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Getting Started

- Order a building (Chenoweth) and lab key with the lab technician for your lab.
- International students: Visit International Programs Office 70 Butterfield Terrace, Amherst, http://www.umass.edu/ipo/
- Get a campus ID card from Whitmore.
- Get an email address from OIT.
- Give Stacy (sapostolou@umass.edu) and your advisor the email address you check daily.
- Discuss planned courses and timing for your degree with your advisor.
- Enroll the courses through https://www.spire.umass.edu/
- Discuss with your advisor your expected lab working hours.
- Sign up for and attend lab, fire, and biological safety trainings with environmental health and safety. A link to upcoming classes is here: http://www.ehs.umass.edu/index.html. Check with your advisor to register for additional required safety course(s) that are required.
- If you are receiving a Graduate Assistantship, sign paperwork with Stacy (sapostolou@umass.edu) so you can start getting paid.
- You may choose to order business cards from Print Services: http://www.umass.edu/print/products/business_cards.html.
- Learn how to use Science Citation, library resources, GraphPad/Origin/Sigmaplot data analysis software, and bibliography software.
- Some suggested reading to get you started with independent research and technical writing:
  - Chapters 1, 4, 5, and 6 of At the Bench, A Laboratory Navigator;
  - Purdue Online Writing Lab for Avoiding Plagiarism: (http://owlenglish.purdue.edu/owl/resource/589/01/). Generally speaking, you must ALWAYS cite any reference you use in a text, and you must NEVER write word-for-word what someone else has already published (on the internet, in a book, or in a journal article). You must rephrase it and cite the original source. If you have any questions on what plagiarism is, contact your PI. Our library has a subscription to Turnitin, a software to detect plagiarism. It is a good idea to submit papers to Turnitin to ensure you’re not ‘accidentally’ plagiarizing.
  - English Communication for Scientists from nature education (https://www.nature.com/scitable/ebooks/english-communication-for-scientists-14053993/)
- Other places on campus you may want to check out: Recreation Center for gym membership; Campus Center for campus store and Blue Wall Café; Peoples Market for snacks and coffee; Mullins Center for hockey and basketball games and shows; University Health Services for doctor appointments.
- Other useful University links:
  - Graduate Student Handbook from the Graduate School: http://www.umass.edu/gradschool/policies-forms/graduate-student-handbook
  - Tuition and Fee information: http://www.umass.edu/bursar
Graduate Student Information

University Costs
UMass Amherst tuition, fees, room and board rates are established each spring for the following academic year. Learn more about university costs.

Eligibility
There are several requirements that you must meet in order to be eligible for financial aid. Learn more about eligibility.

Student Employment Office
Most graduate students at UMass Amherst are hired through the graduate appointment process as teaching assistants, research assistants, interns, etc. Your best option for finding a research assistantship is to contact individual faculty. Visit Student Employment for more information.

Full-time Status
Students who completed all course and thesis/dissertation requirements and take less than 9 credits in a semester, should register for Continuous Enrollment (GRADSCH999) and pay the Program Fee. You also need to request an override for full-time status by e-mailing Stacy (sapostolou@umass.edu) in the office. This needs to be done each semester you enrolled for both US and non-US students.
Please check https://www.umass.edu/graduate/policies/registration

Procedure for handling problems arising between a graduate student and the faculty mentor
If a graduate student is dissatisfied with mentorship by his/her advisor, the student should bring this up with any Food Science faculty and/or lab technicians.
M.S. with Thesis

- The standard M.S. degree in Food Science involves the completion of a total 30 graduate course credits.

  ✓ **Category 1**: At least 6 credits of Food Science courses at the 600- or 700-level are required excluding Thesis, Independent Study or Journal Club.
  ✓ **Category 2**: One credit of seminar (FS791A) is required.
  ✓ **Category 3**: Minimum 6 to a maximum of 10 thesis credits.

- Category 1: Two 700-level Food Science courses are offered each semester. Each is offered every two years.

- Students with a background in Food Science need not repeat following courses but may enroll in other 500-level or above courses.
  ✓ Food Chemistry (FS 541 and 542)
  ✓ Food Microbiology (FS 567) or Food Quality (FS590B)
  ✓ Food Processing (FS 561)
  ✓ Food Analysis (FS 581)*

* An analytical chemistry course in the Department of Chemistry at the 400-level or greater may be used to satisfy this requirement

- One course (3 or 4 credits, 400-level or above) may be from courses outside the Department.

- Graduate students can take Teaching Experience (FS796T), an additional seminar with SAT (satisfactory grade, no presentation), or 1 credit journal club toward their degree requirements, either letter grade or SAT.

- Student should complete a thesis defense at the completion of research project. The advisor may require proposal of thesis. Format of proposal and thesis should be discussed with the advisor.

- Continuous enrollment: Students who completed all course and dissertation requirements and take less than 9 credits in a semester, should register for Continuous Enrollment (GRADSCH999) and pay the Program Fee. You also need to request an override for full-time status by e-mailing Stacy (sapostolou@umass.edu). This needs to be done each semester you enrolled for both US and non-US students. [https://www.umass.edu/graduate/policies/registration](https://www.umass.edu/graduate/policies/registration)

Credit transfer
- Maximum 6 Graduate credits can be transferred from a BS degree or another MS degree, if they were not required for the respective degree. To transfer, you will need to submit a correct form to the Graduate School. Appropriate forms can be found at [https://www.umass.edu/graduate/policies/forms-documents](https://www.umass.edu/graduate/policies/forms-documents)

- For students completing 5 year BS/MS program (Accelerated Masters), additional 6 credits can be transferred from the BS degree (double counted). Please submit a form for ‘Transfer credits, Accelerated Masters’
• For students transferring unused credits from the previous MS program from another institution, please submit a form for ‘Transfer credits, External’

• For more information, please check [https://www.umass.edu/graduate/form/masters-degree-checklist-requirements-graduate](https://www.umass.edu/graduate/form/masters-degree-checklist-requirements-graduate)
One-Year Professional Master Degree in Food Science (Non-thesis)

The 1-Year Professional Master Degree in Food Science is designed for applicants who have earned a B.S. degree in a field of science other than food science.

Enrollment is highly selective and limited to applicants with a B.S. degree from a U.S. college/university and who have the necessary prerequisites. If you have not completed any of the courses/lab work below you will need to discuss this with your advisor.

1) GPA of 3.0 or above  
2) Completed courses  
   A. General Chemistry with lab  
   B. Organic Chemistry with lab  
   C. Biochemistry with lab  
   D. Microbiology with lab  
3) Statistics

• The non-thesis M.S. degree in Food Science involves the completion of a total 30 graduate course credits.

  ✓ **Category 1**: At least 12 credits of Food Science courses at the 600- or 700-level are required.
  ✓ **Category 2**: Student should take one course from each of following:  
    A. Food Chemistry I, Food Chemistry II, or Food Analysis  
    B. Food Microbiology or Food Quality  
    C. Food Processing or Food Engineering  
  ✓ **Category 3**: One credit of seminar (FS791A) is required, either letter grade or SAT (satisfactory grade, no presentation). An additional seminar can be taken with SAT and this credit can be used for degree requirement.

• To complete the degree, student should take a general exam after discussion with the advisor.

SUGGESTED COURSES FOR 1-YEAR (minimum 30 credits)

<table>
<thead>
<tr>
<th>FALL</th>
<th>Course</th>
<th>Credits</th>
<th>SPRING</th>
<th>Course</th>
<th>Credits</th>
<th>SUMMER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food Chem 542 (A)</td>
<td>3</td>
<td></td>
<td>Food Chem 541 (A) or Elective*</td>
<td>3</td>
<td>Independent</td>
</tr>
<tr>
<td></td>
<td>Food Microbiology</td>
<td>3</td>
<td></td>
<td>Food Processing (C)</td>
<td>3</td>
<td>study*** (Food</td>
</tr>
<tr>
<td></td>
<td>or Food Quality (B)</td>
<td></td>
<td></td>
<td>Graduate course**</td>
<td>3</td>
<td>Science 696)</td>
</tr>
<tr>
<td></td>
<td>Graduate course**</td>
<td>3</td>
<td></td>
<td>Elective*</td>
<td>3</td>
<td>up to 6 credits.</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td>3</td>
<td></td>
<td>Seminar FS791A</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

** Two 700-level Food Science courses are offered each semester. Each is offered every two years. Incoming students are strongly suggested to take Research Method (FS797R) during Fall semester as a part of Category 1.

* Suggested Electives: Plant & Soil Science 661 (Biometry/Statistics) or other outside-Departmental courses (400-level or above). One 400-level course from the outside department (3 or 4 credits) will be accepted.

* Students can use journal club credits, up to 2, toward their degree requirements, either letter grade or SAT.
*** Independent study can be registered for Spring semester. Student should discuss topics and timing of independent research projects with his/her advisor

Please note that students in this program do not qualify for graduate research assistantships and admission is competitive. Applicants interested in a career in laboratory research or who plan to continue their graduate education should consider the standard thesis option.

- For more information, please check [https://www.umass.edu/graduate/form/masters-degree-checklist-requirements-graduate](https://www.umass.edu/graduate/form/masters-degree-checklist-requirements-graduate)
Ph.D. Degree in Food Science

Requirements
• Course requirements (listed below)
• Comprehensive exam (information in pages 10, 15, & 16)
• Prospectus (information in pages 11-12)
• Defense (information in pages 13-14)

Course requirements
The following coursework should be completed to obtain a Ph.D. in Food Science. Specific classes are determined based on research interests and student’s need, to be agreed upon by the student and advisor.

A total of 21 graduate course credits and 18 dissertation credits are required to complete the degree.

For 21 graduate course credits,

Category 1. 9 credits from courses within the Department ≥600 level
Category 2. 2 credits Graduate Seminar (FS791A, 1 credit each, 2 separate semesters)
Category 3. 1 credit Teaching Experience (FS796T)
Category 4. 9 credits from within or outside the Department ≥500 level

• The Graduate school requires two consecutive semesters of residency for graduation, fulfilled by registering and earning 9 or more credits in two consecutive semesters. Most students complete this requirement during their first 2 semesters.

Additional Information
• Category 2: At least 1 presentation (letter grade) seminar is required. Additional seminar can be either letter grade or SAT (no presentation) and this can be transferred if student completed MS degree at UMass. Seminar from other institution will NOT be transferred.

• Category 3: All graduate students are required to complete 1 credit teaching experience (FS796T). Students are allowed to take an additional 1 credit of Teaching Experience with agreement from the advisor and this can be used toward total credit requirement as Category 4. Department Head will assign the course for Teaching Experience.

• Category 4: Suggested courses are one each from the following bullets unless evidence is provided that student has taken these courses in previous degree program(s).
  ▪ Food Chemistry I, Food Chemistry II, or Food Analysis
  ▪ Food Microbiology or Food Quality
  ▪ Food Processing or Food Engineering

• Category 4: As stated above, graduate students can use the second Teaching Experience credit for this category as well as journal club credits (up to 2) toward their degree requirements, either letter grade or SAT.
• Student will need to consult the advisor for course selection

Transfer Credits:

• Maximum 6 credits can be transferred from a BS degree, if they were not required for the BS degree.
• Credits can be transferred from a MS degree to fulfill the 9 credits ≥500 level credits (category 4 above) and 1 credit of graduate seminar (category 2 above, only taken during MS degree at UMass Food Science). Transferred credits should be a subject appreciably different from the courses taken at UMass.
• Your advisor must send an e-mail to the Graduate Program Director (GPD) with details of the courses to be transferred.

Continuous enrollment:

• Students who completed all course and dissertation requirements and take less than 9 credits in a semester, should register for Continuous Enrollment (GRADSCH999) and pay the Program Fee.
• You also need to request an override for full-time status by e-mailing Stacy (sapostolou@umass.edu).
• This needs to be done each semester you enrolled for both US and non-US students.
• More information can be found at https://www.umass.edu/graduate/policies/registration

Required Forms

1. Chair of the Comprehensive Exam Committee (4 faculty members) to send nomination (results of comprehensive exam) to GPD.
2. Advisor sends e-mail to GPD requesting the appointment of dissertation committee (should include at least 1 outside member).
3. Student submits signed prospectus/outline signature sheet to graduate school after completion of prospectus (At least 6 months before defense).
4. Advisor sends e-mail to GPD for a memo with dissertation defense date, time, location and title of dissertation. This should be done at least one month prior to defense date.
5. Advisor sends e-mail to GPD for results of defense, date passed, and committee names.
6. Student submit the signed dissertation signature sheet and the Doctoral degree eligibility form to the graduate school after completion of successful defense

Notes

• Specific timing depends on individual student’s progress.
• Additional information can be found at https://www.umass.edu/graduate/form/doctoral-degree-checklist-requirements-graduate
• Prof. Yeonhwa Park, ypark@foodsci.umass.edu, (252 Chenoweth Lab) is the Food Science GPD.
# Checklist for Food Science Ph.D. Student

<table>
<thead>
<tr>
<th>✔</th>
<th>To do</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete required coursework</td>
<td><a href="https://www.foodsci.umass.edu/graduate/msphd-requirements/phd-requirements">https://www.foodsci.umass.edu/graduate/msphd-requirements/phd-requirements</a></td>
<td></td>
</tr>
<tr>
<td>• Residency requirements</td>
<td>• Register 9 or more credits in two consecutive semesters</td>
<td></td>
</tr>
<tr>
<td>• Dissertation credits</td>
<td>• Register for total 18 credits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 9 credits of dissertation credits is maximum for a semester</td>
<td></td>
</tr>
<tr>
<td>• Category 1</td>
<td>• 9 credits from courses within the Department ≥600 level</td>
<td></td>
</tr>
<tr>
<td>• Category 2</td>
<td>• 2 credits Graduate Seminar (FS791A/792A, 1 credit each, 2 separate semesters)</td>
<td></td>
</tr>
<tr>
<td>• Category 3</td>
<td>• 1 credit Teaching Experience (FS796T)</td>
<td></td>
</tr>
<tr>
<td>• Category 4</td>
<td>• Students can use the second Teaching Experience (FS796T) for this category as well as journal club credits (up to 2), either letter grade or SAT.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 6 credits can be transferred from a BS degree, if they were not required for the BS degree.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Credits can be transferred from a MS degree to fulfill the 9 credits ≥500 level credits (category 4) and 1 credit of graduate seminar (category 2 above, only taken during MS degree at UMass Food Science). Transferred credits should be a subject appreciably different from the courses taken at UMass.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Your advisor sends a memo to the Graduate Program Director (GPD) with details of the courses to be transferred.</td>
<td></td>
</tr>
<tr>
<td>Continuous Enrollment</td>
<td>• Students who completed all course and dissertation requirements and take less than 9 credits in a semester, should register for Continuous Enrollment (GRADSCCH999) and pay the Program Fee.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• You also need to request an override for full-time status by e-mailing Stacy (<a href="mailto:sapostolou@umass.edu">sapostolou@umass.edu</a>).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• This needs to be done each semester you enrolled for both US and non-US students.</td>
<td><a href="https://www.umass.edu/graduate/policies/registration">https://www.umass.edu/graduate/policies/registration</a></td>
</tr>
<tr>
<td>Comprehensive exam</td>
<td>• Advisor forms the comprehensive exam committee (at least 4 faculty)</td>
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<tr>
<td></td>
<td>• Chair (not advisor) of the Comprehensive Exam Committee to send results of comprehensive exam to GPD.</td>
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<tr>
<td></td>
<td>• Find complete information for comprehensive exam at <a href="https://www.foodsci.umass.edu/graduate/msphd-requirements/phd-requirements/phd-comprehensive-exam">https://www.foodsci.umass.edu/graduate/msphd-requirements/phd-requirements/phd-comprehensive-exam</a></td>
<td></td>
</tr>
<tr>
<td>Form dissertation committee</td>
<td>• Advisor sends e-mail to GPD requesting the appointment of dissertation committee (should include at least 1 outside member).</td>
<td></td>
</tr>
<tr>
<td>Prospectus</td>
<td>• Student submits signed prospectus/outline signature sheet to graduate school after completion of prospectus (At least 6 months before defense).</td>
<td></td>
</tr>
<tr>
<td>Defense notification</td>
<td>• Advisor sends e-mail to GPD for a memo with dissertation defense date, time, location and title of dissertation. This should be done at least one month prior to defense date.</td>
<td></td>
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<tr>
<td></td>
<td>• Students requests Stacy to send defense notification in the department 1-2 days prior to scheduled defense.</td>
<td></td>
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<tr>
<td></td>
<td>• Additional information can be found at <a href="https://www.umass.edu/graduate/form/checklist-final-doctoral-oral-examinations">https://www.umass.edu/graduate/form/checklist-final-doctoral-oral-examinations</a></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>• Advisor sends e-mail to GPD for results of defense, date passed, and committee names.</td>
<td></td>
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<tr>
<td></td>
<td>• Student submits the signed dissertation signature sheet and the Doctoral degree eligibility form to the graduate school after completion of successful defense</td>
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<tr>
<td></td>
<td>• Students completes survey of earned doctorates requested by the graduate school</td>
<td><a href="https://www.umass.edu/graduate/form/dotal-degree-checklist-requirements-graduate">https://www.umass.edu/graduate/form/dotal-degree-checklist-requirements-graduate</a></td>
</tr>
</tbody>
</table>
Comprehensive Exam

The goal of comprehensive exam is to determine the level of understanding of your own research and relate it to how it contributes to fundamental food science understanding in chemistry, microbiology, and processing.

Student will prepare a hypothesis-driven written research proposal based on format suggested (NIH or USDA). Topic will be determined by the advisor with agreement with committee. This should be based on her/his current research project, preferably with preliminary data available with agreement with the advisor. The written proposal should be provided to the committee one week prior to the exam date.

The advisor will form a committee with at least 4 faculty members (one outside departmental member is allowed, but not required). The advisor cannot serve as a chair for the comprehensive exam. The chair of the comprehensive exam committee will determine the exam outcome as (1) pass, (2) conditional pass, or (3) fail. If student has a conditional pass, student will receive comments from the committee and revise the proposal accordingly. If the student fails, student will have one additional chance to complete the comprehensive exam. The student is considered a Ph.D. candidate once the comprehensive exam is passed.

The oral comprehensive exam consists of two parts: a written grant proposal and an oral examination in which you present and defend the written grant proposal.

Written proposal: The format of the written grant proposal will follow the guidelines of a government grant proposal (such as NIH R21 in page 15 or USDA in page 16, to be determined by the advisor).

Oral exam: The formal of the oral examination will be a ~20 minute prepared presentation and defense of the grant proposal. Expect to be interrupted with questions; total exam time 1–1.5 hrs. The oral comprehensive presentation will be closed, meaning only committee members may attend.

Timeline
It is strongly encouraged that the student takes this oral comprehensive exam by the end of the second year of study.

- Week 0: Your advisor gives you a topic for the grant proposal
- Week 0 - Week 3: Student can seek feedback from the advisor as needed during this time.
- Week 3: At the end of the third week, you should submit an independently written grant proposal to your committee.
- Week 4 or availability of the Committee: Present an oral presentation of the grant proposal to the committee.

Once student passes the comprehensive exam, the advisor will form a dissertation committee. The advisor should notify the dissertation committee to the graduate program director. The purpose of the prospectus meeting is to have the student, the advisor, and the committee agree to a reasonable scope and timeline for the doctoral dissertation. Students are encouraged to convene their committees yearly thereafter informally to provide progress updates.

NOTE: current students who have not completed comprehensive exam shall take this exam if Advisor and student agree, including those who passed written comprehensive exam.
**Dissertation Prospectus/Outline Exam**

**Content**

- Details on formatting guidelines are available from the Graduate School.
- The Dissertation Prospectus/Proposal Exam consists of two parts: a written Dissertation Prospectus/Outline and an oral examination in which you defend your Prospectus/Outline.
- The format of the written Prospectus/Outline will follow that of the Dissertation. Plan to use “paper format” in which each of your publications is formatted into a chapter, with summarizing introduction/conclusion sections. Include a table of abbreviations. A sample outline follows:
  
  - Chapter 1 – introduction (if written, a review paper can serve as the introduction)
  - Chapter 2 – first publication
  - Chapter 3 – second publication
  - Chapter X – work yet to be completed

Note that the format can be different from the above. For example if there are no publications/manuscripts prepared at the time of the Dissertation Proposal presentation, the proposal can include sections comprised of Review of Literature, Specific Objectives, Materials and Methods, Preliminary Results and Future Work. This format is also acceptable to the Graduate School. **Your advisor will provide guidance specific to their expectations.**

- The format of the oral exam will be a 20-30 minute presentation of the Prospectus/Outline. Expect to be interrupted with questions. The entire exam should be 1 – 1.5 hrs.
- The prospectus presentation will be closed, meaning only committee members may attend.
- Your advisor may help with organizing the presentation outline, but will not thoroughly edit the presentation – the presentation itself is part of the exam.
- Be able to verbally defend HOW and WHY you did (or plan to do) every aspect of your research.

**Timeline**

- Once the committee is selected by your advisor, the advisor emails the Graduate Program Director to appoint the committee.
- Once your advisor approves your written prospectus/outline, it must be submitted to the committee before the exam (typically 1 week prior to scheduled prospectus).
- Student must send reminder about location and date/time of exam a few days before the exam.
- The timing for the Dissertation Prospectus/Outline Exam varies widely, depending on students’ progress. It is recommended to have at least 1 publication and a significant amount of self-directed laboratory research by the time of the prospectus.
- The Dissertation Prospectus/Outline Exam should be passed 6 months prior to the Dissertation Exam (although this can be waived if needed by a memo from your advisor to GPD).

**Notes**

- The Dissertation Prospectus exam committee will consist of your advisor and at least two additional
members, one each from within and outside of the Food Science Department.

- After passing the Prospectus exam, the cover sheet of the prospectus must be signed by all committee members and the department head or graduate program director, and submitted to the graduate school by the candidate.
**Final Dissertation Defense**

**Content**

- The Final Dissertation Defense consists of two parts: a written Dissertation and an oral examination in which you present and defend your Dissertation.
- Details on formatting guidelines are available from the Graduate School. Templates can be downloaded from OIT: [http://www.oit.umass.edu/support/workshops-training/format-a-thesis-or-dissertation-microsoft-word](http://www.oit.umass.edu/support/workshops-training/format-a-thesis-or-dissertation-microsoft-word).
- Plan to use “paper format” in which each of your publications is formatted into a chapter, with summarizing introduction/conclusion sections. Include a table of abbreviations. A sample outline follows:
  - Chapter 1 – introduction (if written, a review paper can serve as the introduction)
  - Chapter 2 – first publication
  - Chapter 3 – second publication
  - Chapter X – overall conclusions, and recommendation for future work on topic
- The format of the Dissertation will be a 30-40 minute prepared presentation of the Dissertation. The presentation will be open, followed by general audience questions. After the open question period, the audience will leave and the committee will ask additional questions.
- Your advisor may help with organizing the presentation outline, but will not thoroughly edit the presentation – the presentation itself is part of the exam.
- Be able to verbally defend HOW and WHY you did every aspect of your research. It cannot be overemphasized that you need to know what and why you did everything you present.

**Timeline**

- A memo requesting announcement of the defense must be submitted to the graduate school **one month before the defense date.** The advisor should send the following information to GPD:
  - Student’s full name & identification number, the degree, day of week/date/time/place of the exam, major, and title of dissertation. Once submitted, the defense is announced in the UMass News & Media Relations, and the final checklists of degree requirements are emailed to the student.
- Once your advisor approves your written draft dissertation, it must be submitted to the committee before the defense (typically 1-2 weeks prior to defense date).
- Student must send reminder about location and date/time of exam a few days before the exam.
- The dissertation defense should be the last step in getting the Ph.D. This means that you should have submitted first drafts of each publication you intend to submit prior to defending your dissertation.
- There are three deadlines per year for awarding of PhDs (posted on the graduate school website). Generally, mid-December for a February degree; mid-April for a May degree; and the last working day of August for a September degree. These deadlines are firm.

However, you can defend your dissertation on any date – this just means if you submit your final paperwork in January, you will have a May date on your diploma. This doesn’t mean you have to stay in Amherst until May.
Notes

- The Dissertation defense committee will be the same as your Prospectus/Outline exam committee members.
- After passing the Dissertation defense, the signature page of the Dissertation must be signed by all committee members and the department head or graduate program director, and submitted to the graduate school. This must be on acid-free, 20 lb weight, white, 8.5 x 11” paper.
- The dissertation must be submitted electronically to the graduate school (see the graduate school website for details).
- Student should prepare the doctoral Degree Eligibility Form must be completed including signatures of the Department Head and Graduate Program Director, and then submit it to the graduate school.
- A bound copy of your dissertation should be given to your committee chair (optional). Binding can be done through Copy Cat, acmebook.com, UMI, or a number of book binderies.
- More information can be found: http://www.umass.edu/gradschool/current-students/doctoral-degree-requirements-and-dissertation-information.
Summary of Guidelines for NIH R21 Proposal

• Format
  o Arial, 11 point or larger, 6 lines per vertical inch or fewer, 0.5 inch margin

• Specific aims (1 page)
  o Executive summary of whole project
  o Includes motivation, objectives, expected outcome

• Research proposal (6 pages, not including references)
  o Significance
  o Innovation
  o Approach
    ▪ For each specific aim: introduction, justification, research design, expected outcomes, potential problems & alternate strategies
  o Timeline
  o Future Directions
  o References

• See The Grant Application Writer’s Workbook: National Institutes of Health Version for format details / writing style guidelines.
Summary of Guidelines for USDA NIFA Proposal

- Format
  - Times New Roman, 12 point, 6 lines per vertical inch or fewer, 1 inch margin

- Project Narrative (18 pages, not including references)
  - Introduction
    Include a clear statement of the long-term goal(s) and supporting objectives of the proposed project. Summarize the body of knowledge or past activities that substantiate the need for the proposed project. Describe ongoing or recently completed activities significant to the proposed project including the work of key project personnel. Include preliminary data/information pertinent to the proposed project.
  - Rationale and Significance
    Concisely present the rationale behind the proposed project. The potential long-range improvement in and sustainability of U.S. agriculture and food systems should be shown clearly. Any novel ideas or contributions that the proposed project offers should also be discussed in this section
  - Approach
    a) A description of the activities proposed and the sequence in which the activities are to be performed;
    b) Methods to be used in carrying out the proposed project, including the feasibility of the methods;
    c) Expected outcomes;
    d) Means by which results will be analyzed, assessed, or interpreted;
    e) How results or products will be used;
    f) Pitfalls that may be encountered;
    g) Limitations to proposed procedures;
    h) A full explanation of any materials, procedures, situations, or activities related to the project that may be hazardous to personnel, along with an outline or precautions to be exercised to avoid or mitigate the effects of such hazards; and
    i) A timeline for attainment of objectives and for production of deliverables that includes annual milestones with specific, measurable outcomes.

- See a recent USDA NIFA RFA for details (italicized portions are reproduced from the 2013 RFA)
Travel Guidelines

• Ph.D. students are encouraged to present their research at scientific conferences and meetings. Examples of meetings include Experimental Biology, PittCon, Institute of Food Technologists, American Chemical Society, American Oil Chemists’ Society, American nutrition Society, Gordon Research Conferences among many others. Deadlines for abstract submissions vary and must be sought out by the student. Students must give their advisor ample time (~1 week) to review their abstract prior to approval and submission.

• Travel to a conference is considered part of work – you must behave professionally and participate in the conference beyond your individual presentation. It is not a paid vacation.

• Guidelines for what research can be presented (ie: published? submitted? about to be submitted?) must be agreed upon with your advisor.

• Guidelines for what type of presentation is supported must be agreed upon with your advisor. Generally, junior graduate students can present posters, but senior graduate students are encouraged to present oral presentations (except at conferences that don’t have an oral option, e.g. Gordon Research Conferences).

• Forms: Prior to travel, fill out a pre-travel authorization form at least 2 weeks in advance: https://travelregistry.umasscs.net/

• Funding: The Department of Food Science will support Ph.D. student travel for accepted abstracts in the amount of ~$300-400 per student per year. The student’s advisor is expected to fund an additional $300 toward the travel costs. Travel costs exceeding $600 are expected to be covered by the student – it is therefore recommended to be thrifty. All receipts must be submitted to Mary immediately after the trip.

• Travel Scholarships: Many national conferences offer travel grants to students who are finalists in graduate research competitions (IFT, ACS, and others). Students are encouraged to seek these out. In addition, there are limited funds by the Graduate School to support student travel. Your advisor may nominate you for one of these awards, usually $300 per award, with preference to students who are finalists in a competition, near the end of their program, and who have not yet received a Graduate School travel award.
Annual Report
(Period of July 1 to June 30)

NOTE: Not all advisors require an annual report.

Student: ______________________  Starting Semester: _______________  Degree: ________

Committee Members: ________________________________________________________________

Expected Degree Completion Date: __________

PhD Exam Timeline:  Written Comprehensive  Expected Date: ____  OR Completed Date: _
Oral Comprehensive  Expected Date: ____  OR Completed Date: _
Dissertation Proposal  Expected Date: ____  OR Completed Date: _
Dissertation Defense  Expected Date: ____

Information to be provided by student (no more than two pages):

1. List of accomplishments (publications submitted/accepted/published, courses completed, seminars/research presentations, awards received (including being a finalist), involvement in on and off campus activities). Use the following citation format:

   Publications


   Presentations


2. BRIEF summary of research progress (i.e. what has worked; what has not worked; what would make it work better; equipment that would help your project?)

3. BRIEF summary of plans for the coming year, both in terms of your research and your intended "accomplishments."

Please email the electronic document by June 30th to your advisor