University of Maryland Graduate Program in Nutrition and Food Science

Graduate Student Handbook



Prepared and Presented by Nutrition and Food Science Graduate Faculty

Table of Contents

ORGANIZATION OF THE PROGRAM	. 1
FACILITIES AND PARTNERSHIPS	. 1
ADMISSIONS	. 2
Admission Requirements	. 2
Applying for Admission	. 3
Notice of Acceptance	. 3
FINANCIAL ASSISTANCE	. 4
PROGRAM COMMUNICATIONS	. 5
PROGRAM REQUIREMENTS	. 6
Master of Science	. 6
Doctor of Philosophy	10
Seminar Policies and Requirements1	14
ADVISING/MENTORING	15
GRADUATE SCHOOL FORMS AND DEADLINES	15
APPENDICES	17
Appendix A: Suggested Format for Research Proposal	
Appendix B: Thesis Proposal Approval Sheet	
Appendix C: Application for Admission to Candidacy	
Appendix D: Annual Review of Student Progress Toward M.S./Ph.D. Degree	

ORGANIZATION OF THE PROGRAM

The Graduate Program in Nutrition and Food Science is an interdisciplinary and interdepartmental program administered by the Department of Nutrition and Food Science (NFSC). The program draws upon faculty and scientists from numerous schools, departments, and organizations. These include the Departments of Animal and Avian Sciences, Anthropology, Cell Biology and Molecular Genetics, Chemistry and Biochemistry, Nutrition and Food Science, and Plant Science and Landscape Architecture; the School of Public Health; and nearby research institutions. The Director of the Graduate Program in Nutrition and Food Science is selected from amongst faculty to administer the program.

The program offers graduate study leading to the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in Nutrition and Food Science with specialization in either Nutrition or Food Science. Research interests of faculty members specializing in Nutrition include the genetic and metabolic basis for dietary requirements of animals and humans, nutritional biochemistry, nutritional aspects of chronic disease, international nutrition, community nutrition, epidemiology, neuroscience, and health behavior and health promotion. Research interests of faculty members specializing in Food Science include food chemistry, food processing and engineering, food microbiology, food safety, food nanotechnology, food toxicology, public policy, risk assessment and functional and nutraceutical foods. All programs require completion of a research project (thesis or dissertation). Programs of research are individually planned with the student, an advisor and an appropriate Graduate Advisory Committee.

FACILITIES AND PARTNERSHIPS

The Graduate Program office is housed within the Department of Nutrition and Food Science in Room 0112 in the Skinner Building.

Program facilities are located in the Departments of Nutrition and Food Science, Animal and Avian Sciences, Anthropology, Cell Biology and Molecular Genetics, Chemistry and Biochemistry, and Plant Science and Landscape Architecture. There are also collaborative arrangements with the National Institutes of Health (NIH), Food and Drug Administration (FDA), and U.S. Department of Agriculture (USDA). Additionally, opportunities exist for collaborative research with scientists at the FDA through the Joint Institute for Food Safety and Applied Nutrition.

Library facilities and resources are extensive. In addition to campus libraries, the National Archives, the National Agricultural Library, the Library of Congress, and the National Library of Medicine are all within 10 miles of campus and are available to students.

Teaching assistants in the Department of Nutrition and Food Science are assigned a desk in Room 3205 in Marie Mount Hall as well as a mailbox in Room 0123 in the Skinner Building. Graduate students who are not teaching assistants should discuss desk space availability with their advisor. Also, McKeldin Library offers a limited number of study carrels with desks for which students may apply.

ADMISSIONS

Admission Requirements

Applicants should familiarize themselves with the requirements and policies/procedures of the Graduate School at the University of Maryland, College Park. They may do so by referring to The Graduate Catalog, available online at www.gradschool.umd.edu.

The Graduate Program in Nutrition and Food Science Admissions Committee reviews all applications and makes recommendations based on the applicant's <u>total</u> record. Acceptance to the graduate program will be based upon academic transcripts, three letters of recommendation, a 300-500 word statement of career objectives and professional experience, and Graduate Record Examination (GRE) scores. A minimum of a 3.0/4.0 undergraduate grade point average is required. All applicants must take the GRE General Test. An additional requirement for admission is identification of a research advisor prepared to accept the applicant as an advisee. Faculty committees are responsible for graduate admission and curriculum.

The Graduate Program in Nutrition and Food Science has a long history of educating graduate students from around the world. However, in addition to standard admission requirements, international applicants must also take the Test of English as a Foreign Language Internet-Based Test (TOEFL IBT) or the International English Language Testing System (IELTS) test. A minimum overall score of 100 on the TOEFL IBT or a 7 on the IELTS is required for full admission. International applicants must also submit documentation of adequate financial support for their studies. Details on the graduate admissions process for international applicants may be found at www.gradschool.umd.edu/prospective_students/international_admissions.html.

Transfer of Credits

For the master's degree, courses taken outside the University of Maryland, College Park (UMD) will not be transferred automatically and counted toward requirements for a degree in the Graduate Program in Nutrition and Food Science. However, after matriculation at UMD, the student's advisor and Graduate Advisory Committee may recommend transfer of up to 6 semester hours of courses taken at another accredited university. Inclusion (transfer) of course work done at UMD for another graduate program will also require the approval of the student's advisor and Graduate Advisory Committee. That said, no credits used to satisfy the requirements of another degree will be counted toward the degree in Nutrition and Food Science. Up to 12 credits taken as an Advanced Special Student at UMD may be counted toward the degree, again with the approval of the student's advisor and Graduate Advisory Committee. Only courses with an "A" or "B" grade may be transferred. Recency restrictions also apply. Master's students must complete a *Request for Transfer or Inclusion of Credit Form*, available at www.gradschool.umd.edu/images/uploads/Transfer of Inclusion Form.pdf.

For the doctoral degree, students may not transfer any credits previously taken at another university or UMD. However, course requirements may be adjusted to account for prior coursework at the discretion of the department. Doctoral students should discuss applicability of previous course work with their advisor.

Applying for Admission

All applications for graduate studies at the university are to be submitted to the Graduate School and to the Graduate Program in Nutrition and Food Science for review and recommendations. Applicants wishing to study in this program should mark their application NFSC with a specialization in Nutrition (NUTR) or Food Science (FDSC). To be considered for admission to the Graduate School, each applicant must apply online at www.gradschool.umd.edu/welcome/apply_now.html.

To be qualified for admission consideration, all application materials along with the application fee should be received by the following deadlines:

Ø Admission to the fall semester: December 15

Ø Admission to the spring semester: October 1

Notice of Acceptance

Upon receipt of <u>all</u> required application material for admission into the Graduate Program in Nutrition and Food Science, each applicant is evaluated by the program's Graduate Admissions Committee. The Graduate Admissions Committee makes its recommendation regarding admission to the Director of the Graduate Program in Nutrition and Food Science (Program Director). Official letters of offer of admission (or rejection) are made by the Dean of the Graduate School based upon the recommendation of the Program Director and will be one of the following:

- 1) Admission to full degree (without condition)
- 2) Provisional admission
- 3) Admission denied with reasons stated

An informal letter is also sent to each student by the Program Director, outlining any provisions for admission and designating a faculty advisor. A faculty member of the Graduate Program in Nutrition and Food Science must agree to serve as an advisor, or a prospective graduate student may not be admitted to the program.

The faculty advisor guides the student in the choice of course work and the selection of a thesis/dissertation Graduate Advisory Committee. This committee must then be approved by the Program Director and the Graduate School. Once approved, the Graduate Advisory Committee (chaired by the student's faculty advisor) guides the student; administers the candidacy qualifying exam (doctoral students only); and also serves as the committee for the thesis/dissertation proposal, the final defense, and the approval of the thesis/dissertation of the student.

Officially, the graduate student's dean is the Dean of the Graduate School, but responsibility for supervising graduate research and training is delegated to the Graduate Program in Nutrition and Food Science.

FINANCIAL ASSISTANCE

Financial support for graduate students is available on a competitive basis. The Department of Nutrition and Food Science offers a number of graduate teaching assistantships that support students in the Graduate Program in Nutrition and Food Science. A limited number of research assistantships are also available.

Teaching Assistantships

Applications for teaching assistantships for the fall semester are due around mid-February for continuing students. New students who are interested in a teaching position should contact their advisor for information.

International students who wish to be considered for a teaching assistantship and are not native speakers of English are required by the university to take part in the International Teaching Assistant (ITA) evaluation. This test must be taken before the start of classes and before a teaching assistantship is offered to the student. This includes taking the Test of Spoken English (TSE) and submitting official test scores. International teaching assistants who may have been educated entirely in English and those with a bachelor's and/or master's degree from universities in English-speaking countries must also be evaluated. For more specific information, please check university policy at: http://marylandenglishinstitute.com/wpdir/english-programs/international-teaching-assistants/

Decisions regarding teaching assistantships are usually reached by April 1. Graduate teaching assistants receive a stipend plus health insurance. Tuition fees (up to 10 credits per semester) for teaching assistants are waived by the university. Programs in Biochemistry, Chemistry, and Cellular Biology and Molecular Genetics, administered in the corresponding departments, also offer teaching assistantships to qualified students in the Graduate Program in Nutrition and Food Science. Students are encouraged to submit teaching assistantship applications to those programs.

Research Assistantships

A limited number of research assistantships are available from grant funds, with the student assisting in the research supported under the grant. The research often may be applicable to the thesis or dissertation. The tuition for graduate research assistants is charged at the in-state rate and often is paid directly by the supporting grant. In addition, research assistants receive health insurance. Research assistantships generally are not awarded until after students have attended classes and are known to faculty.

Other Financial Support

Additional types of financial aid are available, including a work-study program, grants, fellowships and loans. The university also offers a number of special support mechanisms for qualified minority students. For more information regarding financial support, please refer to the Graduate School website at www.gradschool.umd.edu.

PROGRAM COMMUNICATIONS

All students are expected to establish a university email account through the UMD Office of Information Technology at www.oit.umd.edu. This service is provided free of charge to students. Email will be the primary means by which the Program Director communicates with students in the program. Technical support for university email is available at www.helpdesk.umd.edu or (301) 405-1500.

It is the responsibility of graduate students to update their personal information (e.g. change of address, telephone number or email address). This may be done online at www.testudo.umd.edu/apps/saddr. In addition to the update online, students must notify the Student Programs Coordinator located in the Skinner Building, Room 0112, of changes to personal information.

PROGRAM REQUIREMENTS

Master of Science

Background Requirements

For applicants to the Nutrition specialization, preference is given to students having a bachelor's degree in nutrition, chemistry, biology, food science, animal science or related fields. Consideration will be given to others having adequate background courses and demonstrable potential for a career in nutrition.

For applicants to the Food Science specialization, proficiency must be demonstrated by satisfactory completion of course work in the following areas: food chemistry, food microbiology, food processing, and biochemistry. Background course requirements will normally be satisfied with completion of a bachelor's degree in food science from an accredited institution. Students deficient in any of these areas will be required to complete coursework to fulfill these background course requirements.

Course Requirements

Co	urse K	equ	irei	nents	
1)	A minimum of 30 credit (semester) hours of course work toward a graduate degree is required. This includes:				
	☐ A minimum of 24 credit hours of course work exclusive of thesis research:				
	 At least 12 credit hours must be in course work designated for graduate stud only (600-level courses). Of these 12 credit hours: 			least 12 credit hours must be in course work designated for graduate students ly (600-level courses). Of these 12 credit hours:	
			§	2 credit hours must be NFSC 688-Seminar in Nutrition and Food Science, with one seminar (1 credit hour) focusing on the thesis results required in the semester intended to graduate. (Only 1 credit hour of NFSC 688 may be taken per semester.)	
			§	At least 3 credit hours must be in statistics such as BIOM 601-Biostatistics I, or equivalent. It will be up to the student's advisor and Graduate Advisory Committee to determine if additional statistics courses are needed.	
		0	at !	maximum of 12 credit hours may be designated as 400-level courses. However, least 9 of these credit hours must be for advanced nutrition/food science urses.	
	•	6 c	red	it hours of NFSC 799-Master's Thesis Research.	
2)	Additional course requirements for each student are decided by the student's advisor and Graduate Advisory Committee.				
3)	Students in the Nutrition specialization may be required to take the following courses if not taken as an undergraduate, as determined by the student's advisor and Graduate Advisory Committee:				
		1 s	eme	ester of BCHM 461-Biochemistry I or equivalent	
	☐ 1 semester of BCHM 462-Biochemistry II or equivalent				

Approved June 2016

6

☐ 1 semester of BSCI 440-Mammalian Physiology or equivalent
☐ 1 semester of NFSC 440-Advanced Human Nutrition or equivalent (also offered as NFSC 678R)
Students whose area of emphasis is in <u>Applied Nutrition</u> will be required to take a set of core courses which include the following, if not taken previously:
☐ 3 graduate courses in statistics to cover basic statistics, multivariate and principal component (Example of courses include, BIOM 601, BIOM 602, 603, 621 or their equivalent).
And, one of the following courses:
 ☐ A sampling course that sensitizes the students to the analytical strategies required for the analysis of data collected using complex surveys designs (such as Multi-stage cluster samples, stratified and proportional sampling) ☐ A course that teaches students the principles of making questionnaires when they are about to collect empirical data. ☐ An epidemiology course

Students whose area of emphasis is in <u>Food Science</u> are expected to complete three courses in their area of specialization which may be in food safety, food processing/technology, and food chemistry.

- 4) Attendance at the Nutrition and Food Science seminars (NFSC 688) each semester is required even if not taken for credit. Attendance at the annual Shorb lecture is also required. Attending the thesis/dissertation defenses of other students or other special departmental seminars is strongly recommended.
- 5) Each student is required to present a poster of his or her research progress at the Graduate Program in Nutrition and Food Science Research Day held yearly on the first Friday of May.
- 6) A minimum grade point average of 3.0 is required to maintain good standing and for graduation.
- 7) A residence of at least 2 semesters or their equivalent (4 semesters at half time) is required.

Composition of Graduate Advisory Committee

- 1) The Graduate Advisory Committee serves as the thesis examining committee. Chaired by the student's advisor, the Graduate Advisory Committee is comprised of a minimum of three members, two of whom must be full members (tenured or tenure track) of the faculty of the Graduate Program in Nutrition and Food Science.
- 2) Each remaining committee member may be a full member of UMD graduate faculty, an adjunct member of UMD graduate faculty, or a "special member" of UMD graduate faculty. (A special member is someone outside UMD who is familiar with the student's program of study. A special member must have appropriate credentials and be appointed as a special member of UMD graduate faculty.)

3) Graduate Advisory Committee members must be approved by the Dean of the Graduate School, based on the recommendation of the Program Director and the student's advisor. The form for the approval of the student's Graduate Advisory Committee members, *Nomination of Thesis or Dissertation Committee*, must be submitted to the Program Director at least <u>6 weeks</u> prior to the thesis proposal defense date.

Thesis Proposal

The thesis must demonstrate the student's ability to do independent and scholarly research and writing. To complete the thesis, each student must first create and defend a thesis proposal as follows:

- 1) A Graduate Advisory Committee consisting of at least three members must be formed.
- 2) The student must generate a thesis proposal and present the written proposal of his/her research to the Graduate Advisory Committee at least 2 weeks before the meeting with the committee. A suggested guideline for the thesis proposal is available in Appendix A.
- 3) The proposal should be defended to and approved by the Graduate Advisory Committee.
- 4) An approval form will be filled out by the Graduate Advisory Committee and retained in each student's folder (Appendix B).

Thesis Requirements

An oral exam to defend the thesis research is held the semester that the student intends to graduate.

The thesis format of the student's completed research should conform to the university's *Electronic Thesis and Dissertation (ETD) Style Guide*. This manual contains the instructions for preparation of theses and dissertations and is available at http://gradschool.umd.edu/sites/gradschool.umd.edu/files/uploads/DissertationThesis/etd_style_guide-201508.pdf

Presentation and Publication

- 1) It is highly recommended that students present their thesis research results to at least one national scientific meeting.
- 2) The student must prepare a draft of a manuscript for submission to a refereed journal. The draft should be reviewed by the advisor prior to clearing the student for graduation.

Defense

- 1) The student must orally defend the completed thesis before his/her Graduate Advisory Committee.
- 2) A draft of the thesis must be submitted to the Graduate Advisory Committee at least 2 weeks prior to the intended date of defense (examination). The decision to accept the

examination as satisfactory must be unanimous.

- 3) The student may present himself/herself for this oral examination only twice. Failure of the second examination results in termination of the student's admitted status.
- 4) After a successful thesis defense, all members of the Graduate Advisory Committee must sign the committee report. If the student wishes to graduate in the same semester that he/she completes the defense, this signed report must be submitted to the Program Director no later than the deadline announced by the Graduate School.

Doctor of Philosophy

Background Requirements

Students entering the doctoral program generally hold an M.S. and/or have met the course requirements for an M.S. in Nutrition and Food Science.

Students in the Nutrition specialization must have taken courses in biochemistry (equivalent to BCHM 461-Biochemistry I and BCHM 462-Biochemistry II), mammalian physiology (equivalent to BSCI 440-Mammalian Physiology) and advanced human nutrition (equivalent to NFSC 440-Advanced Human Nutrition). These courses may have to be taken at UMD if they have not been taken at the undergraduate/graduate level.

Students in the Food Science specialization without an M.S. degree are required to take at least three out of the five core food science courses in order to meet the background requirements: NFSC 412-Food Processing Technology, NFSC 414-Mechanics of Food Processing, NFSC 421-Food Chemistry, NFSC 430-Food Microbiology, and NFSC 450-Food and Nutrient Analysis.

Course Requirements

1)		um of 27 credit (semester) hours of course work toward a graduate degree is This includes:
	□ A	minimum of 15 credit hours of course work exclusive of doctoral research.
	0	At least 9 credit hours must be in course work designated for graduate students, 6 of which must be 600-level courses.
	0	3 credit hours of NFSC 688-Seminar in Nutrition and Food Science (no more than 1 credit hour per semester) are required, with one seminar (1 credit hour) focusing on the research proposal, one seminar on the dissertation results, and one seminar on a topic different from the dissertation.
	0	At least 3 credit hours of 600-level statistics above what is required for the master's degree must be taken. It will be up to the student's advisor and Graduate Advisory Committee to determine if additional statistics courses are needed.
		2 credit hours of NFSC 899-Doctoral Dissertation Research, including at least 1 redit hour of NFSC 899 in the semester intended to graduate.

2) Additional course requirements for each student are decided by the student's advisor and Graduate Advisory Committee. Supporting courses should provide the student with background work in relevant disciplines. Students who lack basic background courses in supporting areas will be required to take these courses at UMD.

Students whose area of emphasis is in Applied Nutrition will be required to take a set of core courses which include the following, if not taken previously:

☐ 3 graduate courses in statistics to cover basic statistics, multivariate and component (Example of courses include, BIOM 601, BIOM 602, 603, 621 c equivalent).	1 1
And, one of the following courses:	
 ☐ A sampling course that sensitizes the students to the analytical strategies the analysis of data collected using complex surveys designs (such as Multisamples, stratified and proportional sampling) ☐ A course that teaches students the principles of making questionnaires wabout to collect empirical data. ☐ An epidemiology course 	-stage cluster

Students whose area of emphasis is in <u>Food Science</u> are expected to complete three courses in their area of specialization which may be in food safety, food processing/technology, and food chemistry.

- 3) Attendance at the Nutrition and Food Science seminars (NFSC 688) each semester is required even if not taken for credit. Attendance at the annual Shorb lecture is also required. Attending the thesis/dissertation defenses of other students or other special departmental seminars is strongly recommended.
- 4) Each student is required to present a poster of his or her research progress at the Graduate Program in Nutrition and Food Science Research Day held yearly on the first Friday of May.
- 5) A minimum grade point average of 3.0 is required to maintain good standing and for graduation.
- 6) A residence of at least 2 semesters or their equivalent (4 semesters at half time) is required.

Composition of Graduate Advisory Committee

- 1) The Graduate Advisory Committee serves as the doctoral candidacy examining committee and the dissertation examining committee. Chaired by the student's advisor, the Graduate Advisory Committee is comprised of a minimum of five members.
- 2) Three of these committee member must be full members (tenured or tenure track) of UMD graduate faculty. Of these three, two must be members of the Graduate Program in Nutrition and Food Science. The third must be a representative of the Dean of the Graduate School. This individual must also be a full member of UMD graduate faculty, but from outside the Graduate Program in Nutrition and Food Science.
- 3) Each of the remaining committee member may be a full member of UMD graduate faculty, an adjunct member of UMD graduate faculty, or a "special member" of UMD graduate faculty. (A special member is someone outside UMD who is familiar with the student's program of study. A special member must have appropriate credentials and be appointed as a special member of UMD graduate faculty.)

- 4) Graduate Advisory Committee members must be approved by the Dean of the Graduate School, based on the recommendation of the Program Director and the student's advisor.
- 5) The form for the approval of the student's Graduate Advisory Committee members (Appendix C), *Nomination of Thesis or Dissertation Committee*, must be submitted to the Program Director at least <u>6 weeks</u> prior to the dissertation proposal defense and candidacy qualifying exam.
- 6) The policy of the Graduate School for any extensions will be strictly adhered to.

Advancement to Candidacy

A student must pass the candidacy qualifying exam (see below) in order to be a Ph.D. candidate. It is recommended that students have their initial dissertation proposal meeting within 2 years of entering the doctoral program. Students must be advanced to candidacy for the doctorate within 5 years of admission to the doctoral program and at least 6 months before the date on which the degree will be conferred. University of Maryland policy for time limitations for master's and doctoral degrees can be found at

http://apps.gradschool.umd.edu/catalog/academic_record.htm#13

Dissertation Proposal and Candidacy Qualifying Exam

- 1) Submission of a written dissertation proposal to the Graduate Advisory Committee is required at least 2 weeks before taking the candidacy qualifying exam. The format for the written proposal should follow that of a proposal for competitive external funding such as USDA, NIH or NSF. Students should check with the current Requests for Proposal (RFPs) announced by the agencies for detailed information. A sample format for the dissertation proposal is available in Appendix A.
- 2) The candidacy qualifying exam consists of two consecutive parts:
 - ♦ A comprehensive exam that includes questions on the student's core nutrition/food science-related knowledge. The exam may be oral or oral and written according to the requirements set by the academic advisor.
 - ◆ An oral presentation of the dissertation proposal to the Graduate Advisory Committee.
- 3) A second candidacy qualifying exam (in case of failure) requires the approval of the Program Director and the Dean of the Graduate School. If the student fails this second candidacy qualifying exam, or it is not permitted, the student's admission to the graduate program is terminated.
- 4) The Program Director will be notified in writing by the student's advisor about the results of the candidacy qualifying exam.

Dissertation Requirements

1) Each doctoral candidate is required to orally defend his/her doctoral dissertation as a requirement in partial fulfillment of the doctoral degree.

2) The written format of the dissertation is to conform to the university's *Electronic Thesis and Dissertation (ETD) Style Guide*. This manual contains the instructions for preparation of theses and dissertations and is available at www.gradschool.umd.edu. The completed dissertation should be submitted online.

Presentation and Publication

- 1) Doctoral students are expected to present their results to at least one national scientific meeting.
- 2) It is also recommended that doctoral students submit at least one research publication to a peer-reviewed journal prior to the oral defense of his/her doctoral dissertation.

Defense

- 1) The student must orally defend the completed dissertation before his/her Graduate Advisory Committee.
- 2) A draft of the dissertation must be submitted to the Graduate Advisory Committee at least 2 weeks prior to the intended date of defense. Two or more negative votes of the members of the committee on either the written dissertation or its defense constitute a failure of the candidate to meet the dissertation requirement. In cases of failure, it is required that the committee specify in detail and in writing to the Program Director, the Dean of the Graduate School, and the student the exact nature of the deficiencies in the dissertation and/or the oral performance that led to failure.
- 3) A second defense is permitted based on the committee's recommendation, which results in termination of the student's admitted status if it is failed.
- 4) After a successful dissertation defense, all members of the Graduate Advisory Committee must sign the committee report. If the student wishes to graduate in the same semester that he/she completes the defense, this signed report must be submitted to the Program Director no later than the deadline announced by the Graduate School.

Seminar Policies and Requirements

All students enrolled in the Graduate Program in Nutrition and Food Science are expected to attend NFSC 688-Seminar in Nutrition and Food Science to remain in "good standing," whether they register for it or not. NFSC 688 will be offered in the spring and potentially in the fall semester as well.

The grading method for NFSC 688 is an "S" (Satisfactory), "I" (Incomplete) or "F" (Failure). If a student presents a seminar that is not satisfactory, the student could receive an "I" and then repeat the seminar. If it is still not satisfactory, an "F" would be given.

M.S. Degree

2 credit hours of NFSC 688 are required. Only one seminar (1 credit hour) should focus on the student's thesis research results.

Ph.D. Degree

3 credit hours of NFSC 688 are required. One seminar (1 credit hour) will focus on the research proposal, and one seminar will focus on the dissertation research results. One seminar must be on a topic different from the dissertation.

ADVISING/MENTORING

- 1) Each student is assigned an advisor upon admission and is encouraged to meet with his/her advisor as soon as possible. The student and advisor are encouraged to explore mutual research interests and identify a research topic.
- 2) All students should be advised that the research process always takes longer than they initially anticipate and should plan accordingly.
- 3) Although there are a few specific requirements of the Graduate Program in Nutrition and Food Science, the program is intended to be flexible enough to accommodate many different areas of concentration in both course work and research. Consequently, each student's graduate experience will be tailored to best serve the intellectual and career goals of that student. This tailoring of the graduate program will be done in close consultation with the student's advisor. The student should meet/communicate with their Graduate Advisory Committee as frequently as necessary to discuss research results, exams, and final defense of the research. The form in Appendix D should be filed yearly by the student's advisor.

GRADUATE SCHOOL FORMS AND DEADLINES

It is the responsibility of the individual graduate student to ensure that he/she meets all the appropriate Graduate Program in Nutrition and Food Science and Graduate School deadlines. It is essential to check these deadlines at the beginning of the academic year.

Please refer to the Graduate School website (<u>www.gradschool.umd.edu</u>) for information on:

- Ø Graduate School deadlines
- Ø Graduate School policies and procedures
- Ø Graduate School academics/campus/finances/research/academic calendar information
- Ø Policies regarding degree time limits

Students who need assistance with a Graduate School form may visit www.gradschool.umd.edu/current_students/general_forms_for_graduate_students.html or contact the Student Programs Coordinator, located in Room 0112 Skinner Building, at (301) 405-4521.

All forms require the appropriate signatures from the Director of the Graduate Program in Nutrition and Food Science. Therefore, <u>forms should be submitted to the Program</u> Director and not directly to the Graduate School.

The Graduate Program in Nutrition and Food Science is responsible for maintaining an accurate graduate student file and must retain copies of all student forms.

The following forms must be completed to meet appropriate deadlines and adhere to the policies and procedures of the Graduate School:

- Ø IRB/IACUC Approval: Campus and federal requirements stipulate very clearly that the appropriate campus committees must approve any research project using humans or animals prior to the initiation of the research. This applies not only to research conducted on campus, but also to all research conducted under the auspices of UMD, that is, any research by UMD faculty, students, or staff at sites anywhere in the world. Compliance is mandatory; therefore, it is imperative that students discuss both department and university requirements and policies/procedures with their research advisor in order to get the appropriate approvals. For more information regarding the university's Institutional Review Board (IRB), students may call the IRB office at (301) 405-4212 or visit their website, www.umresearch.umd.edu/IRB. For more information regarding the Institutional Animal Care and Use Committee (IACUC), students may call the IACUC office at (301) 405-5037 or visit their website, www.umresearch.umd.edu/IACUC.
- **Ø** Approved Program Form for the Masters of Nutrition and Food Science Program must be filed by master's students.
- Ø Nomination of Thesis or Dissertation Committee Form must be submitted to the Program Director by master's students at least 6 weeks prior to the scheduled thesis proposal defense date. (Please note: "Special members" must be nominated by a student's committee chair. This requires a separate procedure and longer approval time.)
- Nomination of Thesis or Dissertation Committee Form must be submitted to the Program Director by doctoral students at least 6 weeks prior to the scheduled date of the candidacy qualifying exam. (Please note: "Special members" must be nominated by a student's committee chair. This requires a separate procedure and longer approval time.)
- Ø Application for Admission to Candidacy must be filed by doctoral students.
- **Ø** Report of Examining Committee Form must be added to each student's file after the completion of the thesis proposal defense (master's students) or candidacy qualifying exam (doctoral students), as well as after the final thesis or dissertation defense.

All students must also complete the online *Application for Graduation*, which is generally due by the 10th day of class of the semester of intended graduation. The *Application for Graduation* is available at www.testudo.umd.edu/candapp/.

APPENDICES

Appendix A: Suggested Format for Research Proposal

Note: The research proposal must be done in consultation with the student's advisor. All page numbers are approximate. Please double space (except for the references).

<u>Title page</u> (1 page)

Tentative title of research project

Student's name

Advisor and Graduate Advisory Committee members

<u>Introduction</u> (1 page)

Briefly state the situation that has led you to choose this area of research and some key findings that others have found. State your overall objective or the main goal of your project (but do not include methods).

Literature Review (5-10 pages)

Discuss the principal studies related to your project. Include headings for the various subtopics you discuss. If appropriate, consider including a graph, figure, or table to highlight key findings. Indicate how your study will build on what others have found. Include a 1-paragraph summary at the end of your literature review.

Research Question(s) (½ page)

What do you intend to learn or to find out as a result of the research that you will conduct? State in the form of a question or list several questions. (Optional: You can also state a hypothesis pertaining to what you think your research results will show).

Methods (2-5 pages)

Describe your study design, including what you intend to do, and how you will do it. For example, who will be the subjects? How will they be recruited? What surveys or assays will be used? How will you analyze your data?

Expected Results and Limitations (1 page)

List with bullets.

References (at least 1 page)

Single space each citation, but separate with a double space.

Attachments (optional)

If you have a draft of a survey instrument that you are developing, or other documents relevant to your project, include them as attachments.

Note: This proposal will become the foundation for the student's thesis or dissertation.

Appendix B

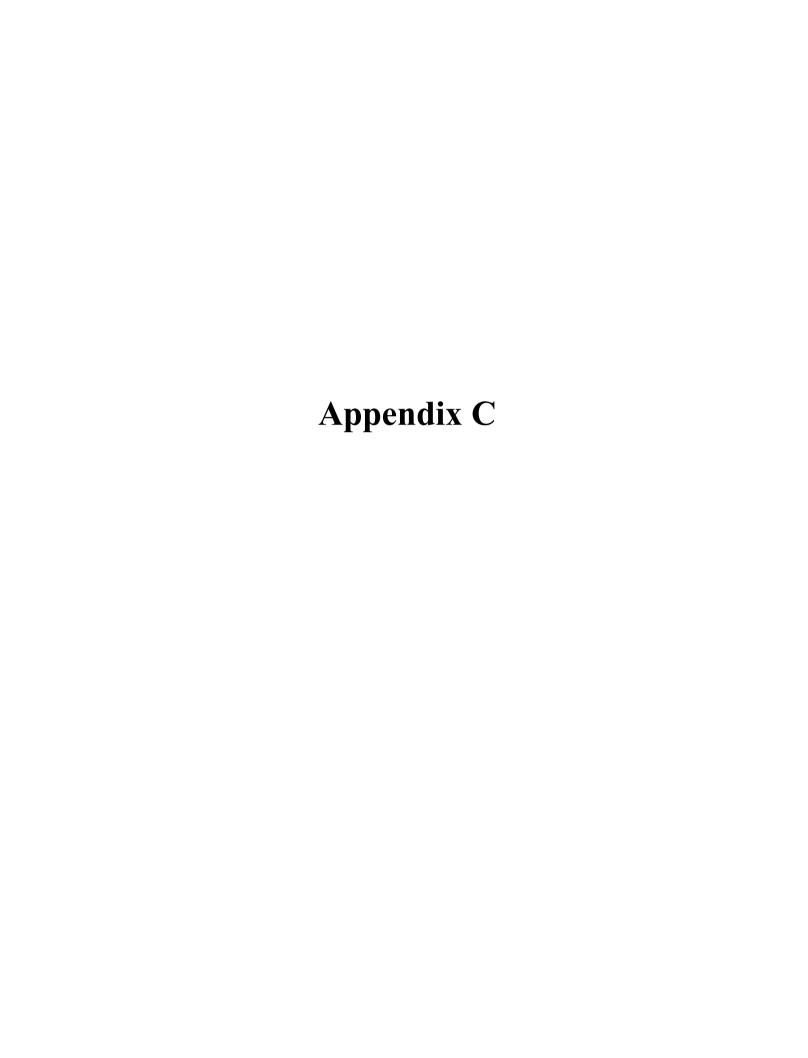
Graduate Program in Nutrition and Food Science

Dissertation Proposal Approval Form

(Internal Document)

Date, Time and Place of Committee Meeting:				
Title of Dissertation Proposal:				
Student:				
Date of proposal defense				
Committee members (names and signatures)				
1. MAJOR ADVISOR:				
2				
3				
4				
5				
6. Graduate school dean's representative				
Approval Director, Graduate Program in Nutrition and Food Science Date				

Comments:





UNIVERSITY OF MARYLAND, COLLEGE PARK Office of the Registrar



APPLICATION FOR ADMISSION TO CANDIDACY FOR THE DEGREE OF

Directions: Read carefully the specific requirements for the doctoral degree as set forth in the Graduate Catalog. Complete this form and have it endorsed by your advisor and the Director of the Graduate Program in which the degree is offered. This form must be received by The Office of the Registrar prior to the 25th of the month in order for the advancement to be effective the first day of the following month. All admission provisions must be met in order to advance to candidacy.

		Date:
Print Full Name (Last, First, Middle)		Student University ID Number(UID)
Address		Graduate Program Code
City, State, Zip		Degree Sought:
(Area Code) Telephone		Email Address
Date Comprehensive Examination Complet	_ ed	
necessary preliminary examinations or such	other substantial tests	at, in the opinion of the student's professor, he or she has undergone the s as the program may elect as prerequisites to candidacy, and has demonstra ully and to pursue the degree sought. Please print name and sign below, whe
Academic Advisor's Name (Print)		Email Address/Extension
Academic Advisor's Signature	Date	899/899 Section Number
Graduate Program Director's Signature	Date	Email Address/Extension
Registrar or Designee	Date	
Please return this form to:		

The Office of the Registrar 1113 Mitchell Building • University of Maryland College Park, Maryland 20742-5121 Email: registrar-graduate@umd.edu

Fax: 301-314-9568

Appendix D: Annual Review of Student Progress Toward M.S./Ph.D. Degree

To be submitted by March 31 of each academic year

	1
-	•

(Annual review page 2 of 2)	
6. Members of my committee are: Advisor and Chair	
7. Has your committee met this academic year?	YesNo
8. Has your committee approved your thesis/dissertation proposal? If Yes, date of approval	YesNo
9. Describe the progress that has been made in your thesis/dissertation	research over this academic year.
If there have been impediments to your progress, describe them. 10. What are your research plans for the coming academic year?	SITY OF LAND
11. Advisor's recommendation and comments:	
Signature of AdvisorDat	re