Biochemistry Ph.D. Program Yearly Planner

Revised Aug. 2019

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Biochemistry Ph.D. program Year 1 (Sept. 1 – Aug. 31)

Critical Ac	ctivities
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 Coursework: During the first year, students are expected to complete Biochemistry Please indicate that you have received a passing grade (B- or better) in each course: BCHM 5771 Advance Biochemistry I (5 credits): 	
BCHM 5776 Scientific Ethics in Research (1 credit):	
Research: During the first year, you are expected to perform four-ten week rotation laboratories. List the PIs with whom you rotated during this year:	s through differen
BCHM 6901 – 903 Rotation 1:	_(Fall - 3 credits)
BCHM 6901 – 903 Rotation 2:	
See Biochemistry Summary Checklist, page 3-5	
3. Joining a laboratory to perform your dissertation research. You MUST have joined a May 31 to ensure your continued funding by the program and start your Ph.D. thesis represented that I have joined is: Advisor:	, ,
Two semesters of teaching must have been satisfactorily completed during the first courses and instructors were: Fall:	year. The
Spring:	_
4. Examinations: All students must take a written comprehensive examination at the edo not pass, you will be required to retake the exam in December of your second year Pass or No Pass:	

From the Biochemistry Graduate School Rules

All Biochemistry Ph.D. students are required to take the written **Preliminary Examination** at the begining the first semester of their second year in the graduate program, generally administered on the Friday of the week prior to the beginning of the fall semester. If a student is not scored as "satisfactory" on the exam, they may be encouraged to take classes in the Fall of their second year to help make up for deficiencies and must take the written exam again by the end of the first semester of their second year (no later than Dec. 20).

The written examination will be composed by two members of the faculty of the Department of Biochemistry, chosen by the Chair of the Department of Biochemistry, and are referred to as the "Preliminary Examination Committee". These faculty shall collaborate to write an examination that tests students mastery of basic concepts in biochemistry, chemistry and biology with an emphasis on quantitative skills. A list of topics that will serve as a guideline for the content to be included on the examination shall be issued to the students by the examination committee no later than six months in advance of the examination along with a set of learning goals for mastery of the examination topics.

Prior to the examination, the Preliminary Examination Committee shall compose an answer key and a rubric as to how the examination will be scored. The examination will be graded according 5 to the scoring rubric and the committee will determine whether each student has performed "Satisfactory" or "Unsatisfactory". The cutoff between the two ratings shall be determined by the Committee. The identity of each student shall not be known to the Committee until final ratings have been assigned and submitted to the Graduate Director.

The results of the examination shall be given to the students no later than one week after the examination was administered. Each student has a right to compare the grading of their examination to the answer key and scoring rubric developed for that examination by the Committee. While the examination itself will be made available to all students, the answer key and scoring rubric will remain confidential and viewable to only the students who took the examination and shall not be copied in any fashion.

The Graduate Director is responsible for the overall administration of the process and will certify that each student has satisfied the examination requirements as stated above. If a student does not rate "Satisfactory" on the examination after two attempts, the Department will recommend either that the student be placed within the Master's Program resulting in a terminal degree of a Master's of Science in Biochemistry (Section V) or dismissed from the Biochemistry Graduate Program. Passing the Preliminary Examination is a prerequisite for the Comprehensive Examination and advancement to Ph.D. candidacy.

The Preliminary Examination will remain in the student's folder and be available for the orals committee. The Comprehensive committee can use this exam to help in their decision to determine if the student is capable of Ph.D. caliber work.

Date of completion: _	
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If you have NOT fulfilled any of the above, please attach a short written statement explaining as to why. This must be approved by the Graduate Director.

Other activities:

- 1. Did you apply for a training grant? List which and dates:
- 2. Did you attend Departmental/Departmental seminars? What fraction did you attend?
- 3. Did you attend Supergroups? Which ones and what fraction of the time did you attend?
- 4. Did you attend the annual Biochemistry Department retreat?
- 5. Did you give an oral or poster presentation of your work? List where/when.
- 6. Were you an author on a published article? If so, give the citation:
- 7. Did you perform any service to the department or the University? If so, list the activities:

Biochemistry Summary Checklist:
Course Requirements
FIRST YEAR FALL SEMESTER Core Course: Advanced Biochemistry I (BCHM-5771 - 5 credit hours) Core Course: Scientific Ethics in Research (BCHM-5776 -1 credit hours) Biochemistry Research Rotation (BCHM-6901 - 3 credits)
FIRST YEAR SPRING SEMESTER Core Course: Advanced Biochemistry II (BCHM-5781 -5 credit hours) Biochemistry Research Rotation (BCHM-6901 - 4 credits) If domestic student, apply for residency: http://www.colorado.edu/registrar/state-tuition
SECOND YEAR FALL SEMESTER Elective Course: Your Choice-check with advisor or grad program director (3 or more credit hours)
Biochemistry Research Lab Course (BCHM-6901-XXX - 3 credits)
SECOND YEAR SPRING SEMESTER Elective Course: Your Choice check with advisor or grad program director (3 or more credit hours)
Biochemistry Research Lab Course (BCHM-6901-XXX - 3 credits)
THIRD THROUGH SIXTH YEARS FALL AND SPRING SEMESTERS DISSERTATION RESEARCH (BCHM-8991-XXX - 5 credits)- Finish up any elective coursework.
FIRST YEAR Four 8-week research rotations MAY OF 1 ST YEAR Choose Research Advisor AUGUST BEFORE 2 ND YEAR Written Comprehensive Exam DECEMBER OF 2 ND YEAR Re-Take Written Comprehensive Exam if not passed in August SECOND YEAR Before the end of the spring term 2 nd year – Complete Oral Comprehensive Exam EACH YEAR —Beginning 3 rd year Annual committee meetings form your thesis committee BEFORE GRADUATION Complete 30 hours of dissertation research, 15 hours course work and successfully defend your thesis.
Activity Requirements FIRST YEAR

EACH YEAR Attend Biochemistry Seminar Series	Other Seminars of Interest
BEFORE GRADUATION Outreach (optional) Add	ditional Teaching (optional)
☐ Internship (optional) ☐ Applied for Training Grant/Fel	lowship (optional) Oral Presentation
(optional) Department Services (optional) Publicat	tions (please list)

Name: **Biochemistry PhD Program Planning Form** Credits Years-Term Course Instructor(s) Grade Year 1-Fall BCHM-5771 5 Year 1-Fall 1 BCHM-5776 Year 1-Fall BCHM-6901-903 3 Batey Year 1-Spring BCHM-5781 5 BCHM-6901-903 4 Year 1-Spring Batey *Year 2-Fall BCHM-6901 3 (Your faculty advisor's section *Year 2-Fall Elective 3 BCHM-6901-XXX 3 (Your faculty advisor's section *Year 2-Spring 3 *Year 2-Spring Elective **Year 3 - Fall **BCHM 8991-XXX** 5 (Your faculty advisor's section **Year 3 - Spring **BCHM 8991-XXX** 5 (Your faculty advisor's section **Year 4 - Fall 5 (Your faculty advisor's section BCHM 8991-XXX **Year 4— Spring **BCHM 8991-XXX** 5 (Your faculty advisor's section **Year 5 - Fall **BCHM 8991-XXX** 5 (Your faculty advisor's section **Year 5- Spring **BCHM 8991-XXX** 5 (Your faculty advisor's section **Year 6- Fall **BCHM 8991-XXX** 5 (Your faculty advisor's section 5 **Year 6 - Spring (Your faculty advisor's section **BCHM 8991-XXX** ***Transferred coursework ***Transferred coursework Additional Courses Additional Courses **Total Hours**

^{*}For Year 2 – register for no more than 6 credits each semester (fall / spring)

- **Must be registered for 6 credit hours in the fall and spring terms to be considered a full time student. Must be registered as full-time student in the term you defend your dissertation.
- ***Up to 10 credit hours of graduate level, formal coursework may be transferred from another school subject to demonstrated proficiency in the subject(s) and written approval by the Biochemistry Graduate Committee. Forms for this purpose can be obtained from the graduate administrator.

Rotation Labs:		<u> </u>
Teaching (courses/term)		
Written Comp Exam Date:	Pass:	
Written Comp Exam-Re-Take (if needed) Date:		
Oral Comp Exam Date:	Pass:	

Biochemistry Ph.D. program Year 2 (Sept. 1 – Aug. 31)

Critical Activities

1. Coursework: during the second year students are expected to complete two 3-credit courses that comprise lectures and examinations. Journal club, literature review and seminar courses do not count towards this requirement. Further, this course must be related in some fashion to the Biochemistry discipline or directly related to your thesis research. Ask the graduate director (Rob Batey) if you have any questions regarding whether a specific course qualifies.

The courses taken were:
Course 1:
Course 2:
2. Research: In the fall and spring semesters, students are expected to enroll in 3 credits of "Research Credit, BCHM 6901-XXX", where XXX is specific to your lab section and thesis advisor. See the Graduate Program Manager, Pamela Williamson, for the correct numbers before you enroll. Fall:
Spring:
3. Examinations: If you did not pass the written examination in August, you are required to take it a second time in December of your second year. You must pass this exam to continue in good standing with the program.
Date of passage of written exam: You are further required to take an oral examination in the spring semester of your second year and must pass this exam prior to Advancement to Ph.D. candidacy.
Date of passage of oral exam:

From the Biochemistry Graduate School Rules

The Comprehensive Examination is an oral examination based upon, but not limited to, a written dissertation research proposal. To advance to Ph.D. candidacy, the student must demonstrate proficiency in the examination.

A.3.a. Composition of the Examining Board.

The examining board, in accordance with Graduate School rules, shall be composed of five members appointed by the Graduate Director and approved by the Dean of the Graduate School (Section 6, p. 17, 2018 ed. of the Graduate School Rules). One member will be the student's dissertation advisor. The second member will be the Graduate Director or in the case the student's dissertation advisor is the Graduate Director the Department Chair. The student's dissertation advisor, while a member of the examination board, may not participate directly in the administration of the oral examination.

The other three members will comprise the examination committee who directly administer the oral examination. The examination committee shall be selected by the Graduate Director in consultation with the student's dissertation advisor. These members shall be from the Department of Biochemistry; additional members can be assigned if outside expertise is merited.

A.3.b. Timeframe of the Comprehensive Examination.

Students must complete the oral comprehensive examination no later than the end of their fourth semester in the Biochemistry Ph.D. program. Deferral of the examination beyond the end of the fourth semester requires permission from the Graduate Director.

Students are responsible for arranging the examination date and place with their committee and should notify the Graduate Program Administrator at least one month prior to the scheduled date.

A.3.c. Dissertation Research Proposal.

One month prior to the date on which the comprehensive examination is administered, the student must submit a written overview of their thesis research plan to the Comprehensive Examination Committee and the external panel member. The format of the overview will be: Specific Aims, Significance and Background, Preliminary Results (not required) and Research Plan and should be modeled after an NIH F31 predoctoral fellowship proposal. The document must be no more than five single-spaced pages of text formatted on pages with 0.5 inch margins and Arial 11 point font; figures and references can be presented on additional pages and do not count against the text total length. This plan will outline clearly the direction of the student's thesis, provide the committee with some advanced idea of the thesis research area, and describe promising research results (if any). Two weeks prior to the examination date, the members of the examination panel shall provide the student feedback on their proposal that will serve as a starting point for the oral examination.

A.3.d. Composition of the Comprehensive Examination.

The oral examination will include, but not exclusive to, questions relating to the student's research plan and general topics covered by the Preliminary Examination. Students are expected to demonstrate a clear understanding of their thesis research, a fundamental knowledge in biochemistry and either biology or chemistry, and the ability to think creatively. Students are strongly advised to spend time reviewing material from biochemistry, biology and chemistry courses they have taken as undergraduates and graduates since this material is often the subject of questioning during the examination.

A.3.e. Determination of Examination Outcome.

The Comprehensive Examination panel shall determine whether the student is capable of Ph.D. degree work or not based upon the oral examination. By the beginning of the semester of the examination, the Comprehensive Examination Committee shall make available a list of criteria that the examination panel will use to evaluate the student's performance and a general scoring scheme for what is considered to be satisfactory or unsatisfactory performance. The decision of each of the three panel members in the presentation meeting is independent; there does not have to be a unanimous decision. Each member rates the exam as one of two possible outcomes:

SATISFACTORY: The student's performance on the examination was Ph.D. caliber as reflected by mastery of a broad field of knowledge and mastery of their research plan as judged by each committee member.

UNSATISFACTORY: The student's performance on the examination was not Ph.D. caliber.

To pass the Comprehensive Examination, the Candidate must receive "SATISFACTORY" ratings from two of the three members of the examining panel in the presentation meeting. The student shall be notified within no more than one week of the exam as to the outcome of the examination and provide written feedback regarding the student's performance.

If the student receives two or more "UNSATISFACTORY" votes by the committee, the committee may place a condition that the student come back before the examination panel no later than the end of the

semester in which the first Comprehensive Examination was given. The chair of the examination panel shall write a letter to the student and their dissertation advisor describing the rationale for the unsatisfactory rating and what the student must do to meet the condition for achieving a satisfactory rating. This letter shall be given to the student no later than one week after the examination. If a student does not fulfill the condition by the date specified by the committee, the examination will be considered "UNSATISFACTORY" the Department shall recommend either that the student be placed within the Master's Program resulting in a terminal degree of a Master's of Science in Biochemistry (Section V) or dismissed from the Biochemistry Graduate Program.

The two other members of the examination board shall also evaluate the student's ability to perform Ph.D. caliber work. The dissertation advisor will assess whether the student is rated as "SATISFACTORY" or "UNSATISFACTORY" independently from the examination committee. The Graduate Director, or in certain cases the Chair of the Department, will rate the student as "SATISFACTORY" or "UNSATISFACTORY".

Recommendations for advancement to Ph.D. candidacy shall be forwarded to the Graduate School by the end of each student's second year in the program. If a student receives a majority of "SATISFACTORY" ratings, then they are considered advanced to Ph.D. candidacy.

If a student does not receive a majority of "SATISFACTORY" ratings, they will be given a second chance the following semester in accordance with Graduate School policy. If students fail the 2nd attempt, the Department will recommend either that the student be placed within the Master's Program resulting in a terminal degree of a Master's of Science in Biochemistry (Section V) or dismissed from the Biochemistry Graduate Program.

Other activities:

- 1. Did you apply for a training grant? List which and dates:
- 2. Did you attend Departmental/Departmental seminars? What fraction did you attend?
- 3. Did you attend Supergroups? Which ones and what fraction of the time did you attend?
- 4. Did you attend the annual Biochemistry Department retreat?
- 5. Did you give an oral or poster presentation of your work? List where/when.
- 6. Were you an author on a published article? If so, give the citation:
- 7. Did you perform any service to the department or the University? If so, list the activities:

Biochemistry Ph.D. program Year 3 (Sept. 1 – Aug. 31)

Critical Activities

1. Coursework: If you did NOT complete your required coursework in your second year, then you must do so in your third year. Journal club, literature review and seminar courses do not count towards this requirement. Further, this course must be related in some fashion to the Biochemistry discipline or directly related to your thesis research. Ask the graduate director (Rob Batey) if you have any questions regarding whether a specific course qualifies.

The courses (numbers and dates) taken were: Course 1:
Course 2:
Upon completion of your coursework, you should qualify to advance to Ph.D. candidacy. As soon as these requirements are fulfilled, please submit the paperwork to the Graduate Program Manager, Pamela Williamson, to ensure that this happens.
2. Research: In the fall and spring semesters, students are expected to enroll in 5 credits per semester of Research, BCHM 8991-XXX. See the Graduate Program Administrator for the correct numbers before you enroll.
Fall:
Spring:
Note that if you have not yet advanced to Ph.D. candidacy, then you need to enroll in six "Research Credits, BCHM 6901-XXX". If you have questions about the number of Research Credits to take,

contact the Graduate Program Manager, Pamela Williamson, before you enroll.

3. Annual committee meeting. Every student MUST have annual thesis committee meeting during the academic year period (Sept. 1 – Aug. 15). If you do not have your annual committee meeting, you may

3. Annual committee meeting. Every student MUST have annual thesis committee meeting during the academic year period (Sept. 1 – Aug. 15). If you do not have your annual committee meeting, you may not enroll for Research in the following fall semester, resulting in your loss of standing with the program (requiring that you re-apply to the program and re-take your written and/or oral examination at the discretion of the Graduate Director). Annual Committee Meeting form at the end of Year 3 section.

Committee Meeting Requirements (from Biochemistry Graduate Program Rules)

During the course of the Ph.D. thesis work following advancement to candidacy status, students will arrange annual meetings with a thesis advisory committee composed of their research advisor and at least two other faculty in the Department of Biochemistry. Additional members of the committee may come from outside the Department if needed to provide specific additional expertise to the panel.

The purpose of these advisory meetings is to ensure the student is making adequate progress on a suitable Ph.D. thesis project. The final annual meeting should be planned to be about 1 year from the anticipated end of the thesis work. For this meeting, the advisory committee will be expanded to 5 faculty members: the thesis advisor, three biochemistry faculty and one faculty member from another department. This committee will become the examination committee that evaluates the results of a completed research program submitted as a thesis for the final examination as described above.

All students are required to have a thesis committee meeting once per academic year, no later than Aug. 15 prior to the start of the new academic year. An extension of one month may be granted with the

permission of the Graduate Director. Students who fail to have an annual committee meeting can be administratively withdrawn from dissertation research, resulting in a discontinuity in their graduate studies, requiring re-admission to the Graduate Program.

One week prior to the date of the committee meeting, the student **is required to** submit to each committee member a two page summary of (1) the research performed during the prior year and (2) proposed research plan for the following year. This summary should be submitted in the format of (1) Arial 11 point font, (2) 1/2 inch margins on all sides and (3) written in a paragraph structure with correct grammar and syntax (e.g., no bullet pointed lists or outlines). It is recommended that each of the two components of the summary (past and future work) be approximately one page; figures may be placed on additional supplementary pages and do not count against the two pages of text.

At the end of the meeting, please fill in the annual committee meeting form (separate from this form) and have your committee sign.

The Annual Committee meeting form and a copy of the two-page summary must be turned into the Graduate Program Manager, Pamela Williamson, along with a copy of the two-page summary of work in order to be credited with this meeting. Annual Committee Meeting form at the end of Year 3 section.

Members of Committee:		
Date of meeting:	 	

If you have NOT fulfilled any of the above, please attach a short written statement explaining as to why. This must be approved by the Graduate Director.

Other Activities:

- 1. Did you apply for a training grant or an active member of a training program? List which and dates:
- 2. Did you attend Departmental/Departmental seminars? What fraction did you attend?
- 3. Did you attend Supergroups? Which ones and what fraction of the time did you attend?
- 4. Did you attend the annual Biochemistry Department retreat?
- 5. Did you give an oral or poster presentation of your work or attend a conference? List where/when.
- 6. Were you an author on a published article? If so, give the citation(s):
- 7. Did you perform any service to the department or the University? If so, list the activities:
- 8. Did you teach or mentor any students?

ANNUAL REPORT – COMMITTEE MEETING

Student Name:	Mentor Name:
Graduate school entry (month/ye	ar):Date of previous meeting:
Date of Meeting:	ttended by:
Date of Seminar: A	ttended by:
Meetings attended, presentation meeting (to be completed by students)	s given, and papers submitted or published since the previous committee lent):
Comments on seminar:	
Comments on progress since last	committee meeting:
Areas discussed and goals for cor	npletion before next committee meeting:
Next committee meeting should	be scheduled in (month/year):
Sign below to acknowledge that	you have read this report:
Student:	Mentor:
Other Committee Members:	

Annual committee meetings (from third year of graduate school through the thesis defense).

Annual monitoring of student progress

Students will arrange a subset of their thesis committee consisting of their thesis advisor and two additional faculty by the end of their second year of graduate school. This yearly evaluation committee will monitor the student from year three until the thesis defense. The following will occur yearly:

- a) Prior to the seminar the student will provide the yearly committee (and the full thesis committee in year 5 and beyond) with a short summary of completed work and work proposed for the next year (approximately two pages).
- b) The student will give a seminar presentation attended by the yearly committee in a forum such as (but not limited to) Signaling Supergroup, RNA Club, Biophysics Supergroup, Biochemistry Retreat, or Mostly Molecular Biology.
- c) Soon after the seminar (preferably within two week) the student will meet with the committee to evaluate student's progress. During this meeting a short written evaluation will be completed (see instructions below).

Example timeline (on average students graduate in 5.5 years)

Year Evaluation

- 1 Core
- 2 Orals
- 3 Summary, seminar, meeting with yearly committee (3 faculty)
- 4 Summary, seminar, meeting with yearly committee (3 faculty)
- 5 Summary, seminar, meeting with yearly committee (5 faculty-your thesis faculty)
- 6 Thesis defense

Timetable for thesis preparation and defense

In all cases the completed thesis is to be given to the student's advisor a MINIMUM of one month prior to the thesis defense, so that the advisor has sufficient time to suggest appropriate revisions. Following incorporation of those revisions, the thesis approved by the advisor will be given to the full thesis committee a MINIMUM of two weeks before thesis defense. If this date cannot be met then the student may have to reschedule the thesis defense for a later date.

Instructions for filling out the Annual Report – Committee Meeting Form:

- 1) Fill in the form during the annual committee meeting (if additional space is needed use the area below these instructions or attach another page).
- 2) The student should fill in information at the top of the report as needed.
- 3) It is the thesis advisor's (mentor's) responsibility to ensure that comments get entered on the report.
- 4) The student, the mentor, and other committee members should sign at the bottom of the report.
- 5) The student should turn in this form signed form and a copy of the two-page summery to the Graduate Program Manager's office by August 15. Both the original Annual Meeting form and the two-page summary should be placed in the student's file.
- 6) The mentor and the student can retain copies of the report.

Biochemistry Ph.D. program Year 4 (Sept. 1 – Aug. 31)

Critical Activities

1. Research: In the fall and spring semesters, students are expected to enroll in 5 credits per semester of Research, BCHM 8991-XXX. See the Graduate Program Manager, Pamela Williamson, for the correct numbers before you enroll.

Fall: Spring:
Total number of BCHM 8891-XXX credits (≥30 needed to graduate):
2. Annual committee meeting. Every student MUST have annual thesis committee meeting during the academic year period (Sept. 1 – Aug. 15). If you do not have your annual committee meeting, you may not enroll for Research in the following fall semester, resulting in your loss of standing with the program (requiring that you re-apply to the program and re-take your written and/or oral examination at the discretion of the Graduate Director).
One week before your committee meeting, you are REQUIRED to submit to the members' two-page summary of the work that you have performed in the past year and proposed research in the coming year. At the meeting, you should be prepared to give an overview of what you have accomplished in the past year (along the lines of a research presentation) and a short set of goals for the upcoming year.
One week prior to the date of the committee meeting, the student is required to submit to each committee member a two page summary of (1) the research performed during the prior year and (2) proposed research plan for the following year. This summary should be submitted in the format of (1) Arial 11 point font, (2) 1/2 inch margins on all sides and (3) written in a paragraph structure with correct grammar and syntax (e.g., no bullet pointed lists or outlines). It is recommended that each of the two components of the summary (past and future work) be approximately one page; figures may be placed on additional supplementary pages and do not count against the two pages of text.
At the end of the meeting, please fill in the annual committee meeting form (separate from this form) and have your committee sign. Annual Committee Meeting form at the end of Year 3 section.
The Annual Committee meeting form and a copy of the two-page summary must be turned into the Graduate Program Manager, Pamela Williamson, along with a copy of the two-page summary of work in order to be credited with this meeting.
Members of Committee:
Date of meeting:
If you have NOT fulfilled any of the above, please attach a short written statement explaining as to why. This must be approved by the Graduate Director.

Other Activities:

1. Did you apply for a training grant or an active member of a training program? List which and dates:

- 2. Did you attend Departmental/Departmental seminars? What fraction did you attend?
- 3. Did you attend Supergroups? Which ones and what fraction of the time did you attend?
- 4. Did you attend the annual Biochemistry Department retreat?
- 5. Did you give an oral or poster presentation of your work or attend a conference? List where/when.
- 6. Were you an author on a published article? If so, give the citation(s):
- 7. Did you perform any service to the department or the University? If so, list the activities:
- 8. Did you teach or mentor any students?

Biochemistry Ph.D. program Year 5 (Sept. 1 – Aug. 31)

Critical Activities

1. Research: In the fall and spring semesters, students are expected to enroll in 5 credits per semester of Research, BCHM 8991-XXXX. See the Graduate Program Manager, Pamela Williamson, for the correct numbers before you enroll.

Fall: Spring:
Total number of BCHM 8891-XXX credits (≥30 needed to graduate):
2. Annual committee meeting. Every student MUST have annual thesis committee meeting during the academic year period (Sept. $1 - \text{Aug. } 15$). If you do not have your annual committee meeting, you may not enroll for Research in the following fall semester, resulting in your loss of standing with the program (requiring that you re-apply to the program and re-take your written and/or oral examination at the discretion of the Graduate Director).
You should be anticipating graduating at the end of your sixth year. In the committee meeting prior to your thesis defense, you need to expand your committee to FIVE members. One of these members must be from outside the Dept. of Biochemistry, as per Graduate School rules. Further, in addition to the research progress report (below), you need to present a detailed thesis outline (along the lines of a Table of Contents) with research performed and research to be done clearly delineated. One of the purposes of this meeting is to come to a consensus agreement on what constitutes a completed research project.
One week prior to the date of the committee meeting, the student is required to submit to each committee member a two page summary of (1) the research performed during the prior year and (2) proposed research plan for the following year. This summary should be submitted in the format of (1) Arial 11 point font, (2) 1/2 inch margins on all sides and (3) written in a paragraph structure with correct grammar and syntax (e.g., no bullet pointed lists or outlines). It is recommended that each of the two components of the summary (past and future work) be approximately one page; figures may be placed on additional supplementary pages and do not count against the two pages of text.
Finally, it is important to start formulating plans for what you will do after graduation. Please come prepared to your committee meeting prepared to discuss this topic.
The Annual Committee meeting form and a copy of the two-page summary must be turned into the Graduate Program Manager, Pamela Williamson, along with a copy of the two-page summary of work in order to be credited with this meeting. Annual Committee Meeting form at the end of Year 3 section.
Members of Committee:

Date of meeting:

If you have NOT fulfilled any of the above, please attach a short written statement explaining as to why. This must be approved by the Graduate Director.

Other activities:

- 1. Did you apply for a training grant or an active member of a training program? List which and dates:
- 2. Did you attend Departmental/Departmental seminars? What fraction did you attend?
- 3. Did you attend Supergroups? Which ones and what fraction of the time did you attend?
- 4. Did you attend the annual Biochemistry Department retreat?
- 5. Did you give an oral or poster presentation of your work or attend a conference? List where/when.
- 6. Were you an author on a published article? If so, give the citation(s):
- 7. Did you perform any service to the department or the University? If so, list the activities:
- 8. Did you teach or mentor any students?

Biochemistry Ph.D. program Year 6 (Sept. 1 – Aug. 31) and (potentially) beyond

If you graduate before the end of summer, you do not have to fill this out.

Critical Activities

1. Research: In the fall and spring semesters, students are expected to enroll in 5 credits per semester of Research, BCHM 8991-XXXX. See the Graduate Program Manager, Pamela Williamson, for the correct numbers before you enroll).

Fall:Spring:	- -
Total number of BCHM 8891-XXX credits (≥30 needed to graduate):	

2. Annual committee meeting. Every student MUST have annual thesis committee meeting during the academic year period (Sept. 1 – Aug. 15). If you do not have your annual committee meeting, you may not enroll for Research in the following fall semester, resulting in your loss of standing with the program (requiring that you re-apply to the program and re-take your written and/or oral examination at the discretion of the Graduate Director).

You should be anticipating graduating at the end of your sixth year. In the committee meeting prior to your thesis defense, you need to expand your committee to FIVE members. One of these members must be from outside the Dept. of Biochemistry, as per Graduate School rules. Further, in addition to the research progress report (below), you need to present a detailed thesis outline (along the lines of a Table of Contents) with research performed and research to be done clearly delineated. One of the purposes of this meeting is to come to a consensus agreement on what constitutes a completed research project.

One week prior to the date of the committee meeting, the student **is required to** submit to each committee member a two page summary of (1) the research performed during the prior year and (2) proposed research plan for the following year. This summary should be submitted in the format of (1) Arial 11 point font, (2) 1/2 inch margins on all sides and (3) written in a paragraph structure with correct grammar and syntax (e.g., no bullet pointed lists or outlines). It is recommended that each of the two components of the summary (past and future work) be approximately one page; figures may be placed on additional supplementary pages and do not count against the two pages of text.

Finally, it is important to start formulating plans for what you will do after graduation. Please come prepared to your committee meeting prepared to discuss this topic.

The Annual Committee meeting form and a copy of the two-page summary must be turned into the Graduate Program Manager, Pamela Williamson, along with a copy of the two-page summary of work in order to be credited with this meeting. Annual Committee Meeting form at the end of Year 3 section.

Members of Committee:	 	
Date of meeting:	 	

3. Petition to the Dean of the Graduate School. You must petition the Graduate School to enroll for a seventh year of graduate studies. Please see the Graduate Administrator regarding the letter that you and your advisor must submit.

Note that the graduate school will not allow for work after your seventh year—YOU MUST DEFEND YOUR THESIS DISSERTATION BY THAT TIME!

Graduate School Policy on enrollment beyond your sixth year (from the Graduate School Rules):

Doctoral degree students are expected to complete all degree requirements within six years from the semester in which they are admitted and begin course work in the doctoral program. Students who fail to complete the degree in this six-year period may be dismissed from their program with the concurrence of the major advisor and/or appropriate departmental personnel. To continue, the student must file a petition for an extension of the time limit with the Dean of the Graduate School. Such petitions must be endorsed by the student's major advisor and/or other appropriate departmental personnel and may be granted for up to one year.

4. Doctoral defense (from the Biochemistry Graduate Program Rules): This examination is primarily a defense of the candidate's thesis. The examining committee consists of the student's thesis advisor, as chair, and four other faculty members, at least one of whom is rostered outside of the Department. The composition of the committee, as chosen by the student in consultation with their research advisor, must be approved by the Graduate director. The student must arrange at least one month prior to the dissertation defense date for one of these other committee members to be the "second reader" of the thesis. The second reader will carefully review the thesis with the candidate. The student is responsible for arranging the date of the examination and notifying the Graduate Program Administrator at least one month prior to the date, and is responsible for distributing copies of the dissertation to the committee members -- after it has been approved by the thesis advisor -- at least two weeks before the examination. Failure to meet this latter deadline is a legitimate reason for any thesis committee member to postpone the examination.

Students must have a first author or co-first author paper describing their research submitted or published in a peer-reviewed journal to be granted a Ph.D. degree. Exceptions to this rule may be granted with permission from the full examination committee and the Graduate Director.

In accordance to the rules of the Graduate School, more than one dissenting vote, disqualifies the candidate. A student may attempt the final examination once more after a period of time determined by the examining committee. (Section 6, p. 18, 2018 ed. of Graduate School Rules).

Other activities:

- 1. Did you apply for a training grant or an active member of a training program? List which and dates:
- 2. Did you attend Departmental/Departmental seminars? What fraction did you attend?
- 3. Did you attend Supergroups? Which ones and what fraction of the time did you attend?
- 4. Did you attend the annual Biochemistry Department retreat?
- 5. Did you give an oral or poster presentation of your work or attend a conference? List where/when.
- 6. Were you an author on a published article? If so, give the citation(s):
- 7. Did you perform any service to the department or the University? If so, list the activities:
- 8. Did you teach or mentor any students?