in a small fraction of cases, a difference of opinion or divergent changes of interest develop, and the parties agree to disagree, resulting in the student’s choice of a new Thesis Advisor. Such cases, however, tend to lengthen the time it takes to graduate.

4.7. Continuation in a Lab Where Undergraduate Research Was Performed

In some cases incoming graduate students intend to continue performing research in a lab in the Department of Chemistry and Biochemistry at CSUN where they did undergraduate research (although please note carefully section 4.6 (above) for details on choosing a Thesis Advisor). It is important for both the student and thesis advisor to understand that while their graduate project may be a continuation of their undergraduate research project, none of the data obtained as an undergraduate can be included in the thesis. Additionally, it should be clear that the quantity and quality of work performed as a graduate student should stand alone as a complete thesis project.
5. CLASSIFIED STATUS

Once a student has satisfied the conditions noted in section 4.1 or 4.2, he/she is advanced to “Classified Status.” Pick up the “Request for Classification” form (OGS 2) from the Department Office and consult with the Graduate Coordinator about filling in this form. As a classified graduate student, you will now be working simultaneously on finishing your course work, your literature seminar, and your thesis research in order to make progress toward graduation. Please note that sections 4.3 – 4.7 still apply after classification.

5.1. Literature Seminar

A student should fulfill the requirement of literature seminar (CHEM 691) no later than one semester after achieving classified status. The literature seminar should be based primarily on current literature, and should be significantly different from the chosen thesis topic. The student should discuss the seminar topic with the Thesis Advisor and Seminar Coordinator (or with the Graduate Coordinator if no Thesis Advisor was selected at that time) and seek his/her approval of the topic. While preparing for this seminar, the student should continuously have discussions and seek guidance from the Thesis Advisor and/or the Seminar Coordinator. The scheduling of the seminar should be made with the Seminar Coordinator for that semester but only after the Thesis Advisor has given approval that the student is ready to present a seminar to the Department.

The literature seminar should be scheduled for the semester immediately following classification. A sign-up for seminar dates is generally made available to students during the summer for fall seminars or late fall for spring seminars. It is the responsibility of the student to ensure they obtain a seminar date.

An abstract of the seminar, which should be no more than one page in length and contain a title, a summary of the seminar presentation and a list of pertinent references, should be given to the Seminar Coordinator at least one week before the seminar so that it can be distributed to the faculty before the scheduled date.

The seminar should be limited enough in scope so that major portions of the presentation are backed by hard facts, experimental observations, clear explanation of the results and their discussion. It should be presented like an oral review article, in which multiple different sources are discussed and the student contributes their own perspectives and evaluation of the articles. While presenting the literature seminar, the student is expected to demonstrate a critical understanding and mastery of the subject matter. The grade in the seminar will be based on the student’s performance in (i) organization, (ii) use of visual aids, (iii) presentation, (iv) understanding of chemical/biochemical concepts, and (v) handling of audience questions. The evaluation will be made by the faculty present at the seminar. The final grade will be assigned by the Seminar Coordinator and relayed to the student along with a summary of faculty comments. Students should ask the Seminar Coordinator for the scoring rubric as part of their advance preparation for the seminar.

5.2. Course Work – Units Required Before and After Classified Status

A student must be classified before he/she is allowed to register for 600-level courses (CHEM 691, 692, 696 or 698). A graduate student may enroll in CHEM 599 (up to three units) for one semester only, and can only do so before they are classified. Unclassified graduate students should not be doing research in areas in which they did not pass their proficiency exams.
5.3. Thesis Work and Committee – CHEM 696/698

a. Soon after a student has attained the classified status and has selected a Thesis Advisor, he/she should select two other faculty members to serve on his/her Thesis Committee, following agreement between the student and the Thesis Advisor on the composition of the committee. Participation on a student’s thesis committee is at the discretion of those additional faculty members, and as such a student should have a backup choice in case their first choice declines. One of the two members selected for the committee has to be from the Chemistry and Biochemistry Department. Although the Thesis Advisor will act as the student’s principal advisor, the other two faculty will also be available for guidance or advice for the duration of the work. At this point the student will also need to select a “working title” (if they have not already done so) for the research project, complete and submit the Thesis/Graduate Project Planning Form via the Electronic Thesis and Dissertation website (https://www.metalab.csun.edu/etd).

b. A maximum of seven units of CHEM 696 (Directed Graduate Research) is allowed. Additionally, a maximum of three units of CHEM 698 (Thesis) is allowed. Student can enroll for all three units of CHEM 698 in one semester alone; however, no more than two different enrollments in CHEM 698 can be used to earn three units credit in CHEM 698, and the thesis must be completed and submitted within 2 years of the first enrollment in CHEM 698.

6. ADVANCEMENT TO CANDIDACY AND GRADUATION

A student is advanced to candidacy when all degree requirements listed in the Degree Progress Report (DPR), aside from the thesis, have been completed. An application for the Master’s degree along with the diploma fee (http://www.csun.edu/research-graduate-studies/graduate-studies-forms) should be filed with Admissions and Records during the semester before the degree is granted.

6.1. Research Progress Presentation to Committee

Approximately one year before the student expects to finish his/her degree, a meeting should be held between the student and the Thesis Committee to examine the student’s progress toward the degree. The student should prepare a presentation that describes progress made, challenges met, and plans for what must still be completed. At that time the Thesis Committee will evaluate the student’s accomplishments, and will decide what additional experimental work is needed before the student is ready to write the thesis. If necessary, this meeting may be repeated over several semesters.

6.2. Thesis Preparation

When a student’s Thesis Advisor (with input from the Thesis Committee) agrees that the student has accomplished enough work and the data collected are sufficient to write a Master’s thesis, the student should start writing the thesis describing the research work and results. While writing the thesis, the student should have frequent discussions with the Thesis Advisor both on the organization and the content of the thesis.

The thesis must be prepared in accordance with the guidelines set by the Office of Graduate Studies (http://www.csun.edu/research-graduate-studies/thesisdissertation-guidelines). Students should consult that office while preparing the thesis, as there are several deadlines associated with first and
final drafts.

A student will prepare a word-processed well-edited draft and submit it to his/her Thesis Advisor for examination and revision. This draft will be written in an accepted journal-format style with results, tables, diagrams, graphs, etc., included as appropriate. It must also adhere to the formatting guidelines defined by the university. After incorporating the corrections/suggestions made by the Thesis Advisor (several iterations will be necessary), the near final draft must be given to the Thesis Committee at least two weeks prior to the thesis seminar (and defense). In addition, this near-final version must be placed in the Conference Room in the Department Office at least one week before the defense of the thesis. All Chemistry and Biochemistry faculty will then have the opportunity to examine the thesis before the thesis seminar (and defense).

6.3. Thesis Seminar and Defense

The Chemistry and Biochemistry Department requires, as part of the procedure by which a thesis is approved, a formal oral defense of the thesis by the student. It is done in the form of a seminar describing the results of the student’s thesis work after the project is completed. If the thesis defense is carried out during the regular school year, the seminar must be scheduled through the Seminar Coordinator (see similar guidelines for submission of abstract, etc, described in section 5.1). If the thesis defense is carried out in the summer, it is incumbent upon the student to work with his/her Thesis Committee and the departmental office to schedule a date and time for the seminar. The thesis seminar should be announced to the Department faculty at least a week before the scheduled date. After the seminar, the Thesis Committee may have a private meeting with the student to discuss their evaluation of the thesis, and necessary corrections to be made.

6.4. Final Thesis Submission

After the corrections are made, and the Thesis Committee’s concerns (if any) are satisfied, the student will obtain the online approval from faculty in addition to the physical signatures of the Thesis Committee members on the signature page printed on proper thesis paper. The final thesis is then submitted electronically to the Office of Graduate Studies (https://www.metalab.csun.edu/etd). Before performing the submission, however, it is critically important for the student to discuss with his/her Thesis Advisor whether or not the thesis should be placed under “embargo”, and if so, for how long. A Thesis Advisor might want the contents of the thesis embargoed for a period of time in order to allow for publication of the results before it is made available globally online.

One printed, bound copy must be sent to the Chemistry and Biochemistry Department, in addition to a copy for the Thesis Advisor (if they would like one).

CONGRATULATIONS ON COMPLETING YOUR M.S. STUDIES AT CSUN!
**Progress check list for MS in Chemistry or Biochemistry**

### 1. Achieving classified status

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission as a Conditionally Classified student</td>
<td></td>
</tr>
<tr>
<td>GRE (required only if undergraduate GPA &lt;3.0; score in &gt;50th percentile on at least one section)</td>
<td></td>
</tr>
<tr>
<td>Proficiencies satisfied, either by examination or by course work (indicate semester completed)</td>
<td>(note: MS Chemistry must complete any three, MS Biochemistry must complete biochemistry, organic and one other chemistry)</td>
</tr>
<tr>
<td>Analytical</td>
<td></td>
</tr>
<tr>
<td>Biochemistry</td>
<td></td>
</tr>
<tr>
<td>Inorganic</td>
<td></td>
</tr>
<tr>
<td>Organic</td>
<td></td>
</tr>
<tr>
<td>Physical</td>
<td></td>
</tr>
<tr>
<td>Complete Upper Division Writing Proficiency Exam (UDWPE), if received Bachelor’s outside CSUN</td>
<td></td>
</tr>
<tr>
<td>Choose Thesis Advisor and reach an agreement on a research project (use form CHEM1, give to departmental office)</td>
<td></td>
</tr>
<tr>
<td>Complete “Request for Classification” (OGS2) form, get Graduate Coordinator signature, then give to departmental office (they will forward to Graduate Studies)</td>
<td></td>
</tr>
<tr>
<td>Receive official notification that you have been Classified from the Office of Graduate Studies</td>
<td></td>
</tr>
</tbody>
</table>

### 2. After classified status is achieved

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Thesis Committee</td>
<td></td>
</tr>
<tr>
<td>Initiate thesis paperwork via the Electronic Thesis &amp; Dissertation system (<a href="http://www.metalab.csun.edu/etd">www.metalab.csun.edu/etd</a>)</td>
<td></td>
</tr>
<tr>
<td>Complete formal course work</td>
<td></td>
</tr>
<tr>
<td>Elective courses: a total of at least 18 units of approved 400 or 500-level courses. For MS Biochemistry degree, this must include at least 6 units of 500-level biochemistry courses and may include up to 6 units of biology courses. Note: for both degrees, a maximum of 9 units of 400-level courses may be applied to the unit total for the degree.</td>
<td></td>
</tr>
<tr>
<td>400- or 500-level laboratory class</td>
<td></td>
</tr>
<tr>
<td>CHEM 691 (Literature Seminar in semester after Classification)</td>
<td></td>
</tr>
<tr>
<td>Meet with Thesis Committee (at least once) approximately one year before expected MS completion date to present research progress</td>
<td></td>
</tr>
<tr>
<td>CHEM 696 (Directed Graduate Research – maximum 7 units)</td>
<td></td>
</tr>
<tr>
<td>CHEM 698 (Thesis – maximum 3 units in no more than two semesters)</td>
<td></td>
</tr>
<tr>
<td>CHEM 692 (Thesis Seminar)</td>
<td></td>
</tr>
</tbody>
</table>

### 3. For graduation

<table>
<thead>
<tr>
<th>Task</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check DPR to ensure that all of your course / unit requirements have been met</td>
<td></td>
</tr>
<tr>
<td>Check DPR to ensure there are no remaining incomplete (I) or report in progress (RP) grades</td>
<td></td>
</tr>
<tr>
<td>Complete application for graduation and pay diploma fee (one semester before finishing)</td>
<td></td>
</tr>
<tr>
<td><strong>Preparation and completion of thesis</strong></td>
<td></td>
</tr>
<tr>
<td>Write your thesis and work closely with Thesis Advisor during editing process</td>
<td></td>
</tr>
<tr>
<td>Give well-edited, near-final drafts to Thesis Committee to read at least 2 weeks prior to defense</td>
<td></td>
</tr>
<tr>
<td>Place a copy of the thesis in dept conference room at least one week before thesis seminar</td>
<td></td>
</tr>
<tr>
<td>Determine deadline for submission of first and final thesis drafts and submit to Graduate Studies office before those deadlines</td>
<td></td>
</tr>
<tr>
<td>Arrange for one bound copy to be sent to Chemistry Department and order additional copies as needed (for your Thesis Advisor, parents, etc)</td>
<td></td>
</tr>
</tbody>
</table>
Graduate student enrollment agreement for 300-level courses
Department of Chemistry & Biochemistry, CSU Northridge

Student: please complete this form (including instructor signature) and give to the Graduate Coordinator NO LATER THAN the end of the third week of the semester in which this course is being taken.

Student name: ________________________________  Student ID#: __________________

Course (please circle one):  CHEM 334  Semester: __________________________
   CHEM 351
   CHEM 352

Instructor: ________________________________  Course ticket #: __________________

**Graduate student contract:** I, the undersigned, agree to attend this section of ______________________ (course name), and complete the same assignments / exams as students formally enrolled in this course, with the understanding that I am doing so for subject proficiency purposes, as a component of my graduate classification requirements. I understand that a final grade of B or higher will indicate proficiency in this subject. If I receive lower than a B, I will have to re-take the course or take the equivalent ACS exam, as long as I am in compliance with the maximum number of attempts outlined in the graduate handbook.

_________________________________________________  __________________________________
Graduate student signature  Date

**Instructor contract:** I, the undersigned, allow this graduate student to fully audit the course. I will provide the student access to the Canvas course page and will grade all assignments / exams in the same way as students who are formally enrolled in this course. A final grade for the course will be provided to the Graduate Coordinator at the end of the semester, to be used in evaluating the student for classification purposes.

_________________________________________________  __________________________________
Instructor signature  Date

*************************************************************************************
Internal use – to be completed by the Graduate Coordinator

Final course grade: _________
Sample of OGS2 document – obtain original triplicate form from the departmental office

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE
Office of Graduate Studies, Graduate Evaluation Services

REQUEST FOR CLASSIFICATION
Master’s Students

Student Name: __________________________ ID #: ______________________
Address: ________________________________
Department: __________________ Date: ________

Below are the conditions for classification as stated on the student’s Evaluation of Graduate Application for Admission or Change of Objective. Please attach a copy of the Admissions 1295 form.

1. Semester formally admitted to program Date Completed: ________
   (mo/yr)
2. GRE or MAT (if required; U.GPA= ___) (attach GRE/MAT) Date Completed: ________
   (mo/yr)
3. Upper Division Writing Proficiency Exam Date Completed: ________
   (mo/yr)
4. Bachelor’s Degree Date Completed: ________
   (mo/yr)
Other: ____________________________________________ Date Completed: ________
   (mo/yr)

I have reviewed the above student’s record and recommend fully Classified Status.
I have also verified and indicated the dates the above conditions were completed.

SIGNATURE: ____________________________ Date: ________________
(Graduate Coordinator)
(Graduate Evaluation Services Use Only-Mail Drop 8222)

STUDENT FORMALLY CLASSIFIED __________________________
(Semester)

STUDENT PLEASE NOTE: To advance to Approved Candidacy Status, you MUST FILE A FORMAL
MASTER’S PROGRAM through your Department. See your Department Graduate Coordinator regarding
this matter.

____RETURNED WITHOUT ACTION (Please resubmit when the following matters have been clarified):

__________________________________________________________________________

__________________________________________________________________________

(Graduate Evaluation Services) (Date)

White: Office of Graduate Studies
Yellow: Student
Pink: Department

OGS Rev. 8/12
Selection of Thesis Advisor  Form CHEM 1

Department of Chemistry
California State University, Northridge

From: ___________________________  Date: ___________________________

To: Graduate Coordinator:

After interviewing the following three faculty members, I have selected Dr. __________________ as my research advisor, and he/she has agreed to be my mentor for my thesis research.

Signature of Thesis Advisor: __________________________________________

__________________________________________
(Print name)

Signatures of faculty members interviewed:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________