

# Nutrition

## Program Philosophy

The Nutrition Science program, because of its small size, encourages the exchange of ideas and information among students and between students and faculty to enhance the learning process. The faculty members recognize that students develop personally and professionally as they experience the scientific, management and liberal studies approaches to problem identification and solution. The faculty encourages students with diverse talents and backgrounds to enter the Nutrition Science program.

## Program Mission

The mission of the Nutrition Science program is to provide students with an opportunity to study the foundation knowledge of nutrition, food science, and food service management within a small, private, liberal arts college.

## Program General Goal

The goal of the Nutrition Science program is to present educational opportunities that will prepare students with knowledge of nutrition, food science, and food service management. Students will be provided with learning opportunities to develop the basic knowledge and skills necessary to support quality nutrition services for individuals, groups, and communities.

## Approval Status

The Didactic Program in Dietetics (DPD) at Sage is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND), a specialized accrediting body recognized by the Commission on Recognition of Post-Secondary Accreditation and the United States Department of Education. The address and phone number of ACEND are: 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, (800) 877-1600, ext. 5400.

An undergraduate major in Nutrition Science coupled with an ACEND-accredited Dietetic Internship (DI) and success on the Commission on Dietetic Registration (CDR) examination will lead to Registered Dietitian (R.D.) status. Graduates of Russell Sage College's Nutrition Science major have an above average pass rate on the CDR registration examination. For RD exam pass rates go to: [http://www.sage.edu/academics/professional\\_exams/](http://www.sage.edu/academics/professional_exams/).

The Nutrition Science major also meets the educational requirements of the New York State Department of Education for certification in New York State as a Certified Dietitian, Certified Nutritionist or Certified Dietitian/Nutritionist (CDN). Additional experience and examination requirements are needed for this credential.

## An Accredited Dietetic Internship at Russell Sage College

Russell Sage College offers post-baccalaureate accredited dietetic internships in the Russell Sage College Graduate Schools. Matriculated students are eligible to apply for early admission (pre-select) to the post-baccalaureate Dietetic Internship offered at Russell Sage College Graduate Schools. Students chosen for this special program reserve a position in the internship class nearly one year in advance of regular admissions.

They must maintain an overall GPA of 3.300 and a nutrition coursework GPA of 3.500. Students apply to this program at the end of the junior year. The DI can serve as the experience requirement for the CDN credential as well as the RD credential. Admission requirements and a description of the dietetic internship at Sage can be found in the Russell Sage College Graduate Schools catalog.

## Other

Graduates of the Nutrition Science major at Sage can find careers in dietetics, medicine, nutrition education and health promotion, the food industry, and sports nutrition. Graduate degrees received by Nutrition Science majors include MS/MA, M.B.A./M.P.H., M.D., and Ph.D. Graduates have received appointments at accredited Dietetic Internships throughout the country including Dallas, TX, Boston, MA, Baltimore, MD, and New York City.

The College's ACEND representative will verify completion of the DPD for all Sage's successful degree candidates who have earned a "C" or better in all nutrition science courses (including HUM 201), and who have an overall GPA of 2.800 or above.

## Program Notes

- Students are required to become members of the Academy of Nutrition and Dietetics (AND) during their junior year (Annual Dues = \$58).
- Students are expected to complete 24 hours of nutrition-related community service at approved sites listed in the Nutrition Department's Student Handbook.
- To earn ACEND verification, students must have a major GPA of 2.800 or above and must earn a "C" or better (2.000) in HUM 201 and all NTR courses.

# Nutrition Degrees and Certificates

## Applied Nutrition (M.S.)

### Degree Type

M.S.

The field of nutrition is evolving and so are the opportunities. The demand for well-rounded nutrition professionals is greater than ever. With the current obesity epidemic, soaring health care costs, the focus shift towards disease prevention, as well as calls for evidence-based clinical practice, this trend is set to continue well into the future. To meet this demand, nutrition professionals will need to obtain advanced clinical and research skills as well as broad-view problem solving abilities.

The Applied Nutrition graduate program is based on a solid scientific foundation with a strong focus on research, nutritional epidemiology, public health perspectives, and cutting edge topics in the field of nutrition. Likewise, courses in nutrition communication and food and nutrition program development and evaluation provide a well-rounded view of nutrition. The skills obtained will allow graduates to become leaders in and to make significant contributions to the field.

The 31-34-credit M.S. in Applied Nutrition is designed to be flexible and to accommodate the adult learner. Emphasis is placed on providing students with the following skills:

- Critical evaluation skills through analysis of research literature.

- Ability to integrate and apply what is learned to relevant and current situations.
- In-depth knowledge and understanding of the most recent developments in the field.
- Strong background in theory of health behavior and the translation of theory into practice, a valuable tool in public health, community as well as clinical nutrition settings.
- Skills in planning, conducting, and evaluating food and nutrition programs and interventions.
- The ability to communicate nutrition messages effectively to a wide variety of audiences.
- Hands-on experience in designing and conducting research including identifying research hypotheses, developing surveys, collecting and analyzing data, as well as interpreting results and write-up. All students will be encouraged to publish their work.

## Admission Requirements

Applicants to the program must meet the general admission requirements for Sage Graduate Schools. An interview with the Director of Graduate Programs in Nutrition is recommended.

## Registered Dietitians with Graduate Credits

Official transcripts will be evaluated. A maximum of nine graduate credits or 25 percent of the degree, whichever is greater, may be transferred from another institution if such work was completed within five years of the first course counted toward the MS degree at Sage. Transferred credits must be a "B" or better.

## Registered Dietitians Who Completed the Sage Graduate School Dietetic Internship

Credits earned through the Sage Graduate School Dietetic Internship will apply to the MS in Applied Nutrition. Students must complete the remaining 21 credits including a master's project ([NTR 690](#) and [NTR 691](#)) in order to graduate with an M.S. in Applied Nutrition.

## Applicants with Bachelor's Degree in a Field Other Than Nutrition

Official transcripts will be evaluated. Certain nutrition prerequisites (normally NTR 201, NTR 501, and NTR 503) will be required in preparation for graduate study. Additional basic courses needed are Introduction to Psychology, Statistics, and Anatomy and Physiology I and II. General and Organic chemistry are highly recommended.

## General Information

Students may attend the MS degree program on a full-time or part-time basis. The program is a minimum of three to four terms for full-time students. Working students and commuting students will find courses conveniently scheduled. Courses are typically offered weekly during the evening, but may also be offered during the day or on an every-other-week or a weekend institute basis.

## Program Summary

## Core Courses

Item #	Title	Credits
NTR 561	Nutrition Programs and Interventions: Theory & Practice	
NTR 562	Weight Management	
NTR 555	Nutrition Research: Interpretation and Communication	
NTR 553	Epidemiology for the Health Sciences	
NTR 535	Leadership Development	

## Support Courses

\* Support Courses may be replaced with 6 elective credits for students with a Bachelor's degree in Nutrition.

Item #	Title	Credits
NTR 501	Nutrition Metabolism I: Macronutrients	
NTR 503	Nutrition Metabolism II: Micronutrients	
NTR 507	Nutrition Counseling Across the Lifespan	

## Research Methods Courses

Item #	Title	Credits
NTR 551	Research Methods for the Health Sciences	
NTR 690	Directed Research I	
NTR 691	Directed Research II	

- For Students with a Bachelor's Degree in Nutrition : 30
- For Students with a Bachelor's Degree in a field other than Nutrition : 33

<b>Total Credits</b>	<b>30-33</b>
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## Applied Nutrition (MS) and Dietetic Internship

### Degree Type

M.S.

## Core Courses

Item #	Title	Credits
NTR 553	Epidemiology for the Health Sciences	
NTR 555	Nutrition Research: Interpretation and Communication	
NTR 561	Nutrition Programs and Interventions: Theory & Practice	
NTR 562	Weight Management	
NTR 690	Directed Research I	
NTR 691	Directed Research II	

## Support Courses

Item #	Title	Credits
NTR 525	Advanced Medical Nutrition Therapy	
NTR 530	Dietetic Internship - Fall Practicum	
NTR 531	Dietetic Internship Practicum II	
NTR 532	Dietetic Internship Practicum - Summer Practicum	
NTR 549	Nutrition & Disease Management for Pediatrics	
NTR 535	Leadership Development	
<b>Total Credits</b>		<b>42</b>

## Nutrition and Dietetics

### Degree Type

M.S.

The Master of Science in Nutrition and Dietetics is a program for students without undergraduate backgrounds in nutrition who want to complete the requirements to become a Registered Dietitian Nutritionist. The program provides graduates with lifelong professional skills, including research analysis and interpretation; writing, communication, and professional presentation; critical thinking; ability to evaluate the effectiveness of nutrition interventions; medical nutrition therapy; and, confidence using evidence-based guidelines in practice.

This is a 45-credit course of study that combines graduate-level ACEND-accredited Didactic Program in Dietetics (DPD) courses with master's courses.

Full-time students may complete the program in as few as three semesters, while part-time students may complete the program at their own pace. Additional prerequisite courses may apply.

## Core Didactic Program in Dietetics (DPD) Courses

Item #	Title	Credits
NTR 501	Nutrition Metabolism I: Macronutrients	
NTR 502	Advanced Food Science	
NTR 503	Nutrition Metabolism II: Micronutrients	
NTR 504	Medical Nutrition Therapy	
NTR 507	Nutrition Counseling Across the Lifespan	
NTR 517	Nutrition and Human Disease	
NTR 522	Current Issues in Nutrition	
NTR 551	Research Methods for the Health Sciences	

# Core Master's Courses

Item #	Title	Credits
NTR 549	Nutrition & Disease Management for Pediatrics	
NTR 553	Epidemiology for the Health Sciences	
NTR 561	Nutrition Programs and Interventions: Theory & Practice	
NTR 562	Weight Management	
NTR 690	Directed Research I	
NTR 691	Directed Research II	
<b>Total Credits</b>		<b>45</b>

## Dietetic Internship Certificate

### Degree Type

Certificate

### Type of Program

The Sage School of Health Sciences provides a Dietetic Internship (DI) for students who have successfully completed an Accreditation Council for Education in Nutrition and Dietetics (ACEND) didactic program in dietetics (DPD). Successful candidates for the program qualify to take the registration examination for dietitians to earn "R.D." status. The DI offers two program formats, an on-campus program and a distance/online program. Each format may be completed on either a full-time basis in 10 months or a part-time basis in 22 months. Classes begin in August of each year, and the supervised practice experience is typically completed in late June of the following year.

### Philosophy

Dietetics is a profession undergoing many changes as a result of the expanding health care industry, emergence of the obesity epidemic, a new era of nutritional genetics, and reimbursement for medical nutrition therapy (MNT). The Dietetic Internship at Sage prepares nutrition students for the future. In this program, students are exposed to the variety and diversity of dietetic practice through planned experiences in multiple settings. Drawing upon a variety of resources and professionals, students work with Registered Dietitians in traditional hospital practice, long-term care facilities, outpatient clinics, government food management programs, and other settings.

With an understanding that learning has theoretical underpinnings, the program also requires students to concurrently complete five graduate classes for 24 credits. Students may choose to apply the graduate coursework to one of three graduate degree programs at Sage Graduate Schools: Applied Nutrition, Community Health Education, or Health Services Administration. Students have access to the Albany Medical College library and Russell Sage College library, periodicals and databases, computers and software programs, seminars, and visiting lecturers for further academic development. Thus, the diversity of planned experiences and locations combined with the academic enrichment will serve to position the graduate for a variety of career choices as well as for beginning their graduate education.

### Program Goals

1. Prepare graduates as leaders for a diverse array of entry-level dietetics positions and responsibilities.

2. Promote the concept of lifelong learning as a personal and professional obligation for the practice of dietetics.

## Concentration Area: Communication

Upon completion of the SGS DI, graduates are able to:

1. Review, analyze, and evaluate current literature to establish recommendations for best practices in treatment of nutritional conditions.
2. Apply concepts and techniques from current web-based technologies and social media for use in nutrition and dietetics.

## ADA Accreditation Status

The Sage Graduate Schools' Dietetic Internship is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). The Dietetic Internship at the Sage School of Health Sciences received full accreditation in July 1999. The program may accept up to 16 interns per class.

ACEND is the only accrediting agency for dietetics education recognized by the United States Department of Education (USDE). The address and telephone number of ACEND are: 120 South Riverside Plaza, Suite 2000, Chicago, IL. 60606-6995, 312-899-4876. Sage Graduate Schools of Russell Sage College is accredited by the Middle States Association of Colleges and Secondary Schools and is chartered by the Board of Regents of the University of the State of New York.

## Program Format

The Dietetic Internship integrates five graduate courses with more than 1,000 hours of supervised practice experience in a variety of settings in the Capital District of New York State. Students unable to relocate to the Capital District of New York may be able to obtain placements in other locations, such as Lower Hudson Valley, North Country Region, Utica/ Rome area and Western Massachusetts. The experience component includes three weeks of orientation, 15 weeks for clinical, 11 weeks for food and wellness management, and eight weeks for community nutrition. Field trips and attendance at the New York State Dietetic Association Annual Meeting are also included. The program does not follow the academic calendar.[here](#)

For a list of affiliate institutions, please click [here](#).

**Full Time:** Students attend the supervised practice five days per week for a minimum of 40 hours per week in the field. Two graduate courses are taken each during the fall and spring terms, and one course is taken during summer session. The internship director is available for advisement about graduate coursework.

**Part Time:** The internship may be completed on a part-time basis. Part-time participants complete a minimum of 24 hours of supervised practice per week plus one or two graduate courses each semester. The part-time schedule takes two years to complete all requirements. The DI director works with each part-time intern to arrange the practical experience schedule. One graduate course is taken in the fall semester and continued in the spring semester of the first year. One graduate course is taken in Summer Session of the first year. Two graduate courses are taken in the fall semester of the second year. One course is taken in the spring semester of the second year.

# Practicum Course Waiver for Professional Learning Experiences

In 1994, the Academy of Nutrition and Dietetics revised their standards of education for Dietetic Internships to allow credit for prior learning experience toward the supervised practical experience hours. Based on ACEND's standards of education with corresponding criterion and guidelines, Sage Graduate Schools has approved a program which enables interns to waive a portion (from 1 to 12 credits) of the Dietetic Internship. Graduate credit will not be awarded; rather, students will be able to complete the program in less time by receiving a waiver for up to two of the three practicum courses. Due to the broad nature of these courses, it is expected that individuals will rarely meet the criteria to waive all practicum courses. The waiver option offers a creative and flexible opportunity for non-traditional students and those with extensive experience in nutrition and dietetics practice to complete the Dietetic Internship in a modified format. Applicants are encouraged to discuss this process with the DI director and submit the Practicum Course Waiver Application and the portfolio(s) with Dietetic Internship application.

## Program Expectations

- Food and Wellness Management (one semester- Fall or Spring)
- Clinical Nutrition (one semester- Fall or Spring)
- Community Nutrition (Summer Session 3)

Successful completion of the supervised practice experiences includes the ability to demonstrate entry-level competence in each of the areas of practice. Students are evaluated by facility preceptors as well as the DI director. Tools utilized to evaluate entry-level competencies include, but are not limited to: assignments, quizzes, a professional portfolio, observation during supervised practice experiences, and a final exam. The internship director reserves the right to have students repeat rotations and/or assignments where objectives and competencies have not been met.

The fourth component is the successful completion of five graduate courses, which are integrated with the practical experience, with a "B" grade or better. The option of completing a master's degree would require that the student coordinate the graduate program with a specific graduate program advisor.

The final component is the successful completion of a comprehensive online examination, which simulates the registration examination, with a minimum grade of 65 percent correct.

All five components must be successfully completed to receive a verification statement and qualify for the registration examination. For additional details on program expectations, please [click here](#).

## Admission Requirements

Students must meet Dietetic Internship requirements and, if appropriate, the requirements for matriculation into Sage Graduate Schools.

Requirements are:

- A baccalaureate degree.
- Completion of an ACEND didactic program in dietetics (DPD) with a verification statement form signed by the undergraduate DPD program director.
- Overall GPA of 3.0.



- Recency of education: Additional coursework in dietetics or a related area is required to update a degree which was completed four or more years prior to applying to the Dietetic Internship. A minimum of three courses, equivalent to the following Russell Sage College nutrition science courses NTR 402, NTR 404, and NTR 417, are required for degrees completed four or more years prior to completing this application.
- Factors considered for admission are recommendation letters, relevant work and/or volunteer experience, extracurricular activities and letter of application. Applicants are considered on the basis of qualifications, without regard to race, color, creed, sex, or national origin.

## Application Process

Dietetic Internship application materials may be downloaded from: [www.sage.edu/academics/health\\_sciences/certificates](http://www.sage.edu/academics/health_sciences/certificates) The Sage Graduate Schools application form may be completed online: [www.sage.edu/admission/graduate/procedures/](http://www.sage.edu/admission/graduate/procedures/)

- Application for Admission  
Office of Graduate Admission  
Sage Graduate School  
Russell Sage College  
45 Ferry St., Troy, NY  
12180-4115  
OR call 1-888-VERYSAGE

## Program Tuition and Fees

In addition to tuition for 24 graduate credits, a car and valid driver's license are required as travel to facilities is necessary. Students have housing, board and transportation expenses, parking fees, AND affiliate and district membership fees, and professional liability and health insurance fees. Professional dress clothes, lab coat, reference books, materials, and supplies for graduate courses are also necessary for the planned experiences.

## Dietetic Internship Program Summary

Item #	Title	Credits
NTR 525	Advanced Medical Nutrition Therapy	
NTR 530	Dietetic Internship - Fall Practicum	
NTR 531	Dietetic Internship Practicum II	
NTR 532	Dietetic Internship Practicum - Summer Practicum	
NTR 555	Nutrition Research: Interpretation and Communication	
<b>Total Credits</b>		<b>24</b>

# Nutrition Classes

## NTR 201 : Nutrition Science

This course is designed to help students evaluate eating habits in terms of quantity and distribution of nutrients. The sources and functions of six classes of nutrients will be discussed as well as energy requirements and balance. The special needs of pregnancy, infancy, and of the elderly are examined, and diet-health issues are explored. Lecture and experiential learning projects.

## NTR 210 : ServSafe Essentials

In this course, students will gain knowledge from the industry standards in food safety training on all aspects of handling food, from receiving and storing to preparing and serving.

## NTR 211 : Introduction to Food Science

The basic chemical, physical and biological principles of food production are examined with the objective of maintenance of optimal nutritional and aesthetic qualities. Laboratory and lecture.

### **Prerequisites**

Food Service Safety Certification

## NTR 313 : Food Service Systems Management

This course applies the managerial processes to the functions and operations of a food service system and provides an analysis of food service systems as unified complex organizations (menu planning, purchasing, facilities, and finance). Students will analyze personnel policy in food service systems with varying organizational structures and objectives.

### **Prerequisites**

Food Service Safety Certification, NTR-211 recommended

## NTR 314 : Quantity Food Production

This is a practical study of the preparation and management techniques required in large-scale feeding operations. Students will apply theories to planning, preparation, and execution in actual quantity food production situations, including menu planning.

### **Prerequisites**

NTR-211 , NTR-313 are highly recommended

## NTR 325 : Community Nutrition

Community nutrition is a discipline that strives to improve the nutrition and health of individuals and groups within communities. This course explores the role and responsibilities of the nutrition professional in the community. Community, state, and national food and nutrition programs and services will be discussed with emphasis on program goals, target audiences and policy formation. The course also explores program development via assessing needs, developing objectives, implementing interventions and evaluating programs.

### **Prerequisites**

SCI-120

## NTR 501 : Nutrition Metabolism I: Macronutrients

The functions of the three categories of macronutrients in the human organism for normal nutrition are explored. Emphasis is placed on interactions and interrelationships of the nutrients at the organism and cellular levels. The rationale for dietary goals and determination of human nutrient needs are explained. Relevance of nutritional needs/problems will be discussed.

## NTR 502 : Advanced Food Science

This course analyzes the chemical and physical changes in food components during production, processing and preservation using instrumental and qualitative techniques. Methodological and statistical issues in food science research are discussed. Current research pertinent to food science is examined.

## NTR 503 : Nutrition Metabolism II: Micronutrients

Continuation of Nutrition Metabolism I: Macronutrients. The functions of the micronutrients (vitamins and minerals) in the human organism for normal nutrition are explored. Emphasis is placed on interactions and interrelationships of the nutrients at the organism and cellular levels. The rationale for dietary goals and determination of human nutrient needs are explained. Relevance of nutritional needs/problems will be discussed.

### **Prerequisites**

NTR-501

## NTR 504 : Medical Nutrition Therapy

This course is designed to apply the principles and theories of both normal and aberrant metabolism to the practice of diet therapy. Research and reference resources relating to the practice of medical nutrition therapy are explored. Maternal, infant, and child nutritional needs are also included in this course. A community nutrition education project is required.

## NTR 505 : Introduction to the Dietetic Profession

This course introduces the student to the profession of dietetics and the registered dietitian (RD) credential. The course explores such topics as the Standards of Practice & Professional Performance in different practice settings; professional behavior, legal and ethical issues; research and the ADA. Included in the course are self-study modules and on-line tutorials. Students also complete a pre-test. This course is only open to students enrolled in the Dietetic Internship Program.

## NTR 507 : Nutrition Counseling Across the Lifespan

This course examines nutrition across the lifespan from both a biological and psychosocial perspective. The impact of nutrition on preconception, pregnancy, lactation, infancy, childhood, adolescence, adulthood, and aging will be studied. For every phase of life, normal growth and development, nutrient needs, nutrition assessment, and counseling techniques will be discussed. The laboratory portion of the course provides students with the basics of interviewing and counseling methods and techniques. Intensive experience in applying nutrition counseling techniques will be incorporated.

## NTR 517 : Nutrition and Human Disease

This course examines the etiology and current medical management of diseases where diet modifications are prescribed in the treatment of the patient. An examination of the nutritional concerns of the elderly is included in this course. A community nutrition education project is required.

## NTR 522 : Current Issues in Nutrition

This course will examine current significant topics in the study of nutrition science and dietetics practice. Topics may include third party reimbursement issues, ethics in practice, food/nutrition legislation, and alternative health care practices. The curriculum will vary with the currency of topics.

### **Prerequisites**

Permission of instructor

## NTR 525 : Advanced Medical Nutrition Therapy

This is an advanced course focusing on the nutrition care process and model for management of persons with conditions requiring medical nutrition therapy in general medicine (gastrointestinal), critical care (surgery, renal oncology, enteral and parenteral nutrition), and long term care. Pathophysiology, specialized nutritional needs and principles of nutrition management are covered. Students must be enrolled in the Dietetic Internship Program or have approval of the instructor.

## NTR 530 : Dietetic Internship - Fall Practicum

This course is one of three practicum courses designed for full-time and part-time dietetic interns. The fall semester practicum provides one of the three supervised practice opportunities: 1) Food Service Management, 2) Acute Clinical supervised practice, or 3) Community Nutrition & Long Term Care or Outpatient supervised practice. Lectures and learning activities that reinforce the supervised practice are provided online via Moodle, Russell Sage College's learning management system. Attendance at orientation days, class days, and professional meetings/seminars will be required.

### **Prerequisites**

Enrollment in the Dietetic Internship

## NTR 531 : Dietetic Internship Practicum II

This course is one of three practicum courses designed for full-time and part-time dietetic interns. The spring semester practicum provides one of the three supervised practice opportunities: 1) Food Service Management, 2) Acute Clinical supervised practice, 3) Community Nutrition & Long Term Care or Outpatient supervised practice. Lectures and learning activities that reinforce the supervised practice are provided online via Moodle, Russell Sage College's learning management system. Attendance at orientation days, class days, and professional meetings/seminars will be required.

### **Prerequisites**

Enrollment in the Dietetic Internship

## NTR 532 : Dietetic Internship Practicum - Summer Practicum

This course is one of three practicum courses designed for full-time and part-time dietetic interns. The summer semester practicum provides one of the three supervised practice opportunities described below: 1) Food Service Management, 2) Acute Clinical supervised practice, 3) Community Nutrition & Long

Term Care or Outpatient supervised practice. Lectures and learning activities that reinforce the supervised practice are provided online via Moodle, Russell Sage College's learning management system. Attendance at orientation days, class days, and professional meetings/seminars will be required.

**Prerequisites**

Enrollment in the Dietetic Internship

## NTR 533 : Practicum in Community NTR II

This course is designed for full-time and part-time dietetic interns with some prior community experience or registered dietitians seeking additional community nutrition experience. The practicum provides 160 hours of supervised experience at a community placement. The field experience emphasizes the functional role of public health and community nutritionists. Students participate in the development, implementation and evaluation of community-based food and nutrition programs throughout the practicum experience

**Prerequisites**

Concurrent enrollment in the Dietetic Internship or by special approval of the instructor

## NTR 535 : Leadership Development

This hands-on course addresses the practice of leadership not as a science but as skills that can be developed. Topics cover skills that are foundational for effective leadership including self-assessment, personal development, goal-setting, collaboration, communication, and negotiation.

## NTR 549 : Nutrition & Disease Management for Pediatrics

Nutrition plays a major role in the management of chronic disease and developmental disorders. This course presents a broad base of technical content for children with special health care needs. Topics include developmental disorders, eating and behavior disorders, feeding problems, various chronic diseases, and hereditary metabolic disorders. Systems developed to deliver and finance nutrition services for this population, policy issues, trends, and regulations are also discussed. Multiple state and local level programs serving this population are evaluated for their effectiveness in delivering nutrition services.

**Prerequisites**

Enrolled in Dietetic Internship or Approval by Instructor

## NTR 551 : Research Methods for the Health Sciences

The purpose of this course is to examine the steps of the research process. Topics include experimental design, assessment tools, sampling theory, statistical methods, and research ethics. Students develop and test their own research hypothesis, analyze the data, and report on their findings.

## NTR 553 : Epidemiology for the Health Sciences

This course introduces the student to the basic principles and methods of epidemiology with a focus on nutrition. These include types of epidemiologic studies, choices in study design, measures of disease frequency and association and application to public health.

## NTR 555 : Nutrition Research: Interpretation and Communication

This course is designed to provide students with a comprehensive, practical working knowledge of nutrition research, as well as to develop students' ability to understand and interpret scientific research and to

communicate professionally in both written and spoken formats. The class will include lectures, class discussions in which relevant scholarly articles will be reviewed, and individual presentations. Students will explore a variety of writing forms commonly used in the fields of nutrition and public health. They will develop and enhance their research interpretation and writing skills in order to communicate written messages effectively with various audiences. They will also practice professional oral presentation skills.

## NTR 560 : Sports Nutrition

This course explores the integration of nutrition and exercise, and its impact on optimal exercise performance and training responsiveness. Topics include digestion, absorption and assimilation of nutrients; extraction of energy from food and how training effect nutrient metabolism; nutrition for optimizing performance and training responsiveness; thermal regulation and heat stress; and ergogenic aids.

### **Prerequisites**

Enrollment in the MS in Applied Nutrition

## NTR 561 : Nutrition Programs and Interventions: Theory & Practice

This course examines current community nutrition programs and interventions and their influence on participants~ food and nutrition behavior. Emphasized is the importance of research in evaluating interventions in the community, and the theories and principles needed to help people in various settings improve their food and nutrition behavior.

## NTR 562 : Weight Management

The course will examine the epidemic of obesity and how various behavioral and environmental factors place individuals at risk of becoming overweight. Sources of influence as well as management options to enable long-term patient compliance and sustained success will be discussed.

## NTR 563 : Nutrition Support

Nutrition plays a major role in the management of critical illness. This course presents an in-depth review of enteral and parenteral nutrition in critical care. Topics include assessment and nutritional needs, enteral formulations, enteral device access, calculation of enteral feeding regimens, enteral feeding complications, drug-nutrient interactions, and standards of care for enterally fed patients. Parenteral nutrition topics will include a general overview, parenteral formulations, parenteral access devices, complications of parenteral nutrition, fluid balance, electrolyte balance, and acid-base balance. Home nutrition support will also be reviewed.

## NTR 564 : Psychology of Eating & Eating Disorders

This class focuses on understanding the physical and psychological impact of eating behaviors. Topics include the biological and environmental etiology of eating disorders, symptom presentation, and evidence-based treatments. Additional topics include intuitive eating and the role of the Dietitian in eating disorder treatment.

### **Prerequisites**

Enrollment in MS Applied Nutrition, MS Nutrition , Dietetics or Dietetic Internship programs

## NTR 571 : Contemporary Topics in Ntr

A series of evolving topics and concepts directly related to professional practice in nutrition. While subject matter will change from semester to semester, possible topics include nutrigenomics, functional foods, food insufficiency and biotechnology. The exact nature of the content will be published with each semester~s schedule.

## NTR 572 : Contemporary Topics in Ntr

A series of evolving topics and concepts directly related to professional practice in nutrition. While subject matter will change from semester to semester, possible topics include nutrigenomics, functional foods, food insufficiency and biotechnology. The exact nature of the content will be published with each semester~s schedule.

## NTR 573 : Contemporary Topics in Ntr

A series of evolving topics and concepts directly related to professional practice in nutrition. While subject matter will change from semester to semester, possible topics include nutrigenomics, functional foods, food insufficiency and biotechnology. The exact nature of the content will be published with each semester~s schedule.

## NTR 601 : Nutrition Seminar I

This course is designed to enhance the student~s knowledge and critical thinking skills in the foundational principles of nutrition research. Activities include preparing a high-quality research article review and leading a class discussion. Subject matter will change from semester to semester. The exact nature of the content will be published with each semester~s schedule.

## NTR 602 : Nutrition Seminar II

This course is designed to enhance the student~s knowledge and critical thinking skills in the foundational principles of nutrition research. Activities include preparing a high-quality research article review and leading a class discussion. Subject matter will change from semester to semester. The exact nature of the content will be published with each semester~s schedule.

## NTR 690 : Directed Research I

This course is one of the culminating courses of the MS in nutrition program research sequence. Students complete a faculty mentored year-long research project. The course involves preparing a literature review, designing the methods for a research project, developing data collection tools, submitting an IRB form, and collecting data. Prerequisites: statistics and research methods. The course must be taken during the last year of the MS program.

## NTR 691 : Directed Research II

This course is one of the culminating courses of the MS in Nutrition program research sequence. Students will complete a faculty mentored year-long research project. The course involves analyzing data, interpreting results, creating a research poster, and preparing the final manuscript. This course must be taken during the last year of the MS program.

### **Prerequisite Courses**

