The Study of Nutrition
at the
University of Massachusetts

A Guide for Undergraduate Students

The Department of Nutrition
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Introduction to the Field of Nutrition

What is Nutrition?

Nutrition is the science that focuses upon the nutrients contained in foods; their actions, interactions, and balance in relation to health and disease; and the processes by which an individual ingests, digests, absorbs, transports, utilizes and excretes nutrients. In addition, the study of nutrition is concerned with the social, economical, cultural, and psychological implications of food and eating.

If you want a career that is exciting, challenging, and allows you to succeed, excel, and feel good about what you do, then consider the field of nutrition. Nutrition is a vital, growing field open to creativity and opportunity—and the possibilities are endless.

Opportunities in Nutrition

If you enjoy working with people, have an interest in science, food and health, and are motivated to work independently and as a team, you will enjoy a career as a nutritionist/dietitian.

Nutrition professionals work in a variety of settings, including health care, public health, education, research, sales, marketing, and public relations. They also work in government, restaurant management, fitness, food companies, and private practice. Nutritionists/dietitians may also be involved in lab or community research, and in teaching nutrition courses either in the community, adult education, or public schools. The list of job possibilities continues, with opportunities in international organizations, the media, and communication agencies. The possibilities are endless; the direction you take, and how far you take them, are your choices.

Examples of specific employment opportunities include:

- Clinical dietitian in a health care setting, including acute and long term care*
- Extension nutrition educators, EFNEP
- Hospital diet aides, diet technicians
- Nutritionists for public health programs such as WIC (Women, Infants, and Children)
- Head Start and elderly feeding programs
- School food service director
- Nutrition counselors in commercial weight loss programs
- Nutritionists in health clubs, fitness centers, and sports organizations
- Sales associates in the pharmaceutical, supplement, food manufacturing, and food service equipment industries
- Authors of books, magazine articles, and nutrition education material
- Educator, such as a curriculum resource person, professor, high school science teacher
- Research
- Public health program planner/evaluator
An Entry into Other Health-Related Fields

Nutrition graduates go on to pursue diverse occupations allied to nutrition. For these, nutrition is excellent preparation for further study in health. Graduates from our program have become:

- Physicians
- Dentists
- Nurses
- Nurse practitioners
- Physician assistants
- Chiropractors
- Pharmacists

Listed below are some of the course requirements for these graduate programs that mesh well with an undergraduate degree in nutrition. Check with programs you are interested in for a full list of their specific requirements. Students interested in a post-graduate degree should consult with advisers in the pre-med, nursing, or education programs, if applicable.

**Nursing (Accelerated BSN).** Average 12- to 18-month program:
- Microbiology (3-4 credits)
- Chemistry (3-4 credits)
- Anatomy and Physiology (6 credits)
- Psychology (3 credits)
- Statistics (3 credits)

For more information about the second bachelor’s degree in nursing option at UMass, go to umass.edu/nursing/programs/pro_ug_second_bach/2ndBach_Index.html.

**Physician Assistant.** Average 26-month program:
- Biology (3-6 credits)
- Anatomy and Physiology (8 credits)
- General Chemistry (4 credits)
- Organic Chemistry (4 credits)
- Microbiology (4 credits)
- Statistics (3 credits)
**Physician.** Average 4-year program:

- Biology (8 credits)
- Chemistry/Organic Chemistry (8 credits)
- Physics (6-8 credits)
- Calculus (6 credits)

**Health/Science Teacher in Elementary or Secondary Education.** To prepare to become a science teacher in middle or high school, you can obtain a Bachelor’s of Science degree in nutrition. A degree in nutrition is a good foundation for teaching general science and chemistry at the middle or high school level. For more information, go to umass.edu/education/academics/tecs/step.shtml.

**Dietetic Technician, Registered (DTR).** Individuals who have completed both a baccalaureate degree and a Didactic Program in Dietetics (DPD) will be able to take the registration examination for dietetic technicians without meeting additional academic or supervised practice requirements. For more information, go to cdrnet.org/programdirector/NewPathwayIII.cfm.

**Job Outlook**

According to the United States Department of Labor, employment of dietitians and nutritionists is expected to increase nine percent during 2008-2018, about as fast as the average for all occupations. Job growth will result from an increasing emphasis on disease prevention through improved dietary habits. A growing and aging population will boost demand for nutritional counseling and treatment in hospitals, residential care facilities, schools, prisons, community health programs, and home health care agencies. Public interest in nutrition and increased emphasis on health education and prudent lifestyles also will spur demand, especially in food service management.

In addition to employment growth, job openings will result from the need to replace experienced workers who retire or leave the occupation for other reasons. Overall, job opportunities will be good for dietitians and nutritionists, particularly for licensed professionals and registered dietitians. Job opportunities should be particularly good in outpatient care facilities, offices of physicians, and food service management.

**Advancement.** Experienced dietitians may advance to management positions, such as assistant director, associate director, or director of a dietetic department, or may become self employed. Some dietitians specialize in areas such as renal, diabetic, cardiovascular, or pediatric dietetics. The American Dietetic Association offers advanced certifications in certain areas of dietetics practice. A master’s degree can help some dietitians to advance their careers, particularly in career paths related to research, advanced clinical positions, or public health.
Earnings. According to the United States Department of Labor, the median annual wages of dietitians and nutritionists were $53,250 in May 2010, with 90% of professionals earning more than $33,000 and 10% earning more than $75,000. The middle 50% earned between $42,000 and $64,000. For more information, go to bls.gov/oes/current/oes291031.htm.

According to the American Dietetic Association, median annualized wages for registered dietitians varied by practice area as follows: $60,008 in consultation and business, $64,002 in food and nutrition management, $66,001 in education and research, $52,000 in clinical nutrition/ambulatory care, $53,997 in clinical nutrition/long-term care, $48,006 in community nutrition, and $48,984 in clinical nutrition/acute care. Salaries also vary by years in practice, education level, and geographic region. For more information, go to eatright.org.

Nutritionist or Dietitian?

The two words “nutritionist” and “dietitian” are sometimes used interchangeably. “Nutritionist” refers to an individual trained in the science of nutrition. It is a term that is most commonly applied to professionals in public health or community positions involving nutrition education, or to those in research positions. A “dietitian,” on the other hand, is often based in a hospital or other institution where his/her primary responsibility may be recommending nutritional interventions and providing medical nutrition therapy to patients. Dietitians may also play a role in managing food service operations and educating allied health professionals or food service staff about nutrition. Dietitians have a degree in nutrition, as well as specialized training. Both terms (nutritionist and dietitian) are frequently misused by the public. They both should apply only to individuals who have completed a prescribed curriculum in nutrition.

Credentialing

The registered dietitian (RD) credential is awarded by the Accreditation Council of Education in Nutrition and Dietetics (ACEND) to those who pass an exam after completing specific academic coursework and a supervised dietetic internship. This certification is different from the statutory certification regulated by some states and discussed in the “Licensure” section below. To maintain RD status, dietitians must complete at least 75 credit hours in approved continuing education every five years.

Licensure

The Massachusetts Legislature voted to establish licensure of nutritionists and dietitians in 1999. A person is not able to legally call themselves a “licensed nutritionist” or “licensed dietitian” without fulfilling certain educational and experience requirements. To become licensed, a person must satisfy all of the following criteria:

1. Complete a B.S. degree in nutrition.
2. Complete a 1200-hour dietetic internship or three years of post-B.S. paid work experience.
3. Receive a passing grade on the RD exam or other test approved by the licensure board.

Of the 48 states and jurisdictions with laws governing dietetics, 35 require licensure, 12 require statutory certification, and one requires registration. Requirements vary by state. As a result, interested candidates should determine the requirements of the state in which they want to work before sitting for any exam.

States that require statutory certification limit the use of occupational titles (such as dietitian or nutritionist) to people who meet certain educational requirements. Massachusetts has voluntary licensure. This means individuals do not need to be licensed to call themselves a nutritionist. However, most positions will require licensure or RD certification. The term “Licensed Dietitian/Nutritionist” (LDN) is protected. LDNs or RDs can bill insurance companies for medical nutrition therapy. For more information about becoming an LDN in the state of Massachusetts, please contact the Massachusetts Division of Professional Licensure, 1000 Washington Street, Suite 710, Boston, 617-727-9925 or go to mass.gov/dpl. (Click on “Division of Professional Licensure Boards” and then “Dietitians and Nutritionists.”)

Sources of Additional Information

- For a list of academic programs, scholarships, and other information about dietetics: The Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995 or go to eatright.org.
- For information on the registered dietitian exam and other specialty credentials: Accreditation Council of Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995 or go to www.cdrnet.org.
- For information on licensure in the state of Massachusetts: The Board of Registration of Dietitians and Nutritionists, 616-727-9925. Email erin.m.lebel@state.ma.us or go to mass.gov/dpl. (Click on “Division of Professional Licensure Boards” and then “Dietitians and Nutritionists.”)
- For more information about the Nutrition Department at UMass: Go to our website at umass.edu/sphhs/nutrition.
The Undergraduate Program in Nutrition

Mission Statement of the Nutrition Department

The mission of the Nutrition Department is “to provide quality teaching, research and outreach, by applying a scientific foundation to address the nutritional needs of diverse individuals and populations.”

The teaching goal of the Nutrition Department is “to provide high quality and accessible teaching and mentorship for diverse student learners.”

Major Tracks

There are three tracks in the major that prepare students for different careers within the broad field of nutrition. Students must complete all coursework within a selected track to fulfill the requirements to earn a B.S. in Nutrition.

The Dietetics track is for students who wish to apply for an internship to become a Registered Dietitian (RD). RDs are registered and licensed health care professionals who work in hospitals and other health care facilities such as nursing homes. Hospitals require that their nutrition health care professionals be RDs. Dietitians in hospitals are responsible for ensuring that patients receive the diet most suitable to their conditions. A hospital dietitian’s duties range from the therapeutic aspects of dietetics (helping the patient understand how specific diets can influence their disease and how they can best modify their eating habits) to the administrative aspects (such as supervising food production, planning of special diets, and management of food service systems). The hospital dietitian also acts as a source of nutrition information for outpatients and the community. Additionally, RDs are also qualified to work in the food development and food service industries, in the supplement industry, in community service agencies, in educational and research institutions, and in private practice as consultants to individuals, corporations, medical care groups, and nursing homes.

The Dietetics track is accredited by the Accreditation Council of Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics (formerly American Dietetic Association). This track fulfills the Didactic Program in Dietetics (DPD) requirements, and is the first step towards becoming a RD. Dietetic Registration also requires the successful completion of a Dietetic Internship following graduation, and the passing of a national Registration Examination. Admission to Dietetic Internships is very competitive with the national acceptance rate at about 50%. By the time of admittance to the Dietetics track, students must have taken NUTRITN 130, NUTRITN 230, BIO 150, CHEM 111, 112, and 261 (or 250), and KIN 270/271 (or 272/273), and must have a cumulative GPA of 2.5 or higher. This GPA must be maintained to remain in the dietetics track. For more information about the Didactic Program in Dietetics at the University of Massachusetts Amherst, please see page 29.

For more information on the Academy of Nutrition and Dietetics and the dietetics profession, please visit the AND web site at www.eatright.org.
The Nutrition and Health Science track prepares students to pursue careers or graduate training in nutrition, medicine, physician assistant programs, pharmacy, dentistry, and other health science related careers. Students will be prepared to work in the health or food industries, or work in nutrition research. In addition to the core nutrition and science courses that are common to all majors, students in this track will receive more science and laboratory based training. Students who are interested in medical or dental school may have additional requirements as recommended by the Pre-Medical/Pre-Dental advising program.

The Nutrition in a Global Society track prepares students to pursue careers or graduate training in nutrition, public health, social work, education, and other applied professional careers. Students will be prepared to work in community nutrition programs such as Head Start, Women, Infants and Children Supplemental Food Program (WIC), School Meals Programs, Supplemental Food Assistance Program (SNAP), Elderly Nutrition Program, and other community based programs. Students are also able to join the Peace Corps; pursue careers in teaching health or science; work in the foodservice, wellness or consumer industries; help develop food policies locally or internationally; or pursue an entrepreneurial nutrition practice. In addition to the core nutrition and science courses, students in this track will take community nutrition and international nutrition courses, plus can choose among many relevant electives in public health, kinesiology, sociology, food science, plant and soil science, resource economics, anthropology, or hospitality and tourism management.

Admission Requirements

Admission to the University of Massachusetts as a freshman or transfer student is described at umass.edu/admissions. UMass provides equal opportunity to applicants, as outlined on the university website in the its policy: “The University of Massachusetts Amherst prohibits discrimination on the basis of race, color, religion, creed, sex, sexual orientation, age, marital status, national origin, mental or physical disability, or veteran status, in any aspect of the admission or treatment of students or in employment.”

If a student already has a degree in another field and is interested in becoming a registered dietitian, they will apply to the university as a post-graduate second bachelor’s candidate or in some cases, will apply to the graduate school.

Expenses

The costs of the nutrition degree include the usual tuition, books and other fees as outlined on the UMass website at www.umass.edu/umfa/basics/costs and below:

<table>
<thead>
<tr>
<th></th>
<th>In-State</th>
<th>Out-of-State</th>
<th>NERSP*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition/Fees</td>
<td>$12,612</td>
<td>$25,400</td>
<td>$17,664</td>
</tr>
<tr>
<td>Room/Board</td>
<td>$9,512</td>
<td>$9,512</td>
<td>$9,512</td>
</tr>
<tr>
<td>Books/Supplies</td>
<td>$1,000 (average)</td>
<td>$1,000 (average)</td>
<td>$1,000 (average)</td>
</tr>
<tr>
<td>Total</td>
<td>$23,124</td>
<td>$35,912</td>
<td>$28,126</td>
</tr>
</tbody>
</table>

*The New England Regional Students Program (NERSP) gives a tuition break to New England residents enrolled in certain programs not offered by the public colleges and universities of their home state.
Other Costs
In addition to tuition and fees, you will need to factor expenses for books and supplies into your academic costs. These will vary according to your field of study, but generally average $1,000 for the academic year. Personal and transportation expenses usually range from $700 to $1,400 per year. We add these expenses to the costs above and use the total— a figure referred to as your “Cost of Attendance”—to determine your eligibility and need for financial aid.

Additional expenses specific to nutrition students include:

- AND membership (strongly recommended for Dietetics track)
- Transportation costs for volunteer or shadowing experiences
- Application fees for dietetic internships (for those in Dietetics track applying to internships) or graduate school (for students applying to graduate programs)
- ServSafe exam (recommended for Dietetics track)

For information about financial aid, go to the UMass financial aid services website at umass.edu/umfa.

Withdrawal and Refund of Tuition and Fees

Students may at any time terminate their affiliation in the current semester with the University for personal, academic, financial or medical reasons by processing the University Withdrawal Form. The students' Undergraduate Dean or the Director of University Health Services will determine the effective date of the withdrawal. Students' eligibility to return is determined by their academic status after the withdrawal is processed. Students eligible to return after a withdrawal must apply for readmission by the established deadlines. A student who leaves the university for any reason before a semester is completed will be granted a pro rata refund of tuition and fees. For more information, please visit the UMass financial aid services website at umass.edu/umfa/basics/withdrawal.

Undergraduate Student Policies

Written policies and procedures on academic honesty, family educational rights and privacy, dispute resolution and other important topics are clearly outlined in the Code of Student Conduct publication. For more information, go to the UMass website at umass.edu/dean_students/codeofconduct.
Student Privacy and Access to Personal Information

In compliance with the FERPA law, the University will not distribute grades or any other academic information to anyone but you. As owner of your academic records, you decide whether or not you want to share this with others. For more information, go to umass.edu/umfa/ferpawaiver.

Course of Study

The course of study in nutrition at UMass is expected to take four years (eight semesters) to complete. Students taking longer than 10 semesters will need the approval of the academic dean of the School of Public Health and Health Sciences. Students taking longer than 12 semesters to graduate will need the academic dean to appeal to the Admission and Records Committee in the registrar’s office on their behalf.

Student Grievances

As described in the Code of Student Conduct, any student who wishes to discuss grievances regarding the Nutrition Department disciplinary policies or disputes related to the program in a confidential manner may contact the university Ombuds Office in the Campus Center, Room 823, 413-545-0867 or ombuds@ombuds.umass.edu. For more information, go to the Ombuds Office website at www.umass.edu/ombuds.

Student Performance

To continue as a student at the University of Massachusetts Amherst, you are expected to meet performance criteria as outlined by the Academic Regulations set by the Office of the Provost. Failure to meet these criteria will result in one or more of the following:

- Academic Probation
- Academic Suspension
- Academic Dismissal

Appeals Process: Students have the right to appeal their academic status.

For more information, go to umass.edu/registrar/media/academicregs.pdf.

Assessment of Prior Learning

The University’s transfer credit policy is published online on both the Undergraduate Admissions Office (www.umass.edu/admissions/application_process/Transfer_Students) and the Registrar’s Office websites (www.umass.edu/registrar/gen_info/records/transfer_credit.htm). Acceptance letters to transfer students include a Preliminary Transfer Credit Award form. Final official transfer credit evaluations, including course equivalencies, are completed when students indicate their intention to enroll. Once students enroll they have access to their own degree audits after transfer credits.
are posted to their records through the online registration system (SPIRE). Students may also request transfer credit information from the Undergraduate Admissions Office at any time during the application process. Transfer Nutrition courses are evaluated by either the admission office or Nutrition Faculty depending on the specific course being transferred.

**Academic Calendar**

The University of Massachusetts Amherst follows the academic calendars approved by the Faculty Senate. For details on current or future calendars, please visit umass.edu/registrar/gen_info/academic_calendar.htm.

**The Course of Study in Nutrition**

The nutrition major is designed to expose the student to a research-based and professionally guided program of study leading to the B.S. degree. The course offerings and the list of course requirements established by the Department of Nutrition have been designed to meet both the general education requirements of the University of Massachusetts (page 13) and the specific course requirements for the major (pages 14-15), leading to a Bachelor of Science degree in Nutrition. The requirements for a B.S. degree in Nutrition from the University of Massachusetts Amherst include the following:

1. 120 total credits
2. 45 of these 120 credits must be taken at the University of Massachusetts Amherst
3. Cumulative GPA of 2.0 (2.5 for Dietetics track)

The specific course requirements of the B.S. in Nutrition total 67-81 depending on the specific track chosen. The number of credits required for each track in the Nutrition major are:

- Dietetics: 81 credits
- Nutrition and Health Sciences: 69 credits
- Nutrition in a Global Society: 67 credits

The following section provides an outline of general education course requirements (page 13), as well as core science/social science, nutrition, and other course requirements by track (pages 14-15). A typical eight-semester sequence of course work is provided for each track on pages 16-18. Courses are arranged in a specific manner to ensure that prerequisites for a given course have been satisfied prior to enrollment. Adherence to these outlines ensures that students are adequately prepared for upper division classes. Because many of the indicated courses are not offered every semester, it is important to keep the sequence in mind when planning a course of study. For this reason, individual conferences with one’s faculty advisor during counseling week are important.
UNIVERSITY GRADUATION REQUIREMENTS

(120 credits, 45 in residence. Cumulative Quality Grade Point Average of 2.0 Or Higher (2.5 for Dietetics Track).

GENERAL EDUCATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Curriculum Area</th>
<th>Fulfilling the Requirement</th>
<th>Met By</th>
<th>Prior to Fall 2010</th>
<th>Fall 2010 or later</th>
<th>Transfer students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td># of courses</td>
<td># of credits</td>
<td># of courses</td>
</tr>
<tr>
<td>Writing</td>
<td>College Writing (or exemption) and junior writing course in major department</td>
<td>391</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Basic Mathematics</td>
<td>One course (R1 or exemption)</td>
<td></td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Analytic Reasoning</td>
<td>One course (R2)</td>
<td></td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Biological &amp; Physical World</td>
<td>One BS, one PS and for prior to Fall 2010 one BS, PS or SI</td>
<td></td>
<td>3</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Social World</td>
<td>AL, AT, HS, SB, SI, I</td>
<td></td>
<td>One AL, One (AL, AT, SI, or I), One (HS), One (SB, SI, or I), One (AL, AT, HS, SB, SI)</td>
<td>One (AL/AT) One (HS), One (SB) and One (AL, AT, SB, I or SI)</td>
<td>One (AL/AT) One (HS), One (SB) and One (AL, AT, SB, I or SI)</td>
</tr>
<tr>
<td>Social and Cultural Div.</td>
<td>One Diversity in US (U) One Global Diversity (G)</td>
<td></td>
<td>2</td>
<td>2</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Integrative Seminar

|                      |                                               |        | 577           | Not required | 1             | 3             | 1             | 3             |
## CORE SCIENCE/SOCIAL SCIENCE REQUIREMENTS

<table>
<thead>
<tr>
<th>Science/Social Science Courses</th>
<th>Dietetics</th>
<th>Nutrition &amp; Health Sciences</th>
<th>Nutrition in a Global Society</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31-33 cr</td>
<td>42-45 cr</td>
<td>31-33 cr</td>
</tr>
<tr>
<td><strong>Sem.</strong></td>
<td><strong>Course</strong></td>
<td><strong>Cr.</strong></td>
<td><strong>Prerequisites</strong></td>
</tr>
<tr>
<td>F/S</td>
<td>CHEM 111 General Chemistry I [PS]</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>CHEM 112 General Chemistry II</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>CHEM 261 Organic Chemistry I</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>S</td>
<td>(Or CHEM 250 Organic Chemistry)</td>
<td>(3)</td>
<td>(x)</td>
</tr>
<tr>
<td>F/S</td>
<td>CHEM 262 Organic Chemistry II</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>CHEM 269 Organic Chemistry Lab</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>BIOCHEM 420 Elementary Biochem</td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>F</td>
<td>BIOCHEM 421 Elem. Biochem Lab.</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>BIOLOGY 151 Intro. Biology [BS]</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>S</td>
<td>(Or FOOD-SCI 466 Food Micro.)</td>
<td>(4)</td>
<td>(x)</td>
</tr>
<tr>
<td>F/S</td>
<td>KIN 270 + 271 Anatomy &amp; Physiology I</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>KIN 272 + 273 Anatomy &amp; Physiology II</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>PSYCH 100 Intro. Psych [SB]</td>
<td>4</td>
<td>x</td>
</tr>
<tr>
<td>F/S</td>
<td>STATS 111 Elementary Stats [R1,R2]</td>
<td>3</td>
<td>x</td>
</tr>
</tbody>
</table>

1. Pre-Medical and Pre-Dental students have additional science requirements.
2. Courses in parenthesis are alternative choices.
3. Although KIN 270 is not required for the Dietetics/Nutrition in a Global Society tracks, it is a prerequisite to KIN 272 which is required.
4. KIN labs 271/273 are not Nutrition Department requirement but they are KIN Department concurrent requirements to KIN 270/272.
**ADDITIONAL REQUIREMENTS BY TRACK**

<table>
<thead>
<tr>
<th>Core Nutrition Courses</th>
<th>Dietetics</th>
<th>Nutrition &amp; Health Sciences</th>
<th>Nutrition in a Global Society</th>
<th>Prerequisites</th>
</tr>
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<tbody>
<tr>
<td>Sem.</td>
<td>Course</td>
<td>Cr.</td>
<td>22 cr</td>
<td>22 cr</td>
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<tr>
<td>F/S</td>
<td>NUTRITN 130 Nutr. for Hlthy. Lifestyle [BS]</td>
<td>4</td>
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<td>F/S</td>
<td>NUTRITN 201 Intro. to Prof. Nutr.</td>
<td>1</td>
<td>x</td>
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<tr>
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<td>NUTRITN 230 Basic Nutrition</td>
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</tr>
<tr>
<td>S</td>
<td>NUTRITN 210 Scientific Prin. of Food Prep.</td>
<td>4</td>
<td>x</td>
<td>x</td>
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<tr>
<td>F</td>
<td>NUTRITN 352 Nutrition in Life Cycle</td>
<td>3</td>
<td>x</td>
<td>x</td>
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<tr>
<td>F/S</td>
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<tr>
<td>F/S</td>
<td>NUTRITN 493/4 Senior Seminar</td>
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<tr>
<td>F/S</td>
<td>NUTRITN 577 Nutr. Problems in U.S. [IE]</td>
<td>3</td>
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<tr>
<th>Additional Nutrition Courses</th>
<th>14 cr</th>
<th>9 cr</th>
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<tbody>
<tr>
<td>Sem.</td>
<td>Course</td>
<td>Cr.</td>
<td>300 level or above</td>
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<tr>
<td>S</td>
<td>NUTRITN 430 Nutrition &amp; Metabolism</td>
<td>3</td>
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<tr>
<td>F/S</td>
<td>NUTRITN 480 Med. Term. &amp; the Nutr. Care Proc.</td>
<td>1</td>
<td>x</td>
<td>NUTR 230, KIN 272 or concurrent, JR</td>
</tr>
<tr>
<td>F/S</td>
<td>NUTRITN 572 Community Nutrition</td>
<td>3</td>
<td>x</td>
<td>x</td>
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<tr>
<td>F</td>
<td>NUTRITN 578 Nutr. Prob. Devlp. Wrld.</td>
<td>3</td>
<td>x</td>
<td>NUTRITN 352, NUTRITN 480, SR</td>
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<tr>
<td>F</td>
<td>NUTRITN 580 Medical Nutr. Therapy</td>
<td>4</td>
<td>x</td>
<td>KIN 272, NUTR 230, NUTR 480, SR</td>
</tr>
<tr>
<td>F/S</td>
<td>NUTRITN 585 Practical Skills in Nutr. Couns.</td>
<td>3</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>F/S</td>
<td>Required Nutrition Elective</td>
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<table>
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<tr>
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<td>Course</td>
<td>Cr.</td>
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<tr>
<td>F/S</td>
<td>MANAGMNT 301 Principles of Mgt.</td>
<td>3</td>
<td>x</td>
<td>Junior Standing</td>
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<tr>
<td>F/S</td>
<td>MANAGMNT 314 Human Resource Mgt.</td>
<td>3</td>
<td>x</td>
<td>MANAGMNT 301</td>
</tr>
<tr>
<td>F/S</td>
<td>(Or HTM 260 Hospitality Pers. Mgt.)</td>
<td>(3)</td>
<td>(x)</td>
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<tr>
<td>F/S</td>
<td>HTM 350 Food Service Mgt.</td>
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<td>x</td>
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<tr>
<td>F/S</td>
<td>HTM 355 Adv. Food Prod. Mgt.</td>
<td>3</td>
<td>x</td>
<td>NUTRITN 210, HTM 250</td>
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</table>

| Other Required Electives (see list below) | 0 cr | 0 cr | 6 cr | |
|-------------------------------------------|------|------|------||
|                                          | x    |      |      | |

**Pre-Approved Electives for Nutr. Glob. Society track:**
- Any 100 or 200 level Sociology course
- Resource Ec 121 Hunger in a Global Economy
- MANAGMNT 314 Human Resource Mgt.
- PLSOILIN 265 Sustainable Agriculture
- PLSOILIN 280 Herbs, Spices and Medicinal Plants
- PLSOILIN 397C Community Food Systems
- Any approved by Undergraduate Program Director

**NOTE:** Students in the Nutrition and Health Sciences or Nutrition in a Global Society track who are interested in licensure should take NUTRITN 480, NUTRITN 580, and NUTRITN 585 as electives.

**Typical Sequence of Courses: DIETETICS TRACK**
### SEMESTER 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 111 [PS]</td>
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<tr>
<td>BIO 151 [BS]</td>
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<td>NUTRITN130</td>
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<td>GEN ED [HS]</td>
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### SEMESTER 2

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<tr>
<td>ENGWRIT</td>
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<tr>
<td>CHEM 112</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH 100 [SB]</td>
<td>4</td>
</tr>
<tr>
<td>NUTRITN 201</td>
<td>1</td>
</tr>
<tr>
<td>GEN ED [AL,AT]</td>
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### SEMESTER 3

<table>
<thead>
<tr>
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<td>[KIN 270 + 271]</td>
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<tr>
<td>CHEM 261</td>
<td>3</td>
</tr>
<tr>
<td>HT-MGT 350</td>
<td>3</td>
</tr>
<tr>
<td>NUTRITN 230</td>
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<tr>
<td>ELECTIVE</td>
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### SEMESTER 4

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>KIN 272 + 273</td>
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<tr>
<td>STAT 111 or RES EC 212</td>
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<tr>
<td>NUTRITN 210</td>
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<td>GEN ED [AL,AT,SB,SI,I]</td>
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### SEMESTER 5

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<tr>
<td>BIOCHEM 420</td>
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<td>MANAGMNT 301</td>
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<tr>
<td>NUTRITN 352</td>
<td>3</td>
</tr>
<tr>
<td>NUTRITN 391C or REQUIRED</td>
<td>3</td>
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<tr>
<td>ELECTIVE</td>
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### SEMESTER 6

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MICRO 310 &amp; MICRO LAB 390B or FOODSCI 466</td>
<td>[4]</td>
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<tr>
<td>MANAGMNT 314 or HT-MGT 260</td>
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<tr>
<td>NUTRITN 430</td>
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<tr>
<td>NUTRITN 480</td>
<td>1</td>
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<tr>
<td>NUTRITN 391C or REQUIRED</td>
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<tr>
<td>ELECTIVE*</td>
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### SEMESTER 7

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<tr>
<td>NUTRITN 493/4</td>
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<tr>
<td>NUTRITN 580</td>
<td>4</td>
</tr>
<tr>
<td>NUTRITN 577 [IE]</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE</td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE</td>
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<tr>
<td><strong>TOTAL</strong></td>
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### SEMESTER 8

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>NUTRITN 572</td>
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<tr>
<td>NUTRITN 585</td>
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<tr>
<td>ELECTIVE</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
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</table>

1. Although KIN 270 is not required for this track, they are prerequisites to KIN 272, which is a required course.

*Approved Required Elective list:

**Nutrition Options**
- Nutrition 397A Eating Disorders
- Nutrition 397B Nutrition Education in Practice
- Nutrition 397J Nutrition and Exercise for Weight Management and Fitness
- Nutrition 597F Nutrition and Reproductive Health
- Nutrition 578 Nutrition Problems in the Developing World
- Nutrition 597K Culture Nutrition and Health
- Nutrition 597G Nutrition and Food Policy
- Nutrition 597J Nutritional Genomics

**Non-Nutrition Options**
- HT-MGT 353: Risk and Sanitation Management
- STOCSCH 280: Herbs, Spices and Medicinal Plants
- STOCSCH 398E Farm Enterprise Practicum
- KIN 110: Human Performance & Nutrition

or Any nutrition course 300 or above not required for track.
<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111 [PS]</td>
<td>4</td>
</tr>
<tr>
<td>BIO 151 [BS]</td>
<td>4</td>
</tr>
<tr>
<td>NUTRITN 130</td>
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</tr>
<tr>
<td>GEN ED [AL,AT]</td>
<td>4</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<thead>
<tr>
<th>SEMESTER 3</th>
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<tr>
<td>NUTRITN 230</td>
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<tr>
<td>GEN ED [AL,AT,SB,SI,I]</td>
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<tr>
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<tr>
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<tr>
<td><strong>TOTAL</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER 7</th>
<th>SEMESTER 8</th>
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</thead>
<tbody>
<tr>
<td>NUTRITN 493/4</td>
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<tr>
<td>ELECTIVE</td>
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<tr>
<td>ELECTIVE</td>
<td>3</td>
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<tr>
<td>ELECTIVE</td>
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<tr>
<td>ELECTIVE</td>
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</tr>
<tr>
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</table>

1KIN 271 and 273 are not required by the Nutrition Dept but they are Kin Dept concurrent requirements to Kin 270/272

**NOTE:** Students in the Nutrition and Health Sciences track who are interested in licensure should take NUTRITN 480, NUTRITN 580, and NUTRITN 585 as electives.

**Required Electives (options)**
- Nutrition 397B Nutrition Education in Practice
- Nutrition 578 Nutrition Problems in the Developing World
- Nutrition 597G Nutrition and Food Policy
- Nutrition 597I Nutritional Genomics
- Nutrition 597K Culture, Nutrition and Health
- Nutrition 597R Nutrition and Reproductive Health
- HT MGT 355 Adv. Food Production Management
- STOCKSCH 280: Herbs Spices and Med. Plants
- STOCKSCH 398E Farm Enterprise Practicum
- KIN 110 Human Nutrition and Performance

**Typical Sequence of Courses: NUTRITION IN A GLOBAL SOCIETY TRACK**

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<thead>
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<tr>
<td>Course Code</td>
<td>Semester 3</td>
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<tr>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>CHEM 111 [PS]</td>
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</tr>
<tr>
<td>BIO 151 [BS]</td>
<td>4</td>
</tr>
<tr>
<td>NUTRITION 130</td>
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</tr>
<tr>
<td>GEN ED [AL,AT]</td>
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</tr>
<tr>
<td>GEN ED [HS]</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
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</tbody>
</table>

**SEMESTER 3**

- [KIN 270 + 271]^1,2
- CHEM 261
- NUTRITN 230
- GEN ED [AL,AT,SB,SI,I] 4

**SEMESTER 4**

- KIN 272 + 273^2
- STAT 111 or RES EC 212 [R1,R2] 3
- NUTRITN 210
- ELECTIVE 3

**SEMESTER 5**

- BIOCHEM 420
- NUTRITN 352
- NUTRITN 391C or ELECTIVE
- ELECTIVE [NUTRITN or list below]

**SEMESTER 6**

- MICRO 310 & MICRO LAB 390B 4-6
- or FOOD SCI 466
- NUTRITN 572
- ELECTIVE [NUTRITN] 3
- ELECTIVE or NUTRITN 391C 3

**SEMESTER 7**

- NUTRITN 493/4
- NUTRITN 578
- ELECTIVE
- ELECTIVE
- ELECTIVE
- ELECTIVE

**SEMESTER 8**

- NUTRITN 577 [IE] 3
- ELECTIVE [NUTRITN or list below] 3
- ELECTIVE 3
- ELECTIVE 3
- ELECTIVE 3
- ELECTIVE 3

**TOTAL** 16 **TOTAL** 15

^1 Although KIN 270 is not required for this track, it is a prerequisite to KIN 272 which is a required course.

^2 KIN 271/273 are not required by the Nutrition Department but they are KIN Department concurrent requirements to KIN 270/272.

**Approved Electives for Nutr. Glob. Society Track:**

- Any Public Health course
- Any Kinesiology course
- Anthropology 104 Culture, Society and People
- Food Science 102 World Food Habits
- Food Science 590A Food Science Policy
- HTM 235 Risk and Sanitation Management
- Any elective approved by Undergraduate Program Director.
- Any 100 or 200 level Sociology course
- Resource Ec 121 Hunger In a Global Economy
- PLSOILIN 120 Organic Farming and Gardening
- PLSOILIN 265 Sustainable Agriculture
- PLSOILIN 397C Community Food Systems
- Any 3 credit Nutrition course 300 or above not required for track
- Nutrition 397B Nutrition Education in Practice
- Nutrition 578 Nutrition Problems in the Developing World
- Nutrition 597G Nutrition and Food Policy
- Nutrition 597J Nutritional Genomics
- Nutrition 597K Culture, Nutrition and Health
- Nutrition 597R Nutrition and Reproductive Health
- HT MGT 355 Adv Food Production Management
- STOCKSCH 280: Herbs Spices and Med. Plants
- STOCKSCH 398E Farm Enterprise Practicum
- KIN 110 Human Nutrition and Performance
Independent Study Courses and Practicum Credit

You may receive academic credit for practical experience, a research project, or a review of scientific literature relevant to a specific topic. In general, 40 hours of work per semester equals one credit. Before registering for NUTRITN 396 or 496, Independent Study/Special Problem, students should discuss their intentions with a faculty member (not necessarily their advisor), establish a mutually agreeable set of expectations and criteria of evaluation, and decide the number of credits that will be granted for the completion of the work.

Non-remunerated volunteer work during either the summer or the academic year may qualify for credit with prior approval. Some examples of community work are developing nutrition education programs or educational materials, or teaching children about nutrition. There are many opportunities for experiential learning in the nutrition field while at UMass. Please see page 27 for more ideas. Lab experience can be obtained by working with a research faculty member in the lab. Examples of lab experiences include learning about preparation and maintenance of general laboratory materials and basic lab techniques, including biochemical analysis, cellular and molecular techniques, and cell culture.

Nutrition Departmental Honors (DH)

Students entering UMass in the fall of 2011 have the following honors options:

**Tier 1: General Education Scholar.** Students are invited by Commonwealth Honors College (CHC) as first years or can apply after their first year.

**Tier 2: Departmental Honors (DH).** Includes 2 honors courses, one above 300, as well as a 6-8 credit capstone thesis or project (see more details below).

**Tier 3: Commonwealth College Honors.** Commonwealth College Honors is Tier 1 + Tier 2.

Departmental Honors is designed to complement and extend the experience of the academic major. DH requirements are similar to, but more specific than, those of general honors. The overall GPA for nutrition departmental honors is 3.2-3.4, depending on the year of entry to UMass. The application process varies by class year, so please speak with a CHC advisor about the admission procedure.

**Course Requirements for DH**

- **Two Nutrition Honors Courses:** The Nutrition Department does not offer honors courses. Students typically take graduate-level courses or complete an honors independent study activity along with a non-honors required course using an Honors Independent Study Contract (HIS) obtained through Commonwealth College. The course will appear on the transcript as an HIS in Nutrition. All Departmental Honors Nutrition courses, including the honors thesis or project listed below, need to be discussed with nutrition department Honors Program Director, Dr. Alayne Ronnenberg.
• **Honors Research Project (NUTRITN 499Y):** For more information on this independent research project, go to honors.umass.edu/capstone-experience.

• **Honors Thesis or Project (NUTRITN 499T or 499P):** Including submission of manuscript to CHC. For more information on the honors thesis, go to www.honors.umass.edu/cedocumentation.

**Other Honors College requirements vary** by graduation year and type of honors track. Students should discuss these extra requirements with their CHC advisor.

## Campus Resources

Numerous offices and centers on campus can help you make the most of your undergraduate career. Some helpful resources include the following:

**Career Services.** Make an appointment for advising related to resumes, career exploration, interviewing, and job or internship searches. For more information, go to www.umass.edu/careers or contact Mary Ellen Liseno at meliseno@acad.umass.edu.

**Chemistry Resource Center.** Get help with your chemistry coursework from teaching assistants in the Integrated Sciences Building, room 325. For more information, go to www.isb-web.nsm.umass.edu/ta-chem.html.

**Disability Services.** Get information about accommodations and services available for students with disabilities. For more information, go to umass.edu/disability.

**Writing Center.** Schedule a one-on-one consultation with a tutor for advice about improving your writing assignments. For more information, go to www.umass.edu/writingcenter.

**Learning Resource Center.** Attend review sessions for specific courses, in subjects such as chemistry and math. The center is located on the 10th floor of the W.E.B. DuBois library. For more information, go to www.umass.edu/lrc/si.htm.

**Office of Information Technology.** Get assistance with computing and instructional technology on campus. For more information, go to www.oit.umass.edu.

**Health Services.** UHS provides comprehensive primary care for adults and children, walk-in care, mental health care and many other services and programs. For more information, go to www.umass.edu/uhs/.
Preparation for Graduate School

Students planning to apply for admission to graduate school may need courses in calculus and physics or other requirements. If you are interested in this option, please see your advisor early in your undergraduate career.

Most graduate schools require the completion of the Graduate Record Examination (GRE) and/or an advanced test in one of 20 subject areas. Students should plan to take the GRE during the summer or fall of their senior year and check with graduate schools to learn their specific GRE requirements. A brochure describing the examinations and listing dates and sites of administration may be obtained from the Graduate School Office, located in the lobby of the Goodell Building. For more information, go to www.ets.org/gre/general/register/centers_dates. Students should also discuss preparation for graduate studies in nutrition with the graduate program director, Dr. Elena T. Carbone, DrPH, ecarbone@nutrition.umass.edu.

Plenty of opportunities are available for gaining research experience as an undergraduate in the nutrition department. This experience will increase your chances of being successful in a graduate school application. Speak to the faculty member whose research area interests you about opportunities for experience (see page 22).

Students interested in other health-related graduate degrees should seek information and advising in their field of interest:

- **Pre-Medical and Pre-Dental**: Go to www.cns.umass.edu/students/academic-advising/pre-medical-and-pre-dental-advising.
- **Health/Science Elementary or Secondary Teacher Education**: Go to www.umass.edu/education/academics/tecs/step.shtml.
- **Nursing (2nd Bachelor’s Degree)**: Go to www.umass.edu/nursing/programs/pro_ug_second_bach/2nd_Bach_Index.html.

For more information about typical prerequisites for these degrees, please refer to page 4.
Faculty and Advising

Faculty Advisors

Each nutrition major is assigned to a faculty advisor. The role of the advisor is to assist you in planning course schedules, to answer questions regarding the program and field of study, and to counsel on any other academic issues that may arise. You will meet with their advisor at least once each semester. More frequent consultations, as needed, can be scheduled. You are encouraged to become acquainted with your advisor so that s/he may have an understanding of your goals, interests, strengths, and weaknesses when asked to write letters of recommendation or to advocate for you.

Two faculty/staff members have specific advising duties to all nutrition majors. Dr. Elena T. Carbone, DrPH, is the graduate program director and should be consulted for information regarding graduate programs in nutrition and/or the application process for graduate school. For more information on the graduate program at UMass, contact Dr. Elena T. Carbone at 413-545-1071 or ecarbone@nutrition.umass.edu.

Claire Norton, MS, RD, LDN is the undergraduate program director. She has the responsibility of signing you into the major, approving course substitutions, and verifying that the requirements for graduation are met. Claire Norton is also the director of the Didactic Program in Dietetics (DPD), the AND-accredited program. She advises students about applying to dietetic internships and conducts general meetings for students interested in applying to programs during their junior and senior years. One-on-one counseling is also offered to answer specific, individual concerns. For more information, contact Claire Norton at 413-545-1077 or cpnorton@nutrition.umass.edu.

Nutrition Faculty Research Interests

<table>
<thead>
<tr>
<th>Faculty Member</th>
<th>Research Interests</th>
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</thead>
<tbody>
<tr>
<td>Patricia Beffa-Negrini</td>
<td>Distance education</td>
</tr>
<tr>
<td>Director, Online MPH Nutrition Programs</td>
<td>Nutrition education</td>
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<tr>
<td>Research Associate Professor</td>
<td></td>
</tr>
<tr>
<td>PhD, UMass, Amherst, 1990</td>
<td></td>
</tr>
<tr>
<td>Phone: 413-545-0798</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:patsy@nutrition.umass.edu">patsy@nutrition.umass.edu</a></td>
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<table>
<thead>
<tr>
<th>Melissa Brown</th>
<th></th>
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<tbody>
<tr>
<td>Research Assistant Professor</td>
<td>Islets, diabetes, Beta cell expansion</td>
</tr>
<tr>
<td>PhD, Univ. of Illinois at Chicago, 2004</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:melissab@nutrition.umass.edu">melissab@nutrition.umass.edu</a></td>
<td></td>
</tr>
</tbody>
</table>
Elena T. Carbone  
Associate Professor  
Graduate Program Director  
DrPH, UNC (Chapel Hill), 1999  
Phone: 413-545-1071  
Email: ecarbone@nutrition.umass.edu  
Nutrition and behavior change  
Nutrition education  
Distance education

Nancy L. Cohen  
Professor and Head  
PhD, California (Davis), 1984  
Phone: 413-545-1079  
Email: cohen@nutrition.umass.edu  
Community nutrition  
Nutrition education  
Nutrition of older adults  
Distance learning

Lorraine Cordeiro  
Assistant Professor  
PhD, Tufts, Boston, MA, 2007  
Phone: 413-545-9071  
Email: lcordeiro@nutrition.umass.edu  
Food security  
Multicultural nutrition  
Adolescent nutrition

John J. Cunningham  
Deputy Provost  
PhD, Maryland, 1978  
Phone: 413-545-2526  
Email: jcunningham@provost.umass.edu  
Nutrition and trauma  
Diabetes  
Energy metabolism

Young-Cheul Kim  
Associate Professor  
PhD, Knoxville, TN, 1995  
Phone: 413-577-4553  
Email: yckim@nutrition.umass.edu  
Nutrition and gene expression  
Fat cell metabolism

Zhenhua Liu  
Assistant Professor  
PhD, Auburn University, AL, 2003  
Phone: 413-545-1075  
Email: zliu@nutrition.umass.edu  
Cancer, chronic diseases, systems biology

Jerusha Nelson Peterman  
Assistant Professor  
PhD, Tufts, Boston, MA, 2010  
Phone: 413-545-1078  
Email: jpeterman@nutrition.umass.edu  
Food security  
Nutrition interventions  
Immigrant health

Alayne Ronnenberg  
Associate Professor  
ScD, Harvard, MA, 2001  
Phone: 413-545-1079  
Email: alayner@nutrition.umass.edu  
Nutrition and reproductive health
Lisa M. Troy
Assistant Professor
PhD, Tufts, Boston, MA, 2007
Phone: 413-545-4238
Email: lisatroy@nutrition.umass.edu

**Diet quality measures, monitoring & evaluation**

Richard J. Wood
Associate Professor
PhD, University of Connecticut, 1981
Phone: 413-545-1687
Email: rwood@nutrition.umass.edu

**Calcium, vitamin D**
**Cellular regulation**

Judith Dowd
Lecturer
Director, Dietetic Internship
MA, American International College, 1990

**Dietetics**
**Weight management**

Claire Norton
Lecturer, DPD Director,
and Undergraduate Program Director
MS, Trinity College, Dublin, 1984
Phone: 413-545-1077
Email: cpnorton@nutrition.umass.edu

**Clinical nutrition**
**Eating disorders**
Emeritus Faculty

Mokhtar T. Atallah
Associate Professor
PhD, Washington State, 1973
Dietary fiber and mineral interactions
Physiological effects of fiber

Peter L. Pellett
Professor Emeritus
PhD, London, 1956
International nutrition problems
Pathogenesis of infant malnutrition
Protein and amino acid requirements

Adjunct Faculty

Elizabeth R. Bertone-Johnson
Adjunct Associate Professor
ScD, Harvard, MA 1999
Nutritional epidemiology
Vitamin D and women’s health
Epidemiology of premenstrual syndrome
Email: ebertone@schoolph.umass.edu

Melissa L. Brown
Adjunct Assistant Professor
PhD, University of Illinois at Chicago, 2004
Endocrinology, diabetes
Email: melissa.brown@bhs.org

A. Reed Mangels
Adjunct Faculty Member
PhD, University of MD, College Park, 1989
Vegetarian nutrition
Email: mangels@nutrition.umass.edu

David G. Nyachuba
Adjunct Assistant Professor
PhD, Vermont, 2007
Food safety education
Scholarships for Nutrition Majors

A variety of scholarships are available for undergraduate nutrition majors, graduates who are entering dietetic internships, or graduate students in nutrition. Applications for scholarships for the senior year are completed during the junior year, and applications for internships or graduate studies are completed during the senior year.

**Academy of Nutrition and Dietetics (AND) Scholarships.** The AND awards graduate scholarships, internship scholarships, and undergraduate awards. To apply, request application materials from the Department of Education, Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995. Applications are due in mid-February. For more information, go to eatright.org/students/careers/aid.aspx.

**Massachusetts Dietetic Association (MDA) Scholarships.** The MDA offers several scholarships for nutrition majors who are enrolled in Massachusetts colleges or who have been accepted to dietetic internships in Massachusetts. Information regarding the availability of the scholarships and application materials can be obtained from Claire Norton, director of the Didactic Program in Dietetics, in early April. Applications are due in May. For more information, go to eatrightma.org.

**Western Area Massachusetts Dietetic Association (WAMDA) Scholarship.** Two scholarships are offered for students who live in western Massachusetts and attend a graduate or undergraduate program. Applications are due at the end of March. See Eileen Giard, the Nutrition Department secretary, for application forms or call 413-545-0740. For more information, go to wamda.org.

**Department of Nutrition Scholarships.** The Department offers two scholarships for seniors (at least 90 credit hours accrued): the Virginia Beal Scholarship and the Helen Mitchell Scholarship. These scholarships are named for former UMass faculty members, both well respected in the profession. Scholarship recipients are selected by the nutrition faculty. While emphasis is placed on academic performance, a student’s potential contribution to the profession, as well as financial need, are taken into account in making the final decision. The deadline for application is usually late in the fall semester. The HANDS Scholarship (Health & Nutrition Diversity Scholars) is a nonfinancial scholarship for multicultural students interested in professional development. For more information, go to www.umass.edu/sphhs/nutrition.
Enhancing Your Resume

Membership in professional organizations is one way to enhance your resume. DPD students are strongly encouraged to become student members of the Academy of Nutrition and Dietetics and others listed below.

The Academy of Nutrition and Dietetics (AND)

The Academy of Nutrition and Dietetics (AND), was founded as the American Dietetic Association in 1917, and is the nation’s largest professional organization for dietitians.

Benefits of student membership include:

- The Journal of Academy of Nutrition and Dietetics
- AND’s members-only website, which includes access to the Evidence Analysis Library
- Student Center with career planning information, student news, and a listserv
- Continuing education programs and materials
- Member discounts on publications and meetings
- Membership opportunities in dietetics practice groups (DPGs)
- Scholarship opportunities
- Job announcements

For more information on the Academy of Nutrition and Dietetics, go to eatright.org.

The University of Massachusetts Nutrition Association (UMNA)

The UMNA is a student organization that is run by students, for students. The organization was established in 1979 to provide a forum for the discussion of career alternatives, the nutrition curriculum, and nutrition topics of current interest. It also provides an opportunity for students to meet one another and to support each other through the curriculum. Activities include: study groups for specific courses, guest speakers who are involved in nutrition-related professions, visiting alumni who report their experiences after graduation, business meetings to plan future activities, social events to help students meet their fellow students and faculty, fundraising activities to add money to the treasury, trips to conferences and regional AND meetings, and community service projects (i.e., raising funds for the food bank or Meals on Wheels programs). Students are encouraged to check the bulletin boards in Chenoweth for meeting notices and to get involved. The success of the organization is dependent on student participation. For more information, go to www.umass.edu/sphhs/nutrition/academics/umna.html.
Western Area Massachusetts Dietetic Association (WAMDA)

WAMDA is the professional organization of dietitians and nutritionists located in the western part of the state. The group is involved in organizing and sponsoring professional activities for our membership. Examples of WAMDA activities include holding bimonthly continuing education lectures, planning nutrition education events for the lay public during National Nutrition Month, serving as a resource for the local press, lobbying for the profession at the state level, and recruiting future members of the profession. Students may become members at a reduced cost, and their participation in WAMDA activities is welcome. Joining WAMDA is a good way to begin assuming the role of nutrition professional, to serve the local community, and to gain insight into the wide spectrum of roles the dietitian may play. See Eileen Giard, the Nutrition Department secretary, for application materials. For more information, go to [www.wamda.org](http://www.wamda.org).

Experience/Service Opportunities

Work or volunteer experience during undergraduate academic training is usually an important factor in future employment, internship acceptance, or graduate school admission. Therefore, you are strongly encouraged to consider obtaining nutrition-related experience during the academic year or the summer. The following is a partial list of potential sites. Please also see the Nutrition Department website for links to undergraduate opportunities (see page 28).

2. Volunteer or part-time employment with one of the local Women, Infants, and Children Programs (WIC).
3. Volunteer work with one of the local schools interested in nutrition education.
4. University food service (test kitchen, menu planning, quality control, nutrition education, etc.); contact UMass Dining Services, Worcester Dining Commons.
5. Sodexo Summer Practicum Program: Administrative and clinical experience in a hospital dietary department; contact Sodexo Corporation, Waltham, MA.
6. Research projects in the Department of Nutrition. Contact an individual faculty member to inquire about his/her research programs.
7. Volunteer or part-time work at a nursing home or senior center, or at a nutrition program for the elderly (home-delivered and congregate meals).
8. Volunteer or paid work as a nutrition assistant or dietary aide at Franklin Medical Center (Greenfield), Cooley Dickinson Hospital (Northampton), the V.A. Hospital (Northampton), or Baystate Medical Center (Springfield).
9. Summer employment as a hospital diet aide, camp food service worker, catering service employee, etc.

10. University Internship Program.

11. Volunteer with the Food Bank of Western Massachusetts.

In addition to the above, there are a few ways to gain experience and university credit at the same time:

- Registration in either NUTRITN 396 Independent Study or NUTRITN 496 Practicum, under the supervision of a faculty member.
- Community Nutrition Practicum (NUTRITN 573) is also designed to give students an opportunity to gain hands-on experience in a community nutrition field site (see Dr. Nancy Cohen).
- The Internship Program of the university (not to be confused with a “Dietetic Internship”) also offers opportunities for supervised experience, full or part-time. Contact the Internship Office in Career Services, at 1 Career Center Way (across the street from the Newman Center) or 413-545-6265.

It is the policy of the Department of Nutrition that academic credit is not given for work that also provides monetary remuneration. However, career service credits are available for relevant work through the Field Experience Program. For more information, go to umass.edu/careers.

The Department of Nutrition Website

For further information about the department, go to its website at www.umass.edu/sphhs/nutrition
The site contains an updated listing of news and events, as well as an overview of the department’s mission and history, faculty, and research, with a summary of current research projects. Additional sections of the website that may be useful include:

- **Academics**: Describes requirements for undergraduate and graduate degrees from the department, as well as information about the UMass Dietetic Internship and its affiliated rotation sites. Includes links to selected past UMNA newsletters.
- **Student to Student**: Contains information about opportunities for paid and volunteer experience in the field, study abroad, tips for students who are or are not pursuing the DPD curriculum, interviews with local dietitians and nutritionists, and frequently asked questions.
- **Feedback Form**: An online form where you can feel free to send confidential comments, concerns, suggestions, or inquiries about the UMass Department of Nutrition.
Didactic Program in Dietetics at the University of Massachusetts Amherst

The RD certification requires completion of a Didactic Program in Dietetics (DPD) followed by 1200 hours of supervised practice (also known as a dietetic internship). Both need to take place in programs accredited by Accreditation for Dietetics Education of the Academy of Nutrition and Dietetics.

The Didactic Program in Dietetics (DPD) program at the University of Massachusetts Amherst is housed within the Department of Nutrition, Dietetics Track, and is accredited by the Accreditation Council of Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND), 120 South Riverside Plaza, Suite 2000, Chicago, IL, 60606-6995, 312-899-0040, ext. 5400. [http://www.eatright.org/ACEND](http://www.eatright.org/ACEND).

The Dietetics track fulfills the requirements of the Accreditation Council for Education in Nutrition and Dietetics. Upon graduation, students have earned the Didactic Program in Dietetics Verification Statement of the Accreditation Council for Education in Nutrition and Dietetics. Six copies of this form will be mailed to the student after verification of graduation.

**Mission Statement of the DPD Program.** The mission of the DPD program of the University of Massachusetts is “to provide quality teaching and a good scientific foundation to students, thereby enabling them to be successful in accredited dietetic internship programs or professional careers.”

**Goals of the DPD Program.** A subset of the undergraduate goals for the Nutrition Department:

1. To prepare students for careers in dietetics, dietetic internships, and successful completion of the dietetic registration examination.
2. To provide a strong understanding of the scientific basis for the study of dietetics.

**DPD Outcome Measures (Goal One):**

1. Over a five-year period, at least 80% of students who are enrolled in the dietetics track as freshmen will complete the program within four years of that time.
2. Over a five-year period, at least 60% of dietetics graduates will apply to supervised practice programs the academic year they complete the program.
3. Over a five-year period, at least 50% of those applying to supervised practice programs the academic year they complete the program will be accepted.
4. Over a five-year period, graduates achieve a first time pass rate of at least 80% on the RD exam.
5. Over a five-year period, 60% of graduates who did not apply or were not accepted into supervised practice will report that they are either employed in a nutrition or health-related
field or have been enrolled in graduate school (upon completion of the two-year alumni survey).

6. Over a five-year period, at least 80% of dietetic internship directors rate at least a three on a five-point scale that UMass students came into the internship with an adequate level of knowledge competence appropriate for a supervised practice program.

DPD Outcome Measures (Goal Two):

1. Over a five-year period, 80% of dietetic directors rate at least a three on a five-point scale indicating that UMass graduates have a strong understanding of the scientific basis of dietetics practice.
2. Over a five-year period, 60% of graduates will rate at least a four on a five-point scale that they received a strong understanding of the scientific basis for the study of dietetics in their course work at UMass.

Currently, the dietetics program at UMass has met or exceeded all benchmarks.

The dietetics program is designed to meet the 2008 Commission on Accreditation for Dietetics Education Foundation Knowledge Requirements and Learning Objectives for dietetics programs. These requirements and objectives are:

1) Scientific and Evidence Base of Practice: integration of scientific information and research into practice.
2) Professional Practice Expectations: beliefs, values, attitudes, and behaviors for the professional dietitian level of practice.
3) Clinical and Customer Services: development and delivery of information, products, and services to individuals, groups, and populations.
4) Practice Management and the Use of Resources: strategic application of principles of management and systems in the provision of services to individuals and organizations.
5) Support Knowledge: knowledge underlying the requirements specified above.

Formal Assessment of Student Learning

The Didactic Program in Dietetics meets the 2008 student Knowledge and Learning Outcomes of ACEND. These outcomes, as well as other departmental educational goals are assessed by the courses in which they are taught. Student assessment includes but is not limited to the following: quizzes, exams, papers, presentations, case studies, homework assignments and laboratory reports.
The Dietetic Internship

The dietetic internship is a post-baccalaureate program that is six to 12 months (1200 hours) in length. Internships are designed to prepare entry-level dietitians through planned instruction and supervised work experience in clinical and community nutrition and food service management. Each internship is accredited by the Accreditation Council of Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). As of 2011, 225 dietetics programs and 242 dietetic internship programs were accredited. Some internships offer graduate credit or a master’s degree, and these are usually 18-24 months. Acceptance into dietetic internships is very competitive, with a 50% match rate nationally.

A short description of each program is listed on the AND website at www.eatright.org/students/education/di.aspx. More detailed information about each program may be obtained by reviewing the program website. Another resource is the Applicant Guide to Supervised Practice available in CD-ROM format, which can be borrowed from Eileen Giard, the Nutrition Department secretary. The cost of dietetic internships can vary widely, so check with each individual program about tuition and related expenses.

The Application Process

Internship applications are typically submitted online to an application agency (DICAS). Application deadlines are in mid-February for programs beginning in the summer or fall, or September for January appointments. Programs that offer graduate degrees may differ. During the fall, the didactic program director holds several general meetings to explain the application process in detail. Attendance at these meetings is strongly recommended.

Students may apply to as many programs as they choose. Selection is done largely by computer matching through an online matching agency, D&D Digital (again, graduate programs may differ). Around the middle of April, applicants will receive notification of if and where they have been matched. Students can only be matched with one program. This process is different from applying to college, when you can get accepted to several programs and then choose. If matched, the only choice is whether or not to go to that program. Acceptance of the position is required by a specified date.

Verification Statement and Transcript Evaluation

Internships require evidence that a student will complete the academic requirements of the AND by the time s/he enters their program. Therefore, during a student’s next-to-last semester (December/May), individuals planning to apply should complete a paper “Intent to Complete” form, which is available from the DPD director, Claire Norton. This form lists courses that remain to be completed and indicates the expected date of graduation. The DPD director will check the accuracy of the information and complete the digital version of the “Intent to Complete” form on DICAS. After you have officially graduated, you will then receive the final Verification Statement.
Graduate Record Exam (GRE)

The GRE is a standardized test, similar in format to the SAT. It is usually required for graduate school application and, on occasion, prior to admission to some internships. It is offered about five times per year in addition to walk-in computerized tests that are offered continuously at Sylvan Technology Center in Springfield. If required, the GRE should be taken by December or early February in order for scores to be reported by the internship deadlines. Review courses, if deemed necessary, are offered by the Division of Continuing and Professional Education at UMass or by private businesses.

The Selection Process

Internships frequently have five or more applicants for every position, so the competition can be formidable (see figure, below). As mentioned before, approximately 50% of applicants are accepted into internship programs. Applicants are evaluated on the basis of cumulative grade point average and/or the average of nutrition and science courses; the letter of application (content, grammar, spelling, legibility, etc.); nutrition-related experience; and letters of recommendation. Some internships encourage a personal interview. The vast majority of programs will select candidates who have a GPA of 3.0 or better. ALL students should attempt to gain experience in the field prior to applying for internships. Also, get to know faculty members in the departments of nutrition and HTM, as they will most likely provide some of the necessary recommendation letters.
You can improve your chances of being accepted into a dietetic internship by:

- Maintaining a high GPA (At least 3.0, but 3.2 or higher is recommended).
- Getting significant paid or volunteer work in the field during your undergraduate years (hospital experience, college foodservice, camp foodservice, nursing home foodservice, community nutrition programs). See “Enhancing Your Resume” on page 26 for ideas.
- Starting early: Don’t wait until your junior year to think about getting experience. Use University of Massachusetts Nutrition Association (see page 26) connections and volunteer opportunities, as well as opportunities you hear about through the department and those you can find on your own.
- Working hard so you can get strong letters of recommendation. Get to know faculty and dietitians for which you work/volunteer so they can write a strong letter for you. It is much easier to write a convincing recommendation for someone you know well.
- Being willing to relocate outside of Massachusetts for one year.
- Joining AND and our local Western Massachusetts Dietetic Association, WAMDA. For more information, go to www.eatright.org and www.wamda.org.

The Internship at UMass

The University of Massachusetts Department of Nutrition sponsors a dietetic internship through the Division of Continuing and Professional Education. It is an 11-month program that utilizes local hospitals and community agencies as training sites.

This program is not full time (approximately 30 hours per week) and therefore affords students the opportunity to combine graduate school or part-time work with the completion of the practice requirements of the AND. Selection is competitive. For more information, see the UMass program website at www.umass.edu/dieteticinternship.
RECEIPT OF UNDERGRADUATE BOOKLET

Name: ____________________________________________

Student ID: _______________________________________

Current Interest:

☐ Nutrition and Health Sciences
☐ Dietetics
☐ Nutrition in a Global Society

I have received the booklet “A Guide for Undergraduate Students”.

Name (Print): ______________________________________

Signature: _________________________________________

Date: _____________________________________________