University of Illinois at Urbana-Champaign

# Master of Science in Food Science and Human Nutrition

## A Graduate Program of the College of Agricultural, Consumer and Environmental Sciences
## Department of Food Science and Human Nutrition

## A Guide for Students Earning their Degree at the Oak Brook, Illinois Campus

**Office of Continuing Education**
**Division of Academic Outreach**

**Dawn Bohn – May, 2009**

**TO:** **Prospective Master of Science in Food Science and Human Nutrition Degree Student**

**FROM:** **Dr. Faye Dong**
**Professor and Head, Food Science and Human Nutrition**

**DATE:** **May, 2009**

This guide describes the Academic Outreach MS degree program in Food Science and Human Nutrition offered by the **University of Illinois at Urbana-Champaign** to students in the Chicago area. The program requires 32 hours of challenging course work in addition to your current professional, family, and social responsibilities. This is not an easy undertaking. However, the experience, knowledge, and degree resulting from your participation in this program will be very worthwhile to you as a food science professional.

The Food Science and Human Nutrition program guide is informational in nature. It includes sections on courses offered, the grading system, student advising, graduate college admissions policies and enrollment procedures for courses, and other policies and procedures applicable to this program. Students are encouraged to go to The Graduate College Handbook of Policy and Requirements for Students, Faculty and Staff to view the *University of Illinois at Urbana-Champaign Handbook for Graduate Students* for official information on policies and procedures pertaining to graduate study. This MS in Food Science and Human Nutrition guide is only advisory in nature and should not be considered the final word.

Included also in the guide is a "Checklist for Coursework" form which should be completed by students. Students are urged to communicate frequently with their advisor throughout their degree program and prior to scheduling of the oral final examination.

Welcome to the program as you join other food science professionals in advanced training.

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The Department of Food Science and Human Nutrition, in conjunction with the Office of Continuing Education, offers a Master of Science in Food Science and Human Nutrition program in Oak Brook, IL. Classes are taught by the faculty of the University of Illinois at Urbana-Champaign's Department of Food Science and Human Nutrition who travel to Oak Brook, IL to offer this special program.

We hope that you will take advantage of this unique opportunity to obtain an advanced degree in the field of food science.

## DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION, UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

### Master of Science Program: Oak Brook, IL

The Department of Food Science and Human Nutrition (FSHN) offers a program in Oak Brook, IL leading to the Master of Science Degree in Food Science and Human Nutrition. Beyond minimum requirements in food science, the program focuses on fields such as biochemistry, chemistry, microbiology, nutrition, physiology, sanitation, and similar areas related to foods.

The M.S in Food Science and Human Nutrition program began in 1973 at the request of representatives of the food industry in Chicago. The first M.S. degree was granted in 1977 and presently over 200 people have earned M.S. degrees in Food Science and Human Nutrition through this off-campus program.

### Department of Food Science and Human Nutrition

FSHN is dedicated to programs of teaching and research on the technological aspects of food manufacturing between the farmer-producer and the consumer. The full-time staff of the Department consists of faculty members (professional appointments), academic professionals, research associates (post doctoral), and support staff. It has educational programs at the B.S., M.S., and Ph.D. levels. The graduate programs in FSHN consist of approximately 60 students on-campus and about 40 in the off-campus M.S. degree program in the Chicago area. For more information about FSHN, please visit our *web site* (fshn.illinois.edu).

### Academic Outreach Programs Office

On the Urbana campus, the Division of Academic Outreach works closely with FSHN to coordinate this degree program for off-campus students. In addition to FSHN and the College of Agricultural, Consumer and Environmental Sciences (ACES), the Division also works with the Colleges of Education, Engineering, Applied Life Studies, Liberal Arts and Sciences, and the Schools of Library and Information Science and Social Work to offer graduate credit courses and programs for adults throughout the state.

### Requirements for admission to the Master of Science program

For admission to the Graduate College, a student is required to have a baccalaureate degree. It is desirable, but not required, that this degree be related to physical, biological, agricultural or engineering sciences. Necessary background courses include physics, calculus, general chemistry, organic chemistry and microbiology. If your background is deficient in these areas of study, you will be expected to remedy these deficiencies through additional study. Correspondence courses, other distance education courses, or traditional classroom courses can be taken to satisfy prerequisite requirements. Credit earned to satisfy background requirements is not applied towards an advanced degree. The minimum grade-point average (GPA) required for admission to graduate study is 3.0 (A = 4.0) computed from the last 60 hours of undergraduate work. If your undergraduate GPA is less than 3.0, you may be admitted on *limited status*. Students on limited status must have a minimum graduate GPA of 3.00/4.00 by the end of the first

semester. Students must also submit a statement of purpose and three supporting letters of recommendation. These materials can be uploaded directly to the *ApplyYourself Application Network*.

All students whose native language is not English must take the Test of English as a Foreign Language (TOEFL) exam. Minimum score requirements can be found on the *Graduate College website*.

Deadlines for application for admission to the off-campus masters program in FSHN are as follow:

Fall – July 1
Spring – October 1
Summer – February 1

All materials must be submitted by this deadline in order to be considered for the respective semester.

**Grading System**

The University of Illinois awards letter grades on the A through F scale. For graduate students, only courses taken for graduate credit and graded on the A through F scale are included in the GPA calculation. Any repeated course is ignored when computing the GPA and the accumulated credits toward a degree. Credit for a course in which a student has received an F cannot be counted toward the degree; however, a zero is used in calculating the GPA. Grades are evaluated numerically on a four-point scale for the computation of GPA as follows:

| | | |
|---|---|---|
| A+ = 4.00 | A = 4.00 | A- = 3.67 |
| B+ = 3.33 | B = 3.00 | B- = 2.67 |
| C+ = 2.33 | C = 2.00 | C- = 1.67 |
| D+ = 1.33 | D = 1.00 | D- = 0.67 |
| no + for F | F = 0.00 | no - for F |

Other symbols used by the University grading system include:
**AB** Absent from the final examination without an acceptable excuse. Counts as a failure "F" in the GPA.
**CR** Credit. Used only if students have registered for a course under the Credit/No Credit Option with the approval of their major department. No letter grade is given and none appears on the transcript.
**EX** Temporarily excused. An extension granted by the instructor to a student who has not completed the final examination or other requirements for the course. An excused grade must be replaced by a letter grade no later than the reading day of the following term. Failure to complete work within this time automatically results in a grade of "F".
**NC** No Credit. Used only if students have registered for a course under the Credit/No Credit Option with the approval of their major department. No letter grade is given and none appears on the transcript.
**W** Officially withdrawn from a course. No grade is given.

The GPA includes all hours of course work with grades A through F and AB but not those with grades of CR, NC, and EX. The GPA does not include course work transferred from other universities, with the exception of the other UI campuses. Students in the FSHN M.S. program are required to maintain a GPA of at least 3.00/4.00. If your GPA falls below this minimum, you will be placed on *probation*, and will have one semester to raise your GPA to 3.00/4.00.

**Minimum Requirements for the Non-Thesis Off-Campus Masters Degree**

In summary:

1. Thirty-two (32) hours of course work at the 400- and 500-levels. Up to 8.0 hours of FSHN 598 may be used to fulfill this requirement. More than two hours of S/U graded sections of FSHN 598 require approval by the Graduate Program Committee.
2. A GPA of at least 3.0 (4.0=A) for all graded courses taken during the student's enrollment in the M.S. degree program.
3. Pass a final oral examination administered by three FSHN faculty members selected by the student, all of whom are members of the Graduate College.
4. Completion of all requirements within five years of initial registration in the Graduate College.

A minimum of **32 hours** of credit at the 400 or 500 level is required for the M.S. Degree in Food Science and Human Nutrition. You must take FSHN 461 (food processing I) and FSHN 462 (food processing II) at the Urbana-Champaign campus. FSHN 414 (food chemistry) and FSHN 471 (food and industrial microbiology) or FSHN 472 (sanitation in food processing) are also required. If FSHN 414, 461, 462, 471, or 472 were previously taken at the University of Illinois at Urbana-Champaign, or similar courses were taken at an accredited institution, the student may be eligible to forego taking those courses again. In addition, if FSHN 414, 461, 462, 471, or 472 were taken more than 5 years ago, consideration should be given to taking them again. **At least 12 hours of coursework must be at the 500 level**. Up to 8 hours of FSHN 598 (Independent Study) may be used. After completion of coursework, you must satisfactorily complete an oral examination covering your area of specialization (if you choose one) and the general field of food science.

Of the 32 hours of credit required for the M.S. degree, 20 hours must be from courses offered through the University of Illinois at Urbana-Champaign. **Up to 12 hours of transfer credit** will be considered for approval by the Department and the Graduate College. Please see the next section for more information regarding transfer credit.

***Transfer of Credit***

Per the Graduate College, courses taken as a non-degree student and courses taken at other accredited institutions may be transferable, subject to Departmental and Graduate College approval. All transfer credits are handled by *petition* to the Graduate College. The Graduate College will not consider transfer of courses for credit if those courses were completed more than five calendar years prior to the date of transfer. Only those courses with grades of A or B will be considered.

Letter grades of courses transferred from another accredited institution do not enter into the computation of the grade point average (GPA). Letter grades of courses taken as a non-degree student, or courses taken at the University of Illinois at Chicago or the University of Illinois at Springfield, are included in your GPA. If you have completed graduate work at a recognized institution, but have not applied these courses to an advanced degree at that institution, you may petition to obtain credit toward the M.S. degree. Note that 8 hours of UIUC degree credit must always be earned before any transfer of credit can be initiated.

Additional information regarding transferable coursework, from the Graduate College Handbook for Faculty, Staff, and Students:

> *Generally, a maximum of 12 semester hours of graduate work completed **outside** the University of Illinois at Urbana-Champaign **Graduate College** may be counted toward a graduate degree. Work completed outside the University of Illinois at Urbana-Champaign Graduate College that can be transferred includes these four types:*
>
> 1. *graduate level work taken as an undergraduate at the University of Illinois at Urbana-Champaign, but not used toward a degree,*
> 2. *graduate level work taken through Guided Individual Study at the University of Illinois at Urbana-Champaign,*
> 3. *graduate level work taken at another accredited institution, but not used toward a degree,*
> 4. *graduate level work done while enrolled as a non-degree student at the University of Illinois at Urbana-Champaign.*
>
> *Students who have earned up to 12 hours of graduate credit while enrolled as a non-degree student at the University of Illinois at Urbana-Champaign may petition those hours and up to 12 hours of graduate credit taken at another institution.*

Petition forms can be obtained at: http://www.grad.illinois.edu/gsas/petition_instruct.cfm. **Please send all petitions to the following address for departmental signatures:**

**Department of FSHN – Academic Outreach**
**206 Bevier Hall**
**905 S. Goodwin Ave.**
**Urbana, IL 61801**

The department will send the signed petitions to the Graduate College for final approval on your behalf.

**Advising**

Once admitted to the Food Science and Human Nutrition M.S. degree program, students will be assigned a temporary academic advisor from the Urbana campus. Prior to scheduling his/her oral examination, the student is required to ask a faculty member, typically one that has provided instruction in the program, to be the permanent advisor. If possible, the student is encouraged to communicate with his/her advisor on a frequent basis to plan the graduate program courses. This advisor will also serve as your oral examination committee chair.

**Oral Examination**

Upon completion of the course requirements, the degree candidate must satisfactorily pass a final oral examination administered by an advisory committee. This is a comprehensive oral examination concerning course work and any special projects. In addition to his/her advisor (who will act as the committee chair), the student will ask at least *two members* of the University of Illinois at Urbana-Champaign Graduate Faculty to serve on his/her committee. These members should be of various areas of specialization. Students must provide a copy of their transcript to each member of the committee prior to the examination. It is the student's responsibility to assure that they have met all degree requirements prior to the scheduling of their final exam. The advisory committee must reach a unanimous decision about the performance on the final examination. Its decision of "pass," "decision deferred," or "fail" is communicated to the Graduate College. Students should provide a copy of the M.S. Final Examination Certification to their committee. **It is suggested that students notify the Barb Vandeventer (see contact information list) of the date, time and location of their final oral exam.**

Deadlines for oral examination completion in order to be considered for specific graduation dates are as follows:

May – April 1
August – June 1
October – September 1
December – November 1

In order to receive a degree, a student must apply to be on the degree list for the appropriate graduation date. Until the tenth day of classes in a given semester, students may use the UI-Integrate Self-Service system to apply to be on the degree list. After the tenth day, students should complete an Application for Degree form and submit it to their graduate department office.

**Academic Integrity**

The University is committed to learning and research, and hence is committed to truth and accuracy. Integrity and intellectual honesty in scholarship and scientific investigation are, therefore, of paramount importance. Academic misconduct includes, but is not limited to:

1. Fabrication or falsification of data, including intentionally misleading, selective, or deliberately false reporting of credentials information.

2. Unacknowledged appropriation of the work of others, including plagiarism, the abuse of confidentiality with respect to unpublished materials, or misappropriation of physical materials.

3. Evasion of, or intentional failure to comply with research regulations or requirements, including but not limited to those applying to human subjects, laboratory animals, new drugs, radioactive materials, genetically altered organisms, and standards of safety.

Differences of interpretation or judgment, or honest error, do not constitute academic misconduct. Any member of the University community who becomes aware of an apparent instance of fraud or other academic misconduct relating to research or scholarship has the responsibility to try to resolve the issue, if possible, in consultation with those directly involved. If consultation is inappropriate or unsuccessful, it

is incumbent upon the individual to report the suspicious circumstances to the Department Head (or comparable administrator) of the unit concerned, or to the person appointed by the vice-chancellor for research as the research standards officer.

The unit executive officers, deans, other administrators involved, and the entire academic community are charged with protecting the academic careers of persons who have in good faith reported possible fraud or misconduct in scholarship or research.

Graduate students are expected to adhere to the highest standards of academic integrity in all areas of their training. Typical areas in which graduate students have concerns about infractions of academic integrity (called academic misconduct) include honesty in the classroom and laboratory, fabrication or falsification of data, plagiarism, lack of compliance with research regulations, allocation of credit, authorship of publications, and priority of discovery. Plagiarism is often a sensitive issue because all nations do not have the same legal restrictions on the unacknowledged use of the work of others. Questions on academic integrity should be directed to your advisor.

You are responsible for knowledge of, and compliance with, *University of Illinois policies on academic integrity*, which describes University policy and prescribes procedures for fact-finding and adjudication of allegations of academic misconduct. Although it focuses upon deterring and penalizing unacceptable conduct, its purpose is to promote compliance with the highest scholarly standards.

Background reading on issues of academic integrity is highly recommended to all graduate students and faculty advisors. Discussion of academic and research standards between graduate students and their advisors is strongly encouraged. A good starting point is *On Being a Scientist*, published by the National Academy of Science, National Academy Press, 2101 N.W. Constitution Ave., Washington, DC, 20418-0006

**Library**

The University of Illinois at Urbana-Champaign Academic Outreach Library provides students with convenient access to course library materials, so off-campus students will have similar access to library materials as that available to students on-campus. For more information about off-campus library services, students may call (217) 333-3773.

**Grievance Policy**

All members of the University community are expected to observe high standards of professional conduct and ethical behavior in graduate education (Guiding Standards for Faculty Supervision of Graduate Students). Although infrequent, in a large and heterogeneous scholarly community, problems may arise.

University policy strongly encourages all students who believe they have a grievance to use all appropriate avenues for informal resolution before initiating a formal grievance. Students in Food Science and Human Nutrition are encouraged to discuss the issue with the faculty or staff member with whom the problem has arisen. If a satisfactory solution is not forthcoming, the student should discuss the issue with his or her advisor, the director of graduate studies, or the head of the department, who shall attempt to find a resolution acceptable to both parties. The student may also consult with the Graduate College, the Office of the Dean of Students, the Ombuds Office, the Office of International Student Affairs, or other sources.

The formal procedures for grievances recognized by FSHN are outlined in the annual *FSHN graduate handbook*.

**Other Information**

Food Science and Human Nutrition graduate students are encouraged to participate in professional organizations, such as the Institute of Food Technologists, American Oil Chemists' Society, American Association of Cereal Chemists, and the American Chemical Society.

**Helpful Contact Information**

The Internet address for The University of Illinois at Urbana-Champaign is http://illinois.edu/

**Campus Directory Assistance: 217-333-1000**

**Division of Off-campus Programs:** 1-800-252-1360 ext. 3-3061 or 217-333-3061 (8 a.m. to noon and 1-5 p.m.). Other campus numbers can be accessed by requesting the last five digits of the phone number.

**Director of Student Services:** 217-244-4405 (Course Information, Graduate Application Requirements, Academic Advisement, Transfer Credit, Petitions)

**Oak Brook Masters in Food Science and Human Nutrition Program - Contact Information List**

| Name | Position/Service Provided | Phone Number and Email |
|---|---|---|
| Dr. Scott Martin | Director, Oak Brook MS Program | (217) 244-2877<br>semartn@illinois.edu |
| Dr. Dawn Bohn | Coordinator, Oak Brook MS Program | (217) 333-0881<br>dbrehart@illinois.edu |
| Terri Cummings | | (217) 244-4405<br>tcumming@illinois.edu |
| Barbara Vandeventer | | (217) 333-1324<br>vandvntr@illinois.edu |
| Heather Miller | Director, Academic Outreach Programs for ACES | 217-265-6568<br>hmiller1@illinois.edu |
| Linda Whitney | Regional Program Director at Oak Brook | 630-990-0740 |
| Linda Gotschall | Off-campus Registration | 217-333-3060<br>lgotscha@illinois.edu |
| Patricia Cardenas | Off-campus Librarian | 217-333-3773<br>pcardenas@illinois.edu |
| Cindy Lohr | Illini Union Bookstore, Off-campus Textbook Orders | 217-333-2050<br>lohr@illinois.edu |

| Oak Brook Instructors | | |
|---|---|---|
| Dr. William Artz | Associate Professor | 217-333-9337;<br>wartz@illinois.edu |
| Dr. Ion Baianu | Professor | 217-244-6630;<br>ibaianu@illinois.edu |
| Mr. Bradley Beam | Enology Specialist | 217-244-1042<br>bbeam@illinois.edu |
| Dr. Hans Blaschek | Professor and Assistant Dean | 217-333-8224;<br>blaschek@illinois.edu |
| Dr. Dawn Bohn | Visiting Assistant Professor | 217-333-0881<br>dbrehart@illinois.edu |
| Dr. Susan Brewer | Professor | 217-244-2867;<br>msbrewer@illinois.edu |
| Dr. Keith Cadwallader | Associate Professor | 217-333-5803;<br>cadwlldr@illinois.edu |
| Dr. Karen Chapman-Novakofski | Associate Professor | 217-244-2852;<br>kmc@illinois.edu |
| Dr. Bruce Chassy | Professor; Associate Exec. Dir., Biotech Cntr; Asst Dean | 217-244-7291;<br>bchassy@illinois.edu |
| Dr. Hong Chen | Assistant Professor | 217-244-6160<br>hongchen@illinois.edu |
| Dr. Elvira de Mejia | Assistant Professor | 217-244-3196<br>edemejia@illinois.edu |
| Dr. Nicki Engeseth | Associate Professor | 217-244-6788<br>engeseth@illinois.edu |
| Dr. John Erdman | Professor | 217-333-2527<br>jwerdman@illinois.edu |

| Oak Brook Instructors (continued) | | |
|---|---|---|
| **Name** | **Position/Service Provided** | **Phone Number and Email** |
| Dr. Hao Feng | Assistant Professor | 217-244-2571<br>haofeng@illinois.edu |
| Dr. Tim Garrow | Professor | 217-333-8455<br>tagarrow@illinois.edu |
| Dr. William Helferich | Professor | 217-244-5414<br>helferic@illinois.edu |
| Dr. Elizabeth Jeffery | Professor | 217-333-3820<br>ejeffery@illinois.edu |
| Dr. Soo-Yeun Lee | Assistant Professor | 217-244-9435<br>soolee@illinois.edu |
| Dr. Scott Martin | Professor | 217-244-2877<br>semartn@illinois.edu |
| Dr. Michael Miller | Assistant Professor | 217-244-1973<br>mille216@illinois.edu |
| Dr. Scott Morris | Associate Professor | 217-333-9330<br>smorris@illinois.edu |
| Dr. Manabu Nakamura | Associate Professor | 217-333-1267<br>mtnakamu@illinois.edu |
| Dr. Yuan-Xiang Pan | Assistant Professor | 217-333-3466<br>yxpan@illinois.edu |
| Dr. Robert Reber | Associate Professor | 217-244-2851<br>rjreber@illinois.edu |
| Dr. Shelly Schmidt | Professor | 217-333-6369<br>sjs@illinois.edu |
| Dr. Keith Singletary | Professor | 217-333-5549<br>kws@illinois.edu |
| Dr. Kelly Tappenden | Associate Professor | 217-333-2987<br>tappende@illinois.edu |

**Graduate Admissions Policies and Enrollment Procedures**

The following are a series of questions and answers intended to provide students with information on admission and enrollment policies.

**MUST A PERSON BE ADMITTED TO THE GRADUATE COLLEGE BEFORE ENROLLING IN AN ACADEMIC OUTREACH COURSE?**

No. Persons are permitted to enroll in a course as a non-degree student if course eligibility requirements are met and space is available. However, priority is given to Graduate College degree students.

**WHO IS ELIGIBLE TO ENROLL IN AN OFF-CAMPUS COURSE?**

Off-campus courses at the 100, 200, 300 and 400 levels are open to undergraduates who can meet course prerequisites. Off-campus courses at the 500 level are open only to persons who have a baccalaureate degree from an accredited institution of higher education and also meet course prerequisites.

Persons may also enroll in a course as a non-degree student by paying the regular tuition and fees. Enrollment as a non-degree student is noted on the permanent University record and is subject to space availability and instructor permission. However, no credit is awarded for such enrollment and the course may not be repeated for credit at a later time. Non-degree credit may be petitioned as transfer credit towards the M.S. degree. A maximum of 12 hours of non-degree credit is allowed. Note that 8 hours of University of Illinois at Urbana-Champaign degree credit must be earned before any transfer of credit can be initiated.

**DOES ENROLLMENT IN AN ACADEMIC OUTREACH COURSE AUTOMATICALLY INDICATE APPLICATION FOR ADMISSION TO THE GRADUATE COLLEGE?**

No. Enrollment in a course and application for admission to the Graduate College are two separate and distinct processes. Enrolling in an off-campus course requires that students fill out a course enrollment form at http://www.continuinged.uiuc.edu/outreach/ . Applying for admission to the Graduate College requires that the student: a) complete and submit the application for admission to the Graduate College and the application fee to the Office of Admissions and Records, b) submit all required supporting credentials to the proposed major department and c) be accepted for study by the graduate department. See the answer to the question, "Where can I obtain an application for admission or readmission to the Graduate College?" for further information about application for admission to the Graduate College.

## IF I PLAN TO PURSUE AN ADVANCED DEGREE IN WHOLE OR IN PART THROUGH ACADEMIC OUTREACH STUDY, WHEN SHOULD I APPLY TO THE GRADUATE COLLEGE FOR ADMISSION?

Persons who plan to pursue an advanced degree are strongly encouraged to apply for admission to the Graduate College during the semester in which they take their first course. Taking one or two University of Illinois at Urbana-Champaign graduate level courses prior to applying to the Graduate College may be advantageous for students, especially those with a low undergraduate GPA. Performing well in graduate-level courses increases the likelihood of admittance to the Graduate College.

## WHAT HAPPENS IF I WANT TO PURSUE AN ADVANCED DEGREE, BUT DID NOT APPLY FOR ADMISSION TO THE GRADUATE COLLEGE DURING THE SEMESTER IN WHICH I ENROLLED IN MY FIRST COURSE?

Persons who did not apply for admission to the Graduate College during the semester in which they took their first Academic Outreach course are automatically classified as non-degree students. This classification permits students to enroll in off-campus courses without being admitted to the Graduate College, as long as course eligibility requirements are met and space is available.

Persons who decide that they want to pursue an advanced degree after taking one or more courses as a non-degree student: a) first must apply for admission to the Graduate College and be admitted; and b) then after earning 8 hours of UIUC **degree** credit, the student may petition for acceptance a maximum of 12 hours of UIUC non-degree credit earned prior to admission. Students can also petition for transfer of credit from other universities. The Graduate College will not accept more than **12 hours** of non-degree credit and **12 hours** credit from another accredited institution.

Students should remember that a well-planned program is much more than the mere accumulation of credits. Therefore, persons interested in pursuing a degree should apply for admission early and have a program of study approved to insure that credits earned in courses are applicable to their programs.

## WHERE CAN I OBTAIN AN APPLICATION FOR ADMISSION OR READMISSION TO THE GRADUATE COLLEGE?

Forms and information on admission to the program may be obtained at:

http://www.grad.illinois.edu/admissions/

For those who choose to print and mail the application, please contact the graduate admissions office at gradadmissions@illinois.edu. In the email, please include the phrase “alternative application” in the subject line.

**WHAT IF I AM NOT ADMITTED BY THE GRADUATE COLLEGE AFTER ENROLLING IN AN OFF-CAMPUS COURSE?**

Persons not admitted to the Graduate College are permitted to enroll in off-campus courses for professional development purposes. Credit earned in these courses is not applicable to a degree unless the person is eventually admitted to the Graduate College, at which time a maximum of 12 hours of non-degree graduate-level UIUC courses can be applied toward a degree program (but only after successful petition of such courses to the Graduate College.)

**WHAT IS THE DIFFERENCE BETWEEN OFF-CAMPUS NON-DEGREE STATUS AND GRADUATE COLLEGE NON-DEGREE STATUS?**

Off-campus (Academic Outreach) non-degree status is automatically assigned to persons who complete and submit an Academic Outreach Courses Enrollment form. Anyone interested in pursuing a M.S. degree is encouraged to promptly apply for admission to the Graduate College. However, maintaining off-campus non-degree status is appropriate for students who have baccalaureate or advanced degrees and do not have further degree objectives but want professional development through advanced study.

Graduate College non-degree status is obtained through a formal application and payment of the nonrefundable application fee as described in the section on obtaining an application for admission to the Graduate College. Formally applying for Graduate College non-degree status is not appropriate for Academic Outreach students. The Graduate College non-degree option is generally used by persons on campus who are interested in professional development.

**ONCE I HAVE BEEN ADMITTED TO THE GRADUATE COLLEGE, MUST I ENROLL IN COURSES DURING EACH SUCCESSIVE SEMESTER IN ORDER TO MAINTAIN THAT STATUS?**

Yes and no. A person who is admitted to the graduate program must be enrolled in a course the semester that he/she is admitted. After that semester, he/she is not required to enroll in courses each successive semester in order to maintain eligibility to take such courses. There are time limits, though, for completing an advanced degree program. See the answer to the question, "What is the time limitation for pursuing an advanced degree?" for further information.

**ONCE I HAVE BEEN ADMITTED TO THE GRADUATE COLLEGE, MAY I COME TO THE URBANA-CHAMPAIGN CAMPUS TO ENROLL IN A COURSE?**

Yes. The easiest way to do this is to request that the course you want be listed as an Off-campus Community Credit course. Please contact Linda Gotschall at 217-333-3060 for more information.

**ARE THERE ON-CAMPUS REQUIREMENTS FOR ADVANCED DEGREES?**

FSHN requires that students be on campus only for FSHN 461 and FSHN 462 (unless the student has taken similar approved courses at another university).

**WHAT IS THE TIME LIMITATION FOR PURSUING AN ADVANCED DEGREE?**

All graduate students are subject to University requirements governing time limitations for pursuing an advanced degree. A candidate for a M.S. degree must complete all requirements for the degree within five calendar years after initial registration in the Graduate College. Extensions are permitted for extenuating circumstances.

**ONCE I HAVE COMPLETED AN ADVANCED DEGREE, MAY I CONTINUE TO ENROLL IN ACADEMIC OUTREACH COURSES?**

Yes. Persons who have completed a degree may continue to enroll in courses. These persons are assigned off-campus non-degree status.

**IF MY QUESTIONS ABOUT GRADUATE COLLEGE ADMISSIONS POLICIES AND ENROLLMENT PROCEDURES HAVE NOT BEEN ANSWERED IN THIS MATERIAL, WHERE CAN I OBTAIN ADDITIONAL INFORMATION?**

Contact the Academic Outreach Office at (217) 333-3061.

**Food Science and Human Nutrition Graduate Credit Courses Offered in Oak Brook, IL**

The following courses are offered on a rotational basis. Other courses from allied fields, such as Animal Science, Crop Sciences, and Agricultural Economics, are offered periodically. A class may be cancelled if registration falls below 10 students.

**FSHN 414** **Food Chemistry**
Examines the chemical aspects of major food components: water, carbohydrates, proteins, and lipids; properties of pigments, salts, and food dispersions. Prerequisite: Organic chemistry. 3 hours.

**FSHN 426** **Nutritional Biochemistry I**
Advanced human nutrition, with emphasis on the biochemical functions of nutrients essential for humans. Course emphasizes the role of essential nutrients in fuel metabolism, cell biology and biochemistry, gene expression and the synthesis of proteins, and generation of energy from metabolic fuels. Biochemistry and a course in nutrition suggested, but not required. 3 hours.

**FSHN 440** **Applied Statistical Methods**
Statistical methods involving relationships between populations and samples; collection, organization and analysis of data; and techniques in testing hypotheses with an introduction to regression, correlation, and analyses of variance limited to the completely randomized design and the randomized complete-block design. Prerequisite: Algebra. 4 hours.

**FSHN 460** **Food Processing Engineering**
Examines application of process engineering principles to the conversion of raw agricultural materials into finished food products. Topics include units and dimensions, materials balances, energy balances, thermodynamics, heat transfer, psychrometry, refrigeration and mechanical separations. Prerequisites: Physics and calculus. 3 hours.

**FSHN 469** **Package Engineering**
Cross-disciplinary study of the materials, machinery, research, design, techniques, environmental considerations, ethics and economics used in the global packaging industry with emphasis on the implementation of improved technologies for the problems unique to food packaging. An emphasis on the broad, systems-based nature of packaging will be maintained throughout the course. Prerequisite: chemistry, physics, calculus. 3 hours.

**FSHN 471** **Food and Industrial Microbiology**
Relationship of microorganisms to food manufacture and preservation, to industrial fermentation and processing, and to sanitation. Prerequisite: Organic chemistry and experimental microbiology. 3 hours.

**FSHN 472** **Sanitation in Food Processing**
Studies the principles of sanitation with emphasis on practical considerations as they apply to various food-processing industries; control of insects, rodents, and micro organisms; fundamentals of detergency; sanitation of water supplies; waste disposal methods; and government and public health regulations. Prerequisite: General chemistry and general microbiology. 2 hours.

**FSHN 517** **Fermented and Distilled Beverages**

The production technology, microbiology and chemistry (including the compositional chemistry, flavor chemistry, and chemistry of aging) of fermented and distilled beverages. Prerequisite: Graduate student status, or a food microbiology course and a food chemistry or biochemistry course. 2 hours.

**FSHN 518** **Chemistry of Lipids in Foods**
Detailed examination of the chemical and physical properties of lipids in foods. Prerequisite: food chemistry. 3 hours.

**FSHN 560** **Membrane Separations Technology**
Examines theory and applications of synthetic semipermeable membranes in reverse osmosis, ultrafiltration, microfiltration, and electrodialysis processes; thermodynamics of bioseparations, membrane chemistry and properties, process engineering, equipment design, fouling of membranes, and selected applications. Prerequisite: Food engineering. 2 hours.

**FSHN 573** **Advanced Food Microbiology**
Detailed examination of food and industrial processes dependent on fermentation and other microbiological activities. Prerequisites: Organic chemistry, calculus, general microbiology. 3 hours.

**FSHN 575** **Issues in Food Safety**
Covers risk/benefit assessment, food law, food borne disease, intentional and unintentional additives. 3 hours.

**FSHN 595** **Food Science Advanced Topics**
Detailed lectures and/or laboratory studies of selected topics in Food Science. Study may be specialized topics in anyone of the following fields: (A) Food Chemistry; (B) Food Microbiology; (C) Nutrition; (D) Food Processing/Engineering. 1 to 4 hours. Topics to be offered include:

*Advanced Topics in Sensory Science.* This course will deal with more in-depth and current topics in Sensory Science beyond the scope of an undergraduate introductory sensory course. The main course topics to be discussed are the physiological and psychological basis for sensory evaluation, Thurstonian Modeling in Difference Tests, multivariate statistical methods for sensory studies. Students will discuss and critique current research papers in sensory science and develop a proposal for sensory evaluation research. 3 hours.

*Flavor Chemistry and Analysis*. Discussion/demonstration of sensory and instrumental methods used in modern flavor research. 2 or 4hours.

*Food Enzymology*. Principles of enzymatic reactions, factors affecting enzyme activity, and use of enzymes in analytical and food processing applications. Discusses the influence of parameters such as concentration of substrate and enzyme, pH, temperature and inhibitors on enzymatic activity. Provides specificity and mechanism of action of enzymes in the context of their roles in foods by considering examples selected from enzymes of importance to food science. involve lectures and exercises commonly used in basic and applied research in food enzymology. Regular discussions of recent peer-reviewed papers dealing with major classes of enzymes. Prerequisite Biochemistry. 3 hours.

*Water Relations in Foods*. Advanced study of the behavior of water and solids in ingredient and real foods systems, specifically in relation to food safety and stability. Major topics covered include properties of water, water activity,, water mobility, and solids mobility (e.g., the glass transition). Practical techniques to measure these parameters, including sorption isotherms, nuclear magnetic resonance spectroscopy and imaging, and differential scanning calorimetry, are discussed in detail. 4 hours.

**FSHN 598 Advanced Special Problems**
Supervised research on special problems in Food Science. 1 to 8 hours. Project must be approved by topic advisor prior to the beginning of the semester.

Special arrangements are made for FSHN 461 and FSHN 462. These are presented on an accelerated schedule (i.e., all day Friday and Saturday sessions for five weekends). Most of the lectures and laboratories are offered in Urbana, IL. Unless similar approved courses have been taken, FSHN 461 and FSHN 462 are required for students in the graduate program.

**FSHN 461 Food Processing, I.**
Principles, unit operations, and applications of food preservation and processing by high temperature, refrigeration, and freezing processes; includes heat transfer, kinetics, chemical and microbial changes in food as a result of processing; lecture and laboratory. Prerequisite: Food chemistry, microbiology and food engineering. 3 hours.

**FSHN 462 Food Processing, II.**
Principles and applications of food preservation and processing including evaporation, dehydration, freeze-concentration, membrane processing, extrusion and water activity control; lectures, laboratories. Prerequisite: Food chemistry, microbiology and food engineering 3 hours.

**CHECKLIST FOR COURSEWORK FOR OFF-CAMPUS M.S. DEGREE IN FOOD SCIENCE AND HUMAN NUTRITION**

As you progress through your coursework, please use this checklist as a reference. As you approach fulfillment of the MS requirements, this checklist will serve as an assessment tool in determining that you have met the requirements of the program. The Department of FSHN expects M.S. students in Food Science and Human Nutrition to be proficient in the general areas of Food Chemistry, Food Microbiology, and Food Processing. Students should take courses from all 3 areas. A minimum of 32 hours must be earned, of which 12 hours must be at the 500 level.

**PLEASE COMPLETE AND RETURN THIS CHECKLIST TO 260 BEVIER HALL, 905 SOUTH GOODWIN AVENUE, URBANA, IL 61801 AS YOU PREPARE FOR DEGREE COMPLETION. (Refer to the Graduation Preparation Tips for appropriate submission timing.)**

Student's name _____Date_____

Undergraduate degree and institution _____

Phone (H)_____(W)_____

E-mail _____

| **Emphasis Area** | **UIUC courses taken to be applied toward the MS degree*** | **Other institution courses to be applied to MS degree (Provide institution name, course title and number; attach syllabus)** | **Semester completed** | **Hours earned/ grade earned** |
|---|---|---|---|---|
| **Food Chemistry** | □ FSHN 414 (3 hr) | | | |
| | □ Other _____ | | | |
| **Food Microbiology** | □ FSHN 471 (3 hr) or | | | |
| | □ FSHN 472 (2 hr) or | | | |
| | □ FSHN 573 (3 hr) | | | |
| | □ Other _____ | | | |
| **Food Processing** | □ FSHN 461 (3 hr) and | | | |
| | □ FSHN 462 (3 hr) | | | |
| | □ Other _____ | | | |
| **Other Courses** | □ FSHN 598 | | | |
| | □ Other _____ | | | |
| | □ Other _____ | | | |
| | □ Other _____ | | | |

| | | | |
|---|---|---|---|
| TOTAL 400 LEVEL UNITS | | | |
| TOTAL 500 LEVEL UNITS | | (min. -12 hrs) | |
| TOTAL UNITS | | (min. -32 hrs) | |

*Listing of courses does not mean that they are required but does mean that they are offered on a periodic basis and that they fulfill emphasis area goals.

I have petitioned that all of my non-degree coursework be counted towards my degree.

I have petitioned that all of my courses taken more than five years before the semester I plan to graduate be counted towards my degree.

Student Signature_____ Advisor Signature_____

**M.S. Final Examination Certification**

TO: Head, Department of Food Science and Human Nutrition

_____ has satisfactorily

passed the examination for the M.S. degree in Food Science and Human Nutrition.

Thesis _____

Non-thesis _____

_____
Chairperson, Examination Committee

_____
Member

_____
Member

_____
Date