DOCTORAL PROGRAM IN NUTRITION & FOOD SCIENCE
http://www.clas.wayne.edu/nfs

Although every attempt has been made to present all relevant information, the regulations and policies of the WSU Graduate School published in the Graduate Bulletin and the Handbook for Doctoral Students and Advisers, supersede any information given below.

ADMISSION:

Admission to the doctoral program in the Department of Nutrition and Food Science is contingent upon admission to the Graduate School. Applicants to the program generally must have a Master’s degree in nutrition and/or food science or in a cognate science and have taken the combined verbal, analytic, and quantitative GRE test. A minimum honor point average of 3.0 is usually required for admission. Two letters of recommendation are required, and an interview will be conducted with applicants, if feasible. A statement of research interests and goals is also required of all applicants.

Students with a B.S. degree and exceptional academic credentials may apply directly to the Ph.D. program in Nutrition and Food Science.

CURRICULUM

The Ph.D. program requires a minimum of 90 graduate credits, distributed in the following manner: A total of 60 credits in coursework: At least 30 credits in Nutrition and Food Science; 22 of these credits are required of all students and 8 credits are selected to fill student needs and interests. Additional courses from other basic science departments including at least one 7000 level course in biochemistry and one graduate course in statistics; 8 credits must be completed in one department to form a minor. At least 30 credits of coursework must be at the “graduate only” level, i.e., courses numbered 7000 and above.

Required courses for the doctoral studies are listed below. Electives will be selected in consultation with the advisor. Transcripts of the applicants’ Master’s degree will be evaluated to determine which courses meet the Ph.D. course requirement (a maximum of 22 credits allowed).

NFS 6000 Nutritional Biochemistry 3 cr
NFS 6020 Nutrition and Gene Interactions 3
NFS 6030 Microbiological Safety of Food 3
NFS 7000 Metabolomics/Bioinformatics 3
NFS 7060 Research Problems in NFS 2
NFS 7140 Advance Lab Techniques in NFS 4
NFS 7230 Nutrition and Physical Performance 3
NFS 7991 First year lab rotation 1 - 2
NFS 7996 Research 6 - 20
NFS 7850 Seminar/Journal Club 2
(active participation as long as a student is in the graduate program)
Dissertation Research: NFS 9991 Doctoral Candidate Status 1. NFS 9992 Doctoral Candidate Status 2. NFS 9993 Doctoral Candidate Status 3. NFS 9994 Doctoral Candidate Status 4. Each of these provides 7.5 credits.
Students successfully completing the degree requirements will receive a Doctor of Philosophy with a major in Nutrition and Food Science and specialization in nutrition or food science. There is a seven year time limit to complete all the requirements for the Ph.D. degree.

**DOCTORAL ADVISOR, COMMITTEE AND PLAN OF WORK:**

Students entering the doctoral program in NFS are advised to meet regularly with the departmental Graduate Officer who acts as a temporary advisor to discuss plan of work, course selection, laboratory experience, and interaction with potential research advisors. To be allowed to continue in the program, students must identify a permanent graduate advisor, develop a Plan of work and identify a suitable research project within one year after admission. A Plan of Work should be submitted to the Graduate School before the student has completed 40 graduate credits. Within a semester of approval of the Plan of Work, students, in consultation with the advisor, will establish a permanent Advisory Committee composed of the graduate advisor and at least three faculty; at least two of these will be members of the NFS faculty representing the areas of nutrition and food science. Up to two outside faculty may sit on the committee.

**STUDENT EVALUATION:**

Performance will be evaluated at the end of each year. Students will make a presentation of their research activities (NFS 7996, Research) in the graduate seminar (NFS 7850) after completing the preliminary research. Meetings with the advisory committee and the student will be held as needed, but at least once a year. At such times, progress of the student will be assessed and a Progress Report form submitted to the NFS Graduate Officer. The graduate faculty will evaluate proficiency in laboratory skills as one component of a student’s progress. Should inadequate proficiency in the lab be determined, the department is under no obligation to retain the student in the doctoral program.

**SCREENING EXAM (PART 1 OF QUALIFYING EXAMINATION):**

All students who wish to obtain a PhD degree will be required to pass a screening exam within 7 months of their entry into the program. If unsuccessful, the student will have 2 weeks to be reexamined. If still unsuccessful, the student cannot pursue the PhD program in this Department.

The exam will be a written paper (maximum 4 hours time allowed) consisting of questions designed to test the student’s broad and all around understanding of nutrition and food science as well as their problem solving-skills. The format will be multiple-choice and short answers. The exam will be scheduled annually on the first Tuesday after Spring break (usually sometime in March).

The exam will be based solely on material from the following two textbooks:

  Authors: Sareen S. Gropper, Jack L. Smith and James L. Groff
  Thomson Wadsworth

  Author: Owen R. Fennema
  Marcel Dekker Inc.
For successful completion of the exam, the student’s performance must satisfy the graduate faculty members of the Department. If you have any questions please consult with the Departmental Graduate Officer.

QUALIFYING EXAMINATION:

The qualifying exam for advancement to PhD candidacy will consist of two parts, I and II. Part I will be administered by the NFS Graduate Committee and is described below. Part II will constitute the writing and defense of a PhD dissertation proposal and will be administered by the candidates’ chosen PhD dissertation committee.

Format of Part I

The Part I of the PhD qualifying exam will consist of a series of written Exams designed to test the DEPTH of knowledge of the candidate PLUS an oral examination.

Exam 1 Nutrition and Food Science Prerequisites (40% of Final mark).

This will be based on material that the candidate studied in NFS 6000, 6020, 6030, 7060, 7140, 7240 and the Statistics Course.

Exam 2 Major area of strength Specialization. (30% of Final Mark).

This will be based on the candidate’s chosen areas of expertise. The candidate can select 1 area from these:

- Nutritional Biochemistry and Metabolism
- Nutrient Gene Interactions and Molecular Biology
- Food Chemistry, Food Science, Food Safety

Exam 3 Minor area of strength Specialization. (20% of Final Mark).

The candidate can select 1 area from these (must be different from the Major):

- Nutritional Biochemistry and Metabolism
- Nutrient Gene Interactions and Molecular Biology
- Food Chemistry, Food Science, Food Safety

Exam 4 Oral Examination (10% of Final mark).

This will be on any material covered in Exams 1, 2 and 3 described above.

The candidate must satisfy the NFS Graduate Committee in order to proceed to the second part of the PhD qualifying Exam (dissertation proposal stage).

Format of Part II

This portion of the Qualifying Exam is the writing and oral defense of the student’s PhD research proposal to their PhD dissertation committee. This will be taken in consultation with the student’s PhD advisor and dissertation committee.
**THE DISSERTATION:**

The dissertation research (30 credits including NFS 9991, 9992, 9993 and 9994) provides the student with an opportunity to integrate and apply theory and methodologies of NFS and related areas to a problem focusing on either nutrition or food science. The research will be conducted in Department of NFS laboratories after approval by the student’s doctoral committee. Under special circumstances research will be conducted in another WSU laboratory after approval of the NFS Graduate Committee.

**ACADEMIC SCHOLARSHIP:**

Students will have to repeat a required NFS course with a grade below C. No more than two courses may be repeated during the student’s doctoral program. Students will not receive financial aid for repeated courses. If a student’s average falls below B (Honor Point of 3.0), a “hold” will be placed on future registration. To be removed from this status, the student must give evidence that scholarship has been brought to a satisfactory level. No more than two grades of “C” are allowed. All academic holds will be reviewed by the Graduate Committee prior to being removed. Decisions of whether or not to remove the hold will be based on the likelihood of improved academic performance, and will be granted one time only. Withdrawals from courses are discouraged and no more than one per calendar year will be allowed.

Academic work submitted by a graduate student for graduate credit is assumed to be of his/her own creation, and if found not to be so, will constitute cause for the student’s dismissal from the program.

**ASSISTANTSHIPS AND FELLOWSHIPS:**

**Teaching Assistantships.** Application for graduate teaching assistantships (GTAs) in the Department should be addressed to the Departmental Graduate Officer. Requests for fall term appointments should be received no later than March 1. Applications for winter term appointments, should be received no later than October 30. Assistantships are awarded to applicants having high scholarship and communication skills and showing great potential for professional achievement. Each assistantship carries a stipend for nine months plus benefits, and tuition (up to 10 credits/fall and winter semesters) is waived. Graduate Teaching Assistants give an average of twenty hours per week of service to the instructional program of the Department.

**Research Assistantships** A limited number of graduate research assistantships (GRAs) are available on a competitive basis. Information on application procedures can be obtained in the NFS office.

**Fellowships and tuition stipends.** WSU Graduate School offers a limited number of fellowships (Rumble) and tuition stipends. Selection is made on a competitive basis, and interested students should check with the Graduate School regarding application procedures and deadlines (http://www.gradschool.wayne.edu).

External support Students are strongly encouraged to investigate outside sources of fellowships for support of their graduate studies. The WSU Graduate School (577-8053) provides assistance in identifying and applying for these funds.

Up to date information on NFS Faculty Research Areas can be found by visiting http://www.clas.wayne.edu/unit-faculty.asp?UnitID=16