# University of the Philippines College of Home Economics Department of Food Science and Nutrition

#### **DOCTOR OF PHILOSOPHY (FOOD SCIENCE)**

#### **OBJECTIVES**

The Ph.D. program is designed to prepare men and women for positions of leadership in education and in the food research projects of the government and the food industry. This program allows for specialization in any one of three areas: food processing, food chemistry and food microbiology.

#### **ADMISSION REQUIREMENTS**

An applicant for admission to the Ph.D. program must have a bachelor's degree in food technology or allied fields.

The applicant must include the following:

- 1. A letter of application indicating, among other things, the applicant's purpose of pursuing a graduate degree and his specific fields of interest
- 2. Three copies of the official transcript of records from each college or university attended.
- 3. Two letters of recommendation from former major professors and/or employers, certifying the ability of the applicant to pursue graduate work.
- 4. A statement of English proficiency. This is required of students from schools in which English is not the medium of instruction.

Acceptance of an applicant is determined by the department chairman in consultation with the graduate faculty of Food Science, after careful and thorough consideration of the applicant's academic records, experience and personal qualifications.

Upon admission to the Ph.D. program, the student shall specify his area of concentration as well as 1 or 2 cognate fields related to Food Science. The department chairman assigns the student a program advisory committee, together with the student, shall plan a program of study based on the student's needs, interests and the requirements of the degree. The program advisory committee shall be composed of three members. The chairman being a full time faculty of the Food Science and Nutrition Department. At least one member shall come from the student's cognate field.

A student who lacks background knowledge in Food Science shall be required to take undergraduate courses to make up his deficiencies. The amount of addition course work shall determined by the student's program advisory committee.

#### ADVANCEMENT TO CANDIDACY

The student should take the qualifying examination within one semester after completion of 16 units of graduate Food Science courses with a weighted average of 1.75. A student working for the M.S. degree may apply for the qualifying examination provided his weighted average is 1.75. An M.S. degree holder is not exempted from the qualifying examination. The examination shall be given by the graduate faculty of Food Science. In case of failure, a re-examination should be take within one year. Only one re-examination shall be allowed.

#### **DEGREE REQUIREMENTS**

#### 1. Course Requirements

The minimum requirement for the Ph.D. degree is 60 units of course work, not including 12 units of thesis. The 60 units should include 22 units of required courses, and:

	<u>Minimum units</u>
FS courses in area of specialization	. 12
FS courses outside area of specialization	12
Cognate	9 per cognate field

Minimum unita

At least 12 units of the course should be Food Science course on the 300 level.

A maximum of 12 units of graduate courses taken in other accredited institutions may be accepted for credit provide that either one of these conditions is met:

- a. a grade of at least 1.75 or equivalent is obtained.
- b. a validating test was taken and passed in cases where the grade obtained was lower than 1.75 or equivalent.

An application for transfer of credits shall be filed with the Office of the Department Chairman upon admission to the program.

Only courses with grades of 2.5 or better can be given graduate credit. A weighted average of 1.75 or better is required for graduation. Computation of the weighted average shall include all subjects taken for graduate credit.

#### 2. Comprehensive Examination

A candidate for the Ph.D. degree is required to pass a written comprehensive examination upon completion f all requirements. The examination shall be given by an examining committee of five members made up of the members of the program advisory committee and other faculty members appointed by the department chairman. The chairman of the advisory committee shall also act as the chairman of the examining committee.

Should the student fail in the comprehensive examination the first time, he may be allowed to take another examination not later than one year after the first examination. Failure to pass the examination the second time disbar the student from obtaining the degree.

#### 3. Thesis

All procedures followed for the M.S. thesis, except for the composition of the thesis committee, shall be applicable. The thesis committee of five (5) members shall consist of the thesis adviser, the department chairman and members of the program advisory committee. If necessary, other members within or outside the university may be chosen to bring the membership of the committee to the required number.

#### 4. Language Requirement

The student shall pass a reading proficiency test in a foreign language prescribed by his program advisory committee. However, upon the approval of the program advisory committee, the student may substitute, in lieu of the foreign language requirement, a 3-unit course in statistics or any other course, which may be useful in the conduct of the student's thesis.

#### 5. Resident

A student may have been in residence for at least one (1) year immediately before the granting of the degree. He shall be allowed not more than seven (7) years to fulfill all the requirements for the degree.

### Ph.D. FOOD SCIENCE

## PROGRAM OF STUDY

Course Number and Title		Credit
A.	Required Courses	
В.	FS 215 (Advanced Food Analysis) FS 216 (Advanced Food Microbiology) FS 217 (Sterilization Processes) FS 218 (Dehydration and Freezing) FS 290 (Seminar in Food Science) FS 291 (Advanced Food Biochemistry) FS 299 (Methods of Research in Foods) HE 390 (Graduate Seminar, 1 units must be taken thrice).  Other FS Courses: 12 units in area of specialization and	3 3 3 2 3 2 3 2 2 2 22
	12 units in other areas.	
	Food Processing	
	FS 231 (Sensory Evaluation Methods). FS 234 (Tropical Fruits & Vegetable Processing). FS 238 (Development of Protein-Rich Products). FS 257 (Meat & Dairy Technology). FS 267 (Confectionery & Baking Technology) FS 317 (Food Packaging) FS 337 (Product Development). FS 357 (Food Plant Organization & Management).	2 3 2 3 2 3 3 3 21
	Food Chemistry	
	FS 311 (Food Enzymes) FS 321 (Food Lipids) FS 331 (Accessory Components of Foods) FS 341 (Colloidal Chemistry of Foods)	4 3 3 <u>3</u> 13
	Food Microbiology	
	FS 236 (Industrial Food Fermentation)	3 3 3 <u>3</u> 12

**C.** Cognates: At least 9 units per cognate field.