

School of Nutrition and Food Sciences

Louisiana State University and
Agricultural and Mechanical College

Graduate Student Handbook

A Supplement to the
LSU General Catalog and Graduate Bulletin
for Graduate Students
in the School of Nutrition and Food Sciences

Revised Spring 2022

GRADUATE PROGRAMS IN SCHOOL OF NUTRITION AND FOOD SCIENCES

Graduate students are responsible for reading and knowing the policies, rules, and regulations of the University and the School of Nutrition and Food Sciences found on the LSU website, the General Catalog, the Graduate Bulletin, and this School handbook. Each graduate student is responsible for following the LSU Code of Student Conduct, policies on Academic Integrity, safety rules, Policy Statements (PS) of LSU, and Presidential Memoranda (PM) of the LSU System. Additionally, students should know the policies and regulations of the LSU Agricultural Center (LSU AgCenter) when conducting their research.

It is especially important that graduate students follow the schedules and deadlines contained in the resources in the previous paragraph for their protection and for completion of their graduate degree in a satisfactory and timely manner. The information in this handbook is intended as a guide to supplement the information in other resources and will not answer all questions which may arise. Additional information can also be obtained by the student from the Major Professor, School of Nutrition and Food Sciences Graduate Coordinator, and the Graduate School, in that order of communication sequence.

Vacation Policy: Graduates students do not earn annual leave based on LSU policy statement PM-20. If graduate students must be absent from the worksite, they must get approval from their major professor and the SNFS Graduate Advisor (Dr. Erin McKinley).

The following definitions are some basic terminologies of graduate studies.

Graduate Faculty (Ph.D.): Graduate faculty members are either on a tenure track, have completed the tenure and promotion process or have been appointed to the graduate faculty because of having expertise. Graduate faculty will generally be assistant, associate, or full professors. Faculty members from other campuses, such as the LSU AgCenter, Pennington Biomedical Center or LSU Health Sciences, and other institutions require approval from the Graduate School for appointment to graduate faculty. A full graduate faculty member is one who has completed the tenure and promotion process and is an associate or full professor.

Graduate Program Committee: Members of the School of Nutrition and Food Sciences graduate faculty members who make recommendations to the Director and School graduate faculty members on policies, procedures, and standards for graduate education, graduate course and graduate programs in nutrition and food sciences.

Major Professor/Advisor: The chair of the Graduate Advisory Committee who bears the major responsibility in the day-to-day supervision of the student's research. This may be a full member or an associate member of the graduate faculty.

A student may be able to seek a major advisor from other schools and departments within LSU college of agriculture and other colleges and institutions within the LSU system. In that case, the advisor must have an adjunct professor appointment with the SNFS, and a co-advisor, who is a full member or an associate member of the graduate faculty, is required and must come from the SNFS.

Graduate Advisory Committee: The committee for each graduate student that advises on coursework and research and supervises the Program of Study and research project for a graduate student on behalf of the school. The Graduate Advisory Committee must have three faculty members for M.S. students and at least four for Ph.D. students, with at least two members from the School of Nutrition and Food Sciences of which at least one member must be a full member of the graduate faculty and one Dean's Representative. Any declared minors or areas of concentration require representation on the Graduate Advisory Committee, either from among the first three (M.S.) or four (Ph.D.) members or by additional appointments. Minors also require approval by the Head of the Minor Dept and Minor representative. Members of the Graduate Advisory Committee who are not either full or associate members of the graduate faculty must be appointed as affiliate graduate faculty members through LSU Graduate School approval procedures.

Examination Committee: The Examination Committee will ordinarily be the Graduate Advisory Committee, with one additional member for doctoral committees assigned by the Graduate School to conduct General Examinations and Final Examinations of Theses or Dissertations. Examinations are open to other members of the faculty but without vote.

Program of Study: A listing of the specific courses to be taken by the graduate student for their graduate degree. This is established by the student and approved by their Major Professor and Graduate Advisory Committee. Specific courses required of M.S. and Ph.D. students in nutrition and food sciences concentrations are in following sections. Additional courses required of a graduate student will depend on their academic background as well as their proposed research area and if there are declared minors or areas of concentration. The courses for each graduate student will be discussed and approved by the student's Major Professor and Graduate Advisory Committee. The student has the ultimate responsibility for the graduate academic program, so it is important for students to establish their committees as early as possible, preferably during the first semester of graduate work. In addition to these courses, students may also be required to take English courses as determined by the Graduate School and the English Department, usually in the first semester.

Dean's Representative: (Ph.D. only): The Dean of the Graduate School appoints an outside member to the Graduate Advisory Committee to ensure that the general and final examinations are conducted properly and, in a manner, consistent with maintaining program quality, and that students are questioned and treated fairly. The Dean's representative is a full voting member of the committee.

Practicing Dietetics in Louisiana: The State of Louisiana has a licensing law for the practice of dietetics. At this time only RDs (RDNs) can obtain a license to practice dietetics in Louisiana. Therefore, students need to refrain from providing nutrition/diet advice to individuals since students violating this law will be referred to the Licensing Board. In addition, since providing such advice is a violation of Louisiana law, this is a violation of the Code of Student Conduct. If you choose to violate this law, under no circumstances, should you identify yourself as being an LSU student, since LSU does not condone this practice. If you have any questions about this, please contact Dr. McKinley who is directing the Didactic Program.

School of Nutrition and Food Science Master of Science

The M.S. degree in Nutrition and Food Sciences requires a minimum of 30 hours of graduate credit (includes a minimum of 24 coursework hours and 6 hours of thesis research). At least 12 of the 24 hours of course work must be in courses numbered at or above the 7000 level. The 24 course work hours may include no more than 9 hours of NFS 7030 (Advanced Food and Nutrition Research). The 9 hours of NFS 7030 is the total a student can take while a graduate student in the School of Nutrition and Food Sciences; thus, if a student takes 9 hours at the M.S. level, they may not take this course at the doctoral level. Students without nutrition courses as an undergraduate student may be required to complete selected undergraduate courses which are a prerequisite for graduate study in nutrition. More than 30 hours may be needed to ensure a thorough understanding of the field and this determination is made by the Major Professor and/or the Graduate Advisory Committee. All M.S. graduate students are required to take the School of Nutrition and Food Sciences core courses:

<u>NFS Required Core Courses</u>	<u>Credit hours</u>
NFS 8000 (Thesis Research)	6
NFS 7022 (Current Controversies in Food and Nutrition)	3
NFS 7071 (Seminar in Nutrition and Food Sciences)	2
EXST 7004 (or EXST 7003 or EXST 7005*)	4
Total core course hours	15
<u>Concentration Courses or Electives</u>	<u>15</u>
Total	30

* EXST 7003 Statistical Inference I; EXST 7004 Experimental Statistics I (4); EXST 7005 Statistical Techniques I (4)

Requirements for Master of Science in Food Science and Technology Concentration

<u>Required Courses</u>	<u>Credit hours</u>
NFS core courses (pg. 4)	15

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience*, are required, and may be included in the 15 hours required for the Food Science and Technology Concentration:

NFS 4060 (Food Chemistry)	4
NFS 4075 (Food Preservation)	3
NFS 4050 (Food Composition and Analysis)	4
NFS 4162 (Food Microbiology)	<u>4</u>
	30

Depending on prior coursework and experience (often obtained through an undergraduate degree in Food Science and Technology), additional courses may be required to satisfy the 24-hour course requirement* for the M.S. degree. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Agricultural Sciences, Biological Sciences, and Experimental Statistics; however, they could also be taken from Business or other disciplines related to the student's course of study.

*Competency can be determined by asking the LSU instructor of the course to evaluate the transcript and syllabus of a course taken at another institution, by taking a test on the course materials developed and administered by the LSU instructor, or through review by the LSU instructor of other materials or evidence that the student has gained competency in the course. Students must obtain written verification from the LSU instructor that they have competency in the course material. Demonstration of competency will not result in credit hours for the course being given. Additional courses to receive the same number of credit hours of the core course must be taken.

Requirements for Master of Science in Food and Bioprocessing Systems Concentration

<u>Required Courses</u>	<u>Credit hours</u>
NFS core courses (pg. 4)	15

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience, are required, and may be included in the 15 hours required for Food and Bioprocessing Systems Concentration:

NFS 4060 (Food Chemistry)	4 OR
NFS 4075 (Food Preservation)	3 OR
NFS 4050 (Food Composition and Analysis)	4 OR
NFS 4162 (Food Microbiology)	<u>4 OR</u>
For a total of	7-8
NFS 4075--Food Engineering	3
Technology Courses 4000/7000 level*	<u>5-4</u>
	30

Depending on prior coursework and experience (often obtained through an undergraduate degree in Food Science and Technology), additional courses will be required to satisfy the 24-hour course requirement for the M.S. degree. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Food Science or Engineering.

*The Major Professor or the Graduate Advisory Committee will determine which technology courses will be acceptable to meet the requirement. The courses must be related to food and/or bioprocessing applications in systems. The examples of technology courses are ANSC 4094, Meat Technology; ANSC 4020, Dairy Foods Technology: Frozen and Cultured Dairy Products (4); CHEM 7010, Macromolecular Systems III (3); BE 4341, Biological Reactor Systems Design (3); BE 7350, Advanced Instrumentation and Control for Biological Systems (3); and ISDS 7150, Emerging Markets Supply Chain Management (3).

Requirements for Master of Science in Human Nutrition Concentration

<u>Required Courses</u>	<u>Credit hours</u>
NFS core courses (pg. 4)	15

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience, are required, and must be included in the 15 hours required for the Human Nutrition Concentration:

BIOL 4087 (Biochemistry)	4
NFS 7001 (Macronutrients)	3
NFS 7002 (Topics in Micronutrients)	2
1 NFS course*	2-4
Electives	<u>4-2</u>
Total	30

Depending on prior coursework and experience, additional courses will be required to satisfy the 24-hour course requirement for the M.S. degree. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Biological Sciences, Kinesiology, and Experimental Statistics; however, they could also be taken from Psychology, Sociology, or Business.

*NFS Nutrition and Food Science courses include: NFS 7006, Obesity Biology, Brain and Behavior (2); NFS 7007, Obesity Comorbidities and Treatments (2); NFS 7011, Current Advances in Food and Nutrition (1-4), NFS 7012, Food, Nutrition, and Health Promotion (3), NFS 7014, The Food Environment and Public Health (3); NFS 7021, Weight Management Principles and Practices (3).

Requirements for Master of Science in Molecular Nutrition Concentration

Required Courses

Credit hours

NFS core courses (pg. 4) 15

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience, are required, and may be included in the 15 hours required for the Molecular Nutrition Concentration:

BIOL 4093 & 4094 (Biochemistry)	6
NFS 7001 (Macronutrients)	3
NFS 7002 (Topics in Micronutrients)	2
NFS 7006 & 7007 (Obesity Biology, Brain and Behavior; and Obesity Comorbidities and Treatments)	<u>4</u>
Total	30

Depending on prior coursework and experience, additional courses will be required to satisfy the 24-hour course requirement for the M.S. degree*. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Biological Sciences, Kinesiology, and Experimental Statistics; however, they could also be taken from Psychology, Sociology, or Business.

*Other optional courses will be determined according to the student's interest within the proposed Molecular Nutrition concentration by the Major Professor in cooperation with the students' Graduate Advisory Committees. The types of courses might include courses in biology, biochemistry, physiology, immunology, etc. Other Nutrition courses include: NFS 7011, Current Advances in Food and Nutrition, (1-4); NFS 7012, Food, Nutrition, and Health Promotion (3); NFS 7014, The Food Environment and Public Health (3); and NFS 7021, Weight Management Principles and Practices (3).

School of Nutrition and Food Sciences Master's Degree Procedures:

1. Graduate Students will be evaluated each year by their Major Professor, the "Annual Graduate Evaluation Form" will be sent out first week in January due February 1st.
2. The Graduate Advisory Committee must be selected by the student and Major Professor during the student's first semester and a signed copy of "Academic Course Plan" must be signed by the Major Professor and School of Nutrition and Food Science Graduate Advisor (Dr. Erin McKinley) and turned into Administrative Program Specialist in charge of Student Services (Petrie Baker) 295 Knapp Hall.
3. Research
An oral or written (about five-pages) research proposal must be approved by the Graduate Advisory Committee within the first year the student begins the degree. The Major Professor will advise the graduate student on the proper format for the proposal. The proposal normally includes:
 - a. Justification
 - b. Objectives, hypotheses, and/or research questions
 - c. Review of literature
 - d. Methodology
 - e. Current ResultsGraduate students will meet with their Advisory Committee Annually.
4. A signed copy of the proposal approval sheet and course schedule must be turned into Administrative Program Specialist in charge of Student Services (Petrie Baker) 295 Knapp Hall.
5. Students are encouraged to submit one manuscript for publication and have one national presentation before graduation. For copyright and ethical matters see the LSU graduate schools "Thesis and Dissertation Guidelines."
6. Nutrition and Food Science Seminars – graduate students are encouraged to attend all departmental graduate, faculty, and invited speaker seminars.
7. Assist with teaching (TA 1) in an area of expertise and interest is encouraged for at least one semester at the discretion of the Major Professor after consultation with the Graduate Advisory Committee.
8. Minor in a related field is encouraged.
9. Final Examination is a closed-door defense of the graduate coursework and thesis by oral examination from the Graduate Advisory Committee. The final examination must be preceded by a public oral seminar on thesis research before the final examination can be administered. For the general exam, all graduate students should know all core course work taken for their concentration.

10. Expected time to complete the degree is from 1 ½ to 2 years with potential of additional semester of support, pending completion of milestones and recommendation of committee; however, maximum time allowed by the Graduate School is five years.

NSF Master's Degree Proposal and Thesis:

MS students should meet with their Major Professor to determine the members of their Advisory Committee within the first semester of program and to discuss courses required and fill-out the Academic Course Plan indicating the expected completion date (semester, year). Students must prepare a written or oral proposal of their research for approval by the Advisory committee within the first year. Laboratory areas required by the student should be identified and appropriate laboratory leaders contacted for requirements regarding protocols, supplies, and safety.

The Master's thesis should demonstrate capacity for research, originality of thought, and facility in organizing materials. It must be acceptable in subject matter and exhibit creditable literary workmanship. Inclusion of words, ideas, or data of other researchers must be properly acknowledged and referenced. The School of Nutrition and Food Sciences require all graduate students to include a Review of Literature in their thesis. It is the student's responsibility to know and follow proper citation methods to prevent actual or perceived plagiarism. The thesis style should be discussed and accepted by the student and their Major Professor and must meet Graduate School requirements. Graduating students are expected to attend Graduate School seminars and meetings on thesis format, submission, and approval.

Application for Master's Degree and Master's Final Examination:

Once graduate students have filled out the forms for graduation, they will make an appointment with Petrie to verify that committee members needing Administrative Approval have been approved. At that time, they will get a printout of courses they have taken while at LSU. Next, they will go to the faculty member responsible for verifying that all concentration requirements have been met. (The Concentration Faculty will fill out the "Verification of Graduate Concentration Form"). If you are except from taking courses, then you need the email from the faculty teaching the course showing your exception.

Concentration Faculty

Dr. Subramaniam Sathivel – Food Science and Technology Concentration

Dr. Subramaniam Sathivel – Food and Bioprocessing Systems Concentration

Dr. Mike Keenan - Human Nutrition Concentration and Molecular Nutrition Concentration

Then the student will go by Dr. McKinley's office (285 Knapp) so they can check that everything has been completed and they will sign off on their paperwork and the student will take it to Petrie who will email all forms to the Graduate school.

Early before each semester or summer term there is a deadline for submitting the "Application for Degree" to the Graduate School. When MS students intend to graduate during a

given semester, they should complete and submit their "Application for Degree" and "Request for Final Examination."

The student has the responsibility of scheduling the location, date and time when all committee members can attend the master's Final Examination. The examination should be preceded by a publicly announced School seminar on the thesis research. The Final Examination and seminar may not be scheduled when LSU is not in session. The "Request for Final Examination" form must be approved by the Major Professor and Department Head or Graduate Coordinator and submitted at least three weeks prior to the proposed examination date and by the current semester deadline if the student is a candidate for a degree (see the current "Academic Calendar" for pertinent dates/deadlines). Two originals of this form are forwarded to the Graduate School, one copy to each Examination Committee member and one copy to the Graduate Coordinator. The finished thesis should be distributed to the Examination Committee two weeks prior to the examination date.

The Master's Degree Final Examination is a comprehensive oral examination that will evaluate the thesis, the student's ability to understand, explain and defend the thesis as well as evaluate the student's broader knowledge of the major field (and minor field, if applicable). Outcome of the Final Examination, as well as acceptance of the thesis, rests with the Final Examination Committee. This committee is nominated by the chair of the student's major department and appointed by the dean of the Graduate School and will ordinarily be the faculty members who served as the student's thesis committee. The thesis may be accepted at this time but if revisions are recommended, the approval of the thesis will be delayed until those revisions are made. The Major Professor is responsible for providing two copies of the "Exam Results Form" to the Administrative Program Specialist in charge of Student Services (*Petrie Baker*) 295 *Knapp Hall*.

After the committee has approved the final version of the thesis, required copies must be submitted to and accepted by the Graduate School. One electronic copy must also be sent to the Major Professor, to each Graduate Advisory Committee member, and one electron copy sent to the Administrative Program Specialist in charge of Student Services (*Petrie Baker*) in the School of Nutrition and Food Sciences.

School of Nutrition and Food Science Doctor of Philosophy

Admission to the Ph.D. program in the School of Nutrition and Food Science requires approval by the School of Nutrition and Food Science Graduate Faculty members. To earn a Ph.D. in the School of Nutrition and Food Sciences, students are required to complete a least 54 hours past the B.S. or B.A. degree. Students who wish to switch from an M.S. program to a Ph.D. program without completing the M.S. requirements must get approval from their Major Professor and advisory committee and have been in the school for 2 semesters, completed 6 graduate courses with a GPA of 3.50. Individual Major Professors may have additional requirements. Graduate a PhD student must have a total of three hours of NFS 7071 prior to graduation; a maximum of two hours of seminar taken as part of the master's degree can be applied to the total. The total hours may include no more than 9 hours of NFS 7030 (Advanced Food and Nutrition Research). The 9 hours of NFS 7030 is the total a student can take while a graduate student in the School of Nutrition and Food Sciences; thus, if a student takes 9 hours at the M.S. level, they may not take this course at the doctoral level. Graduate students who apply to the doctoral program after completion of the M.S. at LSU must be approved by the School of Nutrition and Food Science Graduate Faculty after evaluation of credentials in the same process as outside applications for admission into the school graduate program are evaluated. All Ph. D. graduate students are required to take the School of Nutrition and Food Sciences core courses:

<u>NFS Required Core Courses</u>	<u>Credit hours</u>
NFS 7022 (Current Controversies in Food and Nutrition)*	3
NFS 7071 (Seminar in Nutrition and Food Sciences)*	3
EXST 7013, 7014, or 7015	4
NFS 9000 (Dissertation Research)	<u>9</u>
Total core course hours	19
<u>Concentration Courses or Electives</u>	<u>35</u>
	54

EXST 7013 Statistical Inference II; EXST 7014 Experimental Statistics II (4); EXST 7015 Statistical Techniques II (4)

* Students that have complete an MS degree in the School of Nutrition and Food Sciences do not have to retake NFS 7022 course but will have to take an additional 1 hr. of NFS 7071 in addition to the 2 credit hours taken during a MS degree, and additional 5 elective course hours.

We need to include a statement about elective courses (such as experimental statistics other than EXST 7013, 7014, 7015) taken more than 30 hrs can be transferred to a PhD degree. How and when to do that?

Requirements for Doctor of Philosophy in Food Science and Technology Concentration

Required Courses

Credit hours

NFS core courses (pg. 12) 19

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience, are required, and must be included in the 35 hours required for the Food Science and Technology Concentration:

Students must have credit in or demonstrated competency* in:

NFS 4060 (Food Chemistry)	4
NFS 4075 (Food Preservation)	3
NFS 4050 (Food Composition and Analysis)	4
NFS 4162 (Food Microbiology)	4
Elective Hours**	<u>20</u>
	54

Depending on prior coursework and experience, additional courses may be required to satisfy the 54-hour course requirement for the Ph.D. degree. Elective hours or additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Agricultural Sciences, Biological Sciences, and Experimental Statistics; however, they could also be taken from Business.

*Competency can be demonstrated through the same procedures as for M.S. students in the *Requirements for Master of Science in the Food Science* concentration section.

**If a student has credit or competency in any or all these courses, additional elective hours will need to be taken.

Requirements for Doctor of Philosophy in Food and Bioprocessing Concentration

<u>Required Courses</u>	<u>Credit hours</u>
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NFS core courses (pg. 12)	19
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The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience, are required, and must be included in the 35 hours required for the Food and Bioprocessing Concentration:

Students must have credit in or demonstrated competency* in:

NFS 4060 (Food Chemistry)	4 OR
NFS 4075 (Food Preservation)	3 OR
NFS 4050 (Food Composition and Analysis)	4 OR
NFS 4162 (Food Microbiology)	<u>4 OR</u> 7-8
NFS 4075 (Food Engineering)	3
Technology Courses (4000 or 7000 level) **	12
Elective hours	<u>13-12</u> 54

Depending on prior coursework and experience, additional courses will be required to satisfy the 54-hour requirement for the Ph.D. degree. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Biological Sciences, Experimental Statistics, or Engineering; however, they could also be taken from other departments, as appropriate to the student's career goals.

*Competency can be demonstrated through the same procedures as for M.S. students in the *Requirements for Master of Science in the Food Science* concentration section.

** The Major Professor or the student's Graduate Advisory Committee will determine which technology courses will be acceptable to meet the requirement. The courses must be related to food and or bioprocessing applications in systems. The examples of technology courses are ANSC 4094, Meat Technology; ANSC 4020, Dairy Foods Technology: Frozen and Cultured Dairy Products (4); CHEM 7010, Macromolecular Systems III (3); BE 4341, Biological Reactor Systems Design (3); BE 7350, Advanced Instrumentation and Control for Biological Systems (3); and ISDS 7150, Emerging Markets Supply Chain Management (3).

Requirements for Doctor of Philosophy in Human Nutrition Concentration

Students without nutrition courses as an undergraduate or master's student may be required to complete selected undergraduate courses which are a prerequisite for graduate study in nutrition. Other prerequisite courses, such as biochemistry, may also be required. The Major Professor and advisory committee will guide a student in course selections. The Major Professor and advisory committee may determine that coursework beyond the minimum credit hours is needed to round out a student's academic preparation.

<u>Required Courses</u>	<u>Credits</u>
NFS core courses (pg. 12)	19

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience*, are required, and must be included in the 35 hours required for this Human Nutrition Concentration:

BIOL 4087 (Biochemistry)	4
NFS 7001 (Macronutrients)	3
NFS 7002 (Topics in Micronutrients)	2
NFS or related courses**	16
Elective Hours	<u>10</u>
	54

Depending on prior coursework and experience, additional courses may be required to satisfy the 54-hour course requirement for the Ph.D. degree. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Biological Sciences, Kinesiology, and Experimental Statistics; however, they could also be taken from Psychology, Sociology, or Business.

*If the student enters the Ph.D. program with a master's in nutrition, substitutions for required courses will be considered by the student's Major Professor and advisory committee.

**NFS Nutrition courses include: NFS 7006, Obesity, Biology and Behavior (2); NFS 7007, Obesity Comorbidities and Treatments (2); NFS 7011, Current Advances in Food and Nutrition (1-4); NFS 7012, Food, Nutrition, and Health Promotion (3); NFS 7014, The Food and Environment and Public Health (3); NFS 7021, Weight Management Principles and Practices (3).

Requirements for Doctor of Philosophy in Molecular Nutrition Concentration

Students who did not emphasize nutrition or dietetics as an undergraduate or master's student may be required to complete selected undergraduate courses which are a prerequisite for graduate study in nutrition.

<u>Required Courses</u>	<u>Credits</u>
NFS core courses (pg. 12)	19

The following courses or demonstration to the student's Graduate Committee of proficiency in one or more of these courses from previous coursework and experience*, are required, and must be included in the 38 hours required for the Molecular Nutrition Concentration:

BIOL 4093 & 4094 (Biochemistry)	6
NFS 7001 (Macronutrients)	3
NFS 7002 (Topics in Micronutrients)	2
NFS 7006 & 7007 (Obesity, Biology and Behavior; and Obesity Comorbidities and Treatments)	4
NFS or related courses**	8
Elective Hours	<u>12</u>
	54

Depending on prior coursework and experience, additional courses may be required to satisfy the 54-hour course requirement for the Ph.D. degree. Additional courses required for each student's program of study will be determined by the Major Professor and the Graduate Committee. Courses would reflect the students' professional interests and are generally taken from Biological Sciences, Kinesiology, and Experimental Statistics; however, they could also be taken from Psychology, Sociology, or Business.

*If the student enters the Ph.D. program with a master's in nutrition, substitutions for required courses will be considered by the student's Major Professor and Graduate Advisory Committee.

** NFS Nutrition courses include: NFS 7011, Current Advances in Food and Nutrition (1-4); NFS 7012, Food, Nutrition, and Health Promotion (3), NFS 7014; The Food Environment and Public Health (3); and NFS 7021, Weight Management Principles and Practices (3).

School of Nutrition and Food Science Doctor of Philosophy Procedures:

1. Graduate Students will be evaluated each year by their Major Professor, the "Annual Graduate Evaluation Form" will be sent out first week in January due February 1st.
2. Graduate students on assistantships must maintain monthly time records that must be signed by the supervisor and graduate assistant, certifying the hours worked. These are the hours worked for your assistantship not on your research projects. The time sheets are turned into Administrative Program Specialist in charge of Student Services (Petrie Baker) 295 Knapp Hall the first day of every month.

3. The Graduate Advisory Committee must be selected by the student and Major Professor during the first semester and a signed copy of “Academic Course Plan” must be signed by the Major Professor and School of Nutrition and Food Science Graduate Advisor (Dr. Erin McKinley) and turned into Administrative Program Specialist in charge of Student Services (Petrie Baker) 295 Knapp Hall.
4. Research
An oral or written (about five-pages) research proposal must be approved by the graduate Advisory Committee by the first year. The Major Professor will advise the graduate student on the proper format for the proposal.
The proposal normally includes:
 - a. Justification
 - b. Objectives, hypotheses, and/or research questions
 - c. Review of literature
 - d. Methodology
 - e. Current ResultsGraduate students will meet with their Advisory Committee Annually.
5. A signed copy of the proposal approval sheet must be turned into Administrative Program Specialist in charge of Student Services (Petrie Baker) 295 Knapp Hall.
6. The proposed research must be given as an oral presentation at Graduate Seminar (1 h)
7. Publication suggestions are one manuscript accepted, one manuscript submitted, and two national presentations before graduation. For copyright and ethical matters see the LSU graduate schools “Thesis and Dissertation Guidelines.”
8. Nutrition and Food Science Seminars – graduate students are encouraged to attend all departmental graduate, faculty, and invited speaker seminars.
9. Assist with teaching (TA 1) in an area of expertise and interest is encouraged for at least one semester at the discretion of the Major Professor after consultation with the Graduate Advisory Committee.
10. A Minor in a related field is encouraged.
11. The Final Examination is a closed-door defense before the Doctoral Advisory Committee. A public oral seminar on the dissertation research must be presented before the dissertation defense.
12. Expected time to complete the degree is from 3 to 3 ½ years with potential of additional semester of support, pending completion of milestones and recommendation of committee; however, maximum time allowed by the Graduate School is seven years.

Time Limit and Residence Requirement:

The program for the doctoral degree must be completed within seven years from the time a student is classified as a doctoral student. This time limit may not be exceeded except by special permission of the Dean of the Graduate School. Also, at least three calendar months must elapse between the passing of the General Examination and the completion of all requirements for the doctoral degree.

Doctoral Degree Audit and Request for General Examination:

Students are encouraged to select elective courses that are at the 7000 level that will complement their research projects as well as satisfy Graduate School and the School of Nutrition and Food Science requirements. All courses must be approved in the Program of Study by the student's Graduate Advisory Committee. In addition to these courses, students may also be required to take English courses as determined by the Graduate School and the English Department, usually in the first semester of graduate enrollment these courses will not count toward course requirement.

The "Doctoral Degree Audit and Request for General Examination" form must be submitted from the Graduate Advisory Committee to the Graduate School for approval within the first three years. The Graduate School is very specific in how the "Doctoral Degree Audit and Request for General Examination" form is completed. Two originals of the form are forwarded to the Graduate school, one copy to each committee member and one copy to the Administrative Program Specialist in charge of Student Services *295 Knapp Hall*.

General Examination:

The General Examination is ordinarily the most rigorous test in the entire doctoral program. The examination must be comprehensive enough to demonstrate expert competence over broad segments of the major field and, if a minor is chosen, a high degree of familiarity with the content and current progress in that field. It will encompass all subject areas that compose the student's Program of Study as well as their proposed research project. All graduate students should know all core course work taken for their concentration. The General Examination is the occasion when committee members have both the opportunity and the obligation to require the student to display a firm and substantial grasp of nutrition and food sciences in a broad sense, and a sophisticated depth of understanding in those more limited areas of the specialization being pursued in nutrition and food science. As a test of successful performance, the committee should question whether the student has demonstrated a qualified knowledge of the field(s) to such a degree that the student will be recognized as a professional and an academic colleague.

A Ph.D. student becomes eligible to take the General Examination after demonstrating to the Graduate Advisory Committee adequate academic and professional aptitudes. This typically occurs when the course work proposed in the Program of Study has been completed. Students on probation will not be allowed to take the General Examination.

The student has the responsibility of scheduling the location, date and time when all committee members can attend. The examination may not be scheduled between semesters when the University is open. The "Request for General Examination" form must be submitted by the Major Professor and Department Head at least three weeks prior to the proposed examination date. Two originals of this form are forwarded to the Graduate school, one copy to each Examination Committee member and one copy to the Administrative Program Specialist in charge of Student Services, 295 Knapp Hall. The suggested General Examination Committee will be approved at the time the "Request for General Examination" is submitted to the Graduate School. The finished dissertation proposal and literature review should be distributed to the Examination Committee at this time (two weeks prior to the examination date).

It is the responsibility of the student's Major Professor and Graduate Advisory Committee to determine how best to conduct the General Examination for that student. The School of Nutrition and Food Science requires an oral examination. The General Examination must include evaluation of the student's proposed dissertation research project and the student's in-depth understanding of the research area as well as major/minor field(s).

Once graduate students have filled out the forms for general exam, they will make an appointment with Petrie to verify that committee members needing Administrative Approval have been approved. At that time, they will get a printout of courses they have taken while at LSU. Next, they will go to the faculty member responsible for verifying that all concentration requirements have been met. (The Concentration Faculty will fill out the "Verification of Graduate Concentration Form"). If you are except from taking courses, then you need the email from the faculty teaching the course showing your exception.

Concentration Faculty

Dr. Subramaniam Sathivel – Food Science and Technology Concentration

Dr. Subramaniam Sathivel – Food and Bioprocessing Systems Concentration

Dr. Mike Keenan – Human Nutrition Concentration and Molecular Nutrition Concentration

Then the student will go by Dr. McKinley's office (285 Knapp) so they can check that everything has been completed and they will sign off on their paperwork and the student will take it to Petrie who will email all forms to the Graduate school.

Ph.D. Dissertations:

The dissertation must be a contribution to knowledge in the major field of study. It must demonstrate that the student has a mastery of research techniques, ability to do original and independent research, and skill in formulating conclusions that in some way enlarge upon or modify accepted ideas.

The dissertation style/format should be discussed and accepted by the student and the Advisory Committee and must meet Graduate School requirements. "Guidelines for the Preparation of Theses and Dissertations" from the Graduate School will help to prevent a delay in Graduate School acceptance. The School of Nutrition and Food Sciences require all graduate students to include a Review of Literature in their dissertation. It is advisable to have the

Graduate School check the dissertation for format early in the writing process. Graduating students are expected to attend Graduate School seminars and meetings on dissertation format, submission, and approval. Inclusion of words, ideas or data of other researchers must be properly acknowledged and referenced. It is the student's responsibility to be aware of and follow proper citation methods.

Application for Degree and Final Examination:

Each semester or summer term there is a deadline for submitting the "Application for Degree" to the Graduate School. When Ph.D. students intend to graduate during a given semester, they should complete and submit their "Application for Degree" form, listing all course work that applies toward the degree. A copy of the "Application for Degree" must be turned into Administrative Program Specialist in charge of Student Services (Petrie Baker) 295 Knapp Hall.

The student has the responsibility for scheduling the location, date, and time when all committee members can attend. The Examination may be scheduled anytime the university is open for business. The "Request for Final Examination" form must be submitted by the Major Professor and Department Head at least three weeks prior to the proposed exam date and by the current semester deadline if the student is a candidate for a degree (see the current "Academic Calendar" for pertinent dates/deadlines). Two originals of this form are forwarded to the Graduate School, one copy to each Exam Committee member and one copy to the Administrative Program Specialist in charge of Student Services, 295 Knapp Hall. A departmental seminar on the dissertation research should be given before the Final Examination. The Administrative Program Specialist must receive an announcement of the Dissertation Seminar for posting and distribution. The completed dissertation should be distributed to the Examination Committee two weeks prior to the exam date.

Outcome of the Final Examination as well as acceptance of the dissertation rests with Graduate Advisory Committee. The dissertation may be accepted at this time but if revisions are recommended, the approval of the dissertation will be delayed until those revisions are made. The Major Professor is responsible for providing a copy of the "Exam Results Forms" to the Administrative Program Specialist.

After the committee has approved the final version of the dissertation, required copies must be submitted to and accepted by the Graduate School. One electron copy must also be sent to the Major Professor, Graduate Advisory Committee and one electron copy sent to the Administrative Program Specialist in charge of Student Services (*Petrie Baker*) in the School of Nutrition and Food Sciences.

Other Degree Requirements and Regulations

Graduate students are responsible for knowing the policies, rules, and regulations of the University and the School of Nutrition and Food Sciences found on the LSU website, the General Catalog, and the Graduate Bulletin that are not discussed in this departmental handbook. Each graduate student is responsible for following the LSU Code of Student Conduct, policies on Academic Integrity, safety rules, Policy Statements (PS) of LSU, and Presidential Memoranda (PM) of the LSU System.

School of Nutrition and Food Sciences Masters Student Progress Checklist

Annual Evaluation by Major Professor**

The Annual Graduate Evaluation Form will be sent the first week in January and is due by February 1st

- Year one
- Year two

Completion of Academic Course Work

- Year one
 - Semester one
 - Semester two
 - Semester three
- Year two
 - Semester one
 - Semester two
 - Semester three (if needed)

Required Paperwork

- School -level academic course plan** (approved 1st semester)
- Form Advisory Committee (within 1st year)
- Written/Oral Proposal (Proposal Cover Page**) (approved within 1st year)
- Written proposal and/or oral presentation to advisory committee
- Annual Committee meeting
 - Year 1
 - Year 2

Semester of Graduation

- Application for Master's Degree (refer to grad school deadlines)
- Request for Master's Final Examination (Thesis Defense) (refer to grad school deadlines)

Thesis Defense (Final Examination)

- Student to email Petrie Baker 2 weeks prior to defense to fill out graduate forms
- Major Professor (Chair) will bring the following forms to defense and give to Petrie Baker after completion
 - Defense results forms* (2)
 - Master Approval Sheets* if corrections are needed Major Professor (chair) will keep forms (2).
 - Assessment Forms* (1 from each committee member)

Expected time to completion with funding

1 ½ to 2-year completion, with potential of additional semester of support, pending completion of milestones and recommendation of committee

*Forms emailed to the Major Professor

** Forms must be returned to Administrative Program Specialist for Student Services (Petrie Baker, 295 Knapp Hall)

Students may submit graduate school forms directly to gradsvcs@lsu.edu, and copy Administrative Program Specialist in charge of Student Services (Petrie Baker)

Contact Celika Murphy (cmurphy@agcenter.lsu.edu) for scheduling a room for exams

Please refer all questions about this checklist to your major professor or the Graduate Program Advisor, Dr. Erin McKinley (emckinley1@lsu.edu).

**School of Nutrition and Food Sciences
PhD Student Progress Checklist**

Annual Evaluation by Major Professor**

The Annual Graduate Evaluation Form will be sent the first week in January and is due by February 1st

- Year one
- Year two
- Year three

Completion of Academic Course Work

Year one

- Semester one
- Semester two
- Semester three

Year two

- Semester one
- Semester two
- Semester three

Year three

- Semester one
- Semester two
- Semester three

Required Paperwork

- School -level academic course plan** (approved 1st semester)
- Form Advisory Committee (within 1st year)
- Written/Oral Proposal (Proposal Cover Page**) (approved within 1st year)
- Written proposal and/or oral presentation to advisory committee (within 1st year)

Annual Committee meeting

- Year 1
- Year 2
- Year 3

General Exam (Oral Exam)

- Doctoral Degree Audit and Request for General Examination** 3 weeks prior to general exam
- Schedule General Examination in the semester following completion of course work
- Student to email Petrie Baker 2 weeks prior to exam to fill out General exam forms
- Major Professor (Chair) will bring the following forms to General Exam
 - Exam results forms (2) (Chair will give forms to Petrie Baker afterwards)

Semester of Graduation

- Application for Doctoral Degree (refer to graduate school deadline)
- Request for Doctoral Final Examination (refer to graduate school deadline)
- Survey of Earned Doctoral degree

Dissertation Defense (Final Examination)

- Student to email Petrie Baker 2 weeks prior to defense to fill out graduate forms
- Major Professor (Chair) will bring the following forms to defense and give to Petrie Baker after completion
 - Defense results forms* (2)
 - Doctoral Approval Sheets* if corrections are needed Major Professor (chair) will keep forms (2)
 - Assessment Forms* (1 from each committee member)

Expected time to completion with funding

3 to 3 ½-year completion, with potential of additional semester of support, pending completion of milestones and recommendation of committee

*Forms emailed to the Major Professor

** Forms must be returned to Administrative Program Specialist for Student Services (Petrie Baker, 295 Knapp Hall)

Students may submit graduate school forms directly to gradsvcs@lsu.edu, and copy Administrative Program Specialist in charge of Student Services (Petrie Baker)

Contact Celika Murphy (cmurphy@agcenter.lsu.edu) for scheduling a room for exams

Please refer all questions about this checklist to your major professor or the Graduate Program Advisor, Dr. Erin McKinley (emckinley1@lsu.edu).