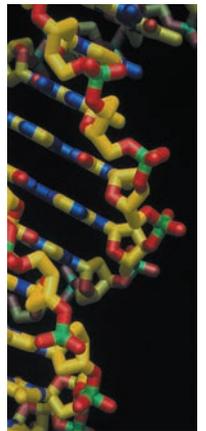
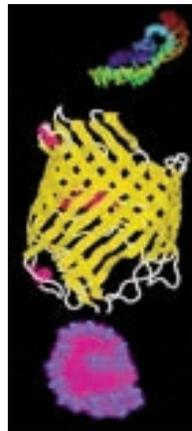


2016-2017

H A N D B O O K

Department of Nutrition



School of Public Health

School of Medicine

*University of North Carolina
at Chapel Hill*



Master of Public Health

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Handbook for the Master of Public Health Degree Program *Department of Nutrition* 2016 ~ 2017

I. INTRODUCTION

A. *Program Overview*

The Master of Public Health (MPH) in Nutrition was the first degree offered by the Department of Nutrition. Since the first three students received their MPH degrees in 1951, the program has grown with an average of 20-24 graduating per year. The program is recognized throughout the United States for the excellence of its training in public health nutrition.

Nutrition is recognized as one of the most important environmental determinants of health throughout the life cycle. It is a key factor in successful pregnancy outcomes, in the physical and mental development of infants and children and in promoting health at all ages. Current research stresses nutrition and diet as critical factors in prevention and treatment of major diseases, which disable or kill: obesity, heart disease, cancer, stroke, diabetes and osteoporosis. The safety, quality, quantity and distribution of local, national and world food supplies are major public policy issues.

Completion of the MPH program provides the graduate with a strong background in the science and practice of public health along with a sound knowledge of the science of human nutrition and food science.

Students enrolled can choose one concentration area to focus on during their Advanced Nutrition Field Experience. The two concentration areas offered are: **public health nutrition** or **clinical nutrition**. Students will choose their initial selection of concentration area during their second fall semester of the program. The topic of the student's Master's Paper will also reflect their choice of concentration.

The mission of the MPH Program in Public Health Nutrition is to prepare future leaders in nutrition and dietetics through effective classroom education and practical community and clinical experiences both locally and globally.

Two program goals have been identified:

Goal One:

To provide an educational environment that enhances critical thinking, problem solving and decision-making skills in enrolled students to produce program graduates that will be leaders in the field of nutrition and dietetics (public health, clinical, policy or nutrition research).

Goal Two:

To prepare competent entry-level practitioners in nutrition and dietetics who can assess and support the nutritional needs of individuals and communities.

These goals are measured annually. Each goal is measured using the following outcomes:

Program Goal #1, Program Outcomes:

- 1) At least 90% of students will rate the program as “meets expectations” or higher when asked about this program goal on the exit survey.
- 2) At least 80% of employers will rate the program as “meets expectations” or higher when asked about this program goal on the employer survey.
- 3) At least 90% of students who enroll in the program are expected to complete program/degree requirements within 150% of the time planned for completion (42 months/3.5 years).
- 4) At least 70% of MPH graduates who sought employment in nutrition will be employed within three months of program completion.

Program Goal #2, Program Outcomes:

- 1) 90% of the students taking the MPH comprehensive exam will pass it.
- 2) When answering the question on the graduate survey about their ability to assess and support the nutritional needs of the individuals and communities, 90% of graduates will be rated as “prepared” or higher.
- 3) When answering the question on the employer survey about their ability to assess and support the nutrition needs of individuals and communities, 90% of graduates will be rated as “prepared” or higher.

The outcome data measuring program achievement of these goals is available, upon request. Please contact the Program Director if you would like this information.

The MPH track (not coordinated with the dietetic internship) is a program for individuals who do not intend to practice nutrition/ dietetics in the United States and those who already have a clinical credential. This includes some international students, students with a medical or dental degree who desire breadth of knowledge of the field of public health with a specialization in nutrition, and students who are already registered dietitians. Students choosing this track do **NOT** complete RD practicum requirements.

Students concurrently completing the dietetic internship should refer to the UNC Dietetic Internship Manual for more information.

Students enrolling in the MPH Program may wish to consider completing a [certificate program](#) concurrently.

Students have found the [Global Health Certificate](#) to be of particular interest to the field of nutrition.

B. Admission Requirements

Applicants must hold an appropriate baccalaureate degree from a four-year college or university, or its international equivalent with a 3.0 GPA or better. Applicants are required to submit Graduate Record Examination (GRE) scores. Physicians and dentists may submit Medical or Dental Aptitude Test scores in lieu of GRE scores. All international applicants — except those from countries where English is the SOLE OFFICIAL language of instruction (Australia, Bahamas, Barbados, Canada — except Quebec, England, Ghana, Ireland, India, Jamaica, Kenya, New Zealand, Nigeria, Scotland, St. Vincent and the

Grenadines, Trinidad, Tobago, Uganda and Wales) OR those who have received or will receive a degree from a university in the United States — must submit an acceptable, official (reported directly from ETS) Test of English as a Foreign Language (TOEFL) score. If you are currently enrolled at a U.S. institution, you must submit an official transcript or verification of degree candidate status from that institution to qualify for a TOEFL waiver. If the degree or an official verification is not received, the TOEFL score will again be required. The minimum score accepted by the Graduate School is 90 for the internet-based and a 7 on the IELTS exam.

In addition to satisfying the TOEFL requirement, all new international students must take the University's English Proficiency Test before registering for their first semester of study, unless they have been awarded a degree from a U.S. institution or are a resident of a country where English is the language of instruction. All international applicants must also complete a financial certificate.

All applicants are required to submit a personal statement stating their reasons for applying to this program (see application for specific questions). The statement should identify career goals and discuss why the student is a good "fit" for the UNC MPH program. Applicants should also include a resume, which details paid and volunteer experiences. Applicants are encouraged to have work and/or volunteer experience in areas relevant to nutrition, health or other areas related to management, education, fitness or the social services and public health.

The following prerequisite course requirements (Appendix C) *must* be completed prior to enrollment:

- Chemistry through organic
- Human Physiology
- General Psychology
- Biochemistry
- Microbiology with Lab
- Intro. to Anthropology or Sociology I
- Human Anatomy
- Human Nutrition

We highly recommend that you submit online your COMPLETED application prior to **December 1st**. The MPH Committee begins making admission offers among completed applications in early January on a rolling basis. Applications received after **December 1st** will be considered until the class is filled. No applications will be accepted by the Graduate School after **January 10, 2017**.

Applications received prior to **December 13th** will be eligible for consideration for Graduate School fellowships (<http://gradschool.unc.edu/funding/>).

Assessment of Prior Learning/Transfer Credit

The MPH Program follows the graduate school's policies for credit of prior learning. The policy can be found here: <http://handbook.unc.edu/coursecredit.html>

The Graduate School's handbook states "up to 20 percent of the total hours required for the master's degree may be graduate-level courses transferred from another approved institution, or from this institution for courses taken before admission to an academic program in The Graduate School (e.g., courses taken as a Continuing Studies student, an undergraduate, or as a non-degree student). Credit received for graduate-level courses taken as an undergraduate may be transferred into an academic program with the program's approval provided the course did not count toward the requirements of the undergraduate

degree. Transferred credits will not be included in the program residence credit calculation.”

C. Time Required

A graduate student has five calendar years from the date of first registration in the Graduate School to complete the Master’s degree. Typically, it takes 24-28 months to complete the MPH. Full time registration is considered to be a minimum of nine credits per semester, but 12-15 credits per semester is a more usual course load. MPH students complete many of the same courses as MPH/RD students however they complete only one eight-week field experience. Students may also choose to extend their program to take additional elective coursework or to complete a research project.

II. THE FACULTY ADVISOR

A faculty adviser is assigned to each student. At a minimum, this academic advisor meets with the student during orientation and during each pre-registration period to discuss courses that meet Department and School of Public Health requirements and to review grades from the prior registration period. Student should obtain their faculty advisor’s signature on the MPH Individual Student Progress Form (Appendix E). We view student/faculty communication as a mutual responsibility. Meetings should be scheduled periodically as required by the student or the advisor. The advisor serves as the major source of guidance to the student in the areas of coursework, field placement and career planning. In addition to guidance from an advisor, students are encouraged to consult with other faculty members, in order to benefit from the diversity of faculty research and experience.

III. SCHOOL OF PUBLIC HEALTH AND DEPARTMENT OF NUTRITION REQUIREMENTS

All candidates for the MPH degree in the School of Public Health are required to successfully complete:

- 1) A major in one of the departments or curricula of the School, by satisfying whatever requirements that department or curriculum may set.
- 2) At least four health-related courses in at least three different departments or curricula other than the major. No portion of this requirement may be waived.
- 3) A minimum of 42-credit hours.

In addition to these requirements, the Department of Nutrition requires that MPH candidates shall successfully complete approved courses in each of five areas:

- | | |
|---------------------------------|-----------------------------------|
| 1) Biostatistics | 4) Environmental Health Sciences |
| 2) Epidemiology | 5) Social and Behavioral Sciences |
| 3) Health Policy and Management | |

A. Courses Recommended for Nutrition MPH students to meet School of Public Health Requirements (see Appendix A)

BIOS 600	<i>Principles of Statistical Inference (3)</i>
EPID 600	<i>Principles of Epidemiology (3)</i>
HPM 600	<i>Introduction to Health Policy and Management (3)</i>
ENVR 600	<i>Environmental Health (3)</i>
HBEH 600	<i>Social and Behavioral Sciences in Public Health (3)</i>

B. Required Coursework for the MPH/RD and MPH Track

(See MPH Track requirements on page 8.)

MPH/RD in Nutrition.

The MPH/RD is a twenty-eight month program preparing Public Health and Clinical Dietitians for careers in clinical nutrition or public health and community leadership. This program includes coursework and experiences that satisfy both the Foundation Knowledge and Learning Outcomes Requirements (Appendix E) of the Academy of Nutrition and Dietetics to prepare students for eligibility to take the examination for dietetic registration.

*Information about the internship hours for this track can be found in the **UNC Dietetic Internship Manual**.*

This twenty-eight month program is also for students who have received a Verification Statement from an ACEND Accredited/Approved Didactic Program in Dietetics. *An official Verification Statement must be given to the Student Services Manager.*

Field hours for both tracks are highlighted in red.

MPH-RD in Nutrition:

Fall Semester		Credits
BIOS 600	Principles of Statistical Inference	3
NUTR 611	Nutrition Across the Lifecycle	3
NUTR 630	Nutrition Communication, Counseling and Culture	3
HBEH 600	Social and Behavioral Sciences in Public Health	3
Total Semester Credits		12

Spring Semester

ENVR 600	Environmental Health (online)	3
EPID 600	Principles of Epidemiology	3
NUTR 400*	Introduction to Nutritional Biochemistry	3
NUTR 640	Medical Nutrition Therapy I: Chronic Disease Management	3
Total Semester Credits		12

Summer Session I (12-weeks)

NUTR 720	Public Health Nutrition Management I	2
<i>Public Health Nutrition Experience: 336 hours (324 community/PH Nutrition, 6 hours WIC, 6 hours of Schools)</i>		
Total Semester Credits		2

Fall Semester

NUTR 600	Human Metabolism: Macronutrients	3
NUTR 642	Medical Nutrition Therapy: Acute Disease Management	3
NUTR 725	Public Health Nutrition Management II	3
NUTR 735	National Nutrition Issues	1
Total Semester Credits		10

Spring Semester

HPM 600	Introduction to Health Policy and Management (online)	3
NUTR 620	Human Metabolism: Micronutrients	3
NUTR 650**	Food Science and Culinary Arts	2
NUTR 650L**	Food Science and Culinary Arts Lab	1
NUTR 728	Nutrition Translational Research and Application (Optional/Elective)	2-3
NUTR 813	Nutritional Epidemiology	3
Total Semester Credits		12-15

Jan-May Food Systems Management Self-Study (Online)

April-May Comprehensive Examination

Summer Session I

RD Clinical Nutrition Experience: 480 hours (432 clinical/hospital-acute/critical care, 8 hours of long term care and 40 hours of foodservice)

Fall Semester

RD	Advanced Nutrition Experience: PH Concentration: 400 hours PH Nutrition –OR- Clinical Nutrition Concentration: 400 hours Clinical/Hospital	
NUTR 992	Master's Paper /Advanced Nutrition Experience	3
Total Semester Credits		3

***Students may opt to take an exemption exam for Nutrition 400 early in the Fall Semester. Contact Student Services Manager to schedule an examination date.**

****Students who are RDs or have a verification statement may take an elective or a core public health course in place of this course.**

MPH in Nutrition:

The MPH is a twenty-four month program for students who want an MPH degree but do not want/need the RD credential to practice. This includes some international students, medical or dental students, registered dietitians (RD) and those with clinical degrees (R.N., M.D., D.D.S., D.V.M.).

<u>Fall Semester</u>		<u>Credits</u>
BIOS 600	Principles of Statistical Inference	3
EPID 600	Principles of Epidemiology	3
HBEH 600	Social and Behavioral Sciences in Public Health	3
NUTR 611	Nutrition Across the Lifecycle	3
NUTR 630	Nutrition Communication, Counseling and Culture	3
Total Semester Credits		15

<u>Spring Semester</u>		
NUTR 400*	Introduction to Nutritional Biochemistry*	3
NUTR 640**	Medical Nutrition Therapy I: Chronic Disease Management**	3
ENVR 600	Environmental Health (online)	3
	Elective (Optional)	3
Total Semester Credits		9-12

<u>Summer Session I</u>		
NUTR 720	Public Health Nutrition Management I (Didactic and Community Assessment Assignment)	2
Total Semester Credits		2

<u>Fall Semester</u>		
NUTR 600	Human Metabolism: Macronutrients	3
NUTR 725	Public Health Nutrition Management II	3
NUTR 735	National Nutrition Issues	1
	Elective (optional)	3
Total Semester Credits		10

<u>Spring Semester</u>		
HPM 600	Introduction to Health Policy and Management (online)	3
NUTR 620	Human Metabolism: Micronutrients	3
NUTR 813	Nutritional Epidemiology	3
NUTR 728	Nutrition Translational Research and Application (Optional or Elective)	2-3
Total Semester Credits		11-12

April Comprehensive Examination

<u>Summer or Fall Semester</u>		
	Advanced Nutrition Field Experience Field Hours: 8 weeks (320 hours)	
NUTR 992	Master's Paper	3
Total Semester Credits		3

***Students may opt to take an exemption exam for Nutrition 400 early in the Fall semester. Contact the Student Services Manager for scheduled examination date.**

****Students who are RDs or have a verification statement may take an elective or a core public health course in place of this course.**

C. *MPH Experiential Placement Philosophy and Policy*

All Department of Nutrition MPH students are required to participate in a set of course requirements and experiential requirements. There are three groups of courses: *a) public health core courses that orient all MPH students to the public health perspective and use of population based data management; b) in-depth knowledge of biological, clinical and behavioral aspects of human nutrition and food selection; and c) understanding of nutrition problems in the community and application of public health to their solutions.* All students are required to take core courses or the approved equivalent in Biostatistics, Epidemiology, Environmental Sciences, Health Policy and Management and Health Behavior and Health Education or approved substitute courses.

During the first summer of study, students in the MPH program take Public Health Nutrition Management I, where they gain skills in community assets mapping and grant writing, as well as team building and partnering. This experience fulfills requirements set by the Council on Education in Public Health (CEPH).

During the 2nd year of the program, students participate in a 3 ½ day Washington, DC seminar between fall and spring semesters in which they meet with personnel in the legislative, advocacy, non-profit, and federal agency areas with the objective to better understand current topics of policy interest and methods of policy development and analysis.

For the **MPH degree**, each student is placed in an individualized Advanced Nutrition Field Experience lasting 8-weeks of full time work for the final summer of study,. This experience follows completion of required coursework, and may be done domestically or internationally. Students are provided with the opportunity to integrate theory with practice, facilitate the transition from student to professional status, and clarify short-term career objectives in a supportive and nurturing environment. Each student is expected to participate in a variety of activities as well as take major responsibility for one major project planned with the field preceptor and faculty advisor. The field experience is jointly selected (between advisor/student) according to the student's needs, interests, career goals, and experience. The *Handbook on Advanced Nutrition Field Practice Experience* is kept current as a reference to faculty advisors, students and field counselors.

For the **MPH-RD program (coordinated program with dietetic internship)**, each student completes a 1216 hour dietetic internship which is divided into three experiences: 1) Public Health Nutrition Management (336 hours), 2) Clinical Nutrition (480 hours) and 3) Advanced Experience (400 hours). The internship prepares students for careers in clinical nutrition or public health and community leadership. This program includes required assignments and experiences that satisfy both the Foundation Knowledge and Learning Outcomes Requirements (Appendix E) of the Academy of Nutrition and Dietetics and to prepare students for eligibility to take the examination for dietetic registration. Placements for the dietetic internship experiences are decided based on input from both student and faculty.

Detailed information about each of these experiences can be found in the *UNC Dietetic Internship Manual* which is kept current as a reference to faculty advisors, students and field counselors.

D. FIELD EXPERIENCES

MPH Nutrition (non RD program)

The practicums and field experiences provide students an opportunity to apply the knowledge and skills being acquired through their coursework and further develop and demonstrate attainment of program learning outcomes.

Advanced Nutrition Field Experience

This 8-week Advanced Nutrition Field Experience follows completion of required coursework. It provides students with the opportunity to integrate theory with practice, facilitate the transition from student to professional status, and clarify short-term career objectives in a supportive and nurturing environment.

The completion of the Advanced Nutrition Field Experience involves traveling from campus to the various sites. Students assume full responsibility for their own safety in the course of this travel to and from the sites. Students should also be prepared to cover the cost of this travel although some financial assistance may be provided (ex. AHEC). Students are also responsible for any injury that occurs during field placements. During these experiences, students participate in educational activities that further their learning. Students are not placed in sites to replace employees.

The faculty field experience coordinator individually plans placements with each student in a series of conferences during the fall and spring semesters of the second year of study. Individual interests and qualifications are carefully considered in arranging placements. For students concentrating in public health nutrition, field sites are established in recognized public health nutrition programs in the United States (federal, state or local) and abroad. Preference is given to agencies where the nutrition program is directed by qualified Public Health Nutritionists and where agency administration supports allocation of staff professional time to the supervision and guidance of field students. Students are expected to have a sound background in food, nutrition, dietetics, and public health. Prerequisites are NUTR 720 Public Health Nutrition Management I and NUTR 725 Public Health Nutrition Management II, or equivalent.

National Nutrition Issues [NUTR 735] (both MPH and MPH/RD tracks)

This 3 1/2 day course in Washington, D.C. is conducted in January of the 2nd year of coursework, prior to the start of the spring semester. It includes small group conferences with staff of the Departments of Agriculture and Health and Human Services, U.S. Congress, and with professional organizations and advocate groups concerned with legislation and nutrition policy.

Field counselors are identified annually depending on their availability and the interests of students. The *Handbook on Advanced Nutrition Field Practice Experience* is kept current as a reference to faculty advisors, students and field counselors.

Field Experiences (MPH-RD in Nutrition)

The practicums and internship experiences provide students an opportunity to apply the knowledge and skills being acquired through their coursework and further develop and demonstrate attainment of program learning outcomes.

National Nutrition Issues [NUTR 735] (both MPH and MPH/RD tracks)

See description on previous page.

Dietetic Internship

The dietetic internship includes 1216 hours divided into three field experiences: 1) Public Health Nutrition Management, 2) Clinical Nutrition and 3) Advanced Experience. The completion of the clinical, public health nutrition management field placement, and advanced nutrition field experiences involves traveling from campus to the various sites. Students assume full responsibility for their own safety in the course of this travel to and from the sites. Students should also be prepared to cover the cost of this travel although some financial assistance may be provided (ex. AHEC). Students are also responsible for any injury that occurs during field placements. During these experiences, students participate in educational activities that further their learning. Students are not placed in sites to replace employees.

Public Health Nutrition Management Experience

Students are assigned to a state or local health agency for their community field experience under the direction of a public health nutritionist/dietitian preceptor.

Food Systems Management Online Module

Each student will complete an online Food Systems Management Module designed to help students in preparing for their foodservice rotations. There are no field hours directly associated with this workshop but it is required prior to the clinical nutrition experience as the content prepares students to complete their foodservice modules during their hospital hours.

Clinical Nutrition Experience

The Clinical Nutrition Experience provides learning experiences to provide basic competencies in clinical nutrition and dietetics practice. The student develops an understanding of the role of the clinical dietitian, the opportunities and constraints of the health care setting in providing nutritional care to patients and awareness of the need for continuity of patient care between the health care facility and the public health agency.

Advanced Nutrition Experience

The Advanced Nutrition Experience is the final field experience for the MPH/RD students. Students are placed in domestic and international organizations (governmental, non-profit, and private sector) that have a role in supporting nutritional health and well-being. The advanced nutrition experience is tailored to the interests and professional goals of the individual student.

Please refer to the *UNC Dietetic Internship Manual* for detailed information about each of these experiences.

E. Optional Applied Research in Public Health Nutrition

Students have the option of learning about the process of applied nutrition research by integrating a research component into their coursework and public health concurrent and/or community field experiences. Within this emphasis, students will become familiar with one or more research skills such as defining a research problem, assessing the feasibility of research in the field setting, evaluating alternative research methodologies, selecting an appropriate study sample, and/or communicating results to the appropriate audience.

Students interested in applied research in areas such as innovative public health service delivery, nutrition surveys and surveillance, data collection tool development and evaluation, program evaluation or policy analyses should discuss their interests with their faculty advisor and faculty field experience coordinator at the initial registration period. This will allow time for planning the necessary course sequence and appropriate field site selection. Students with this interest may wish to extend their program by one semester. In addition to the required course load, the student should take additional coursework to gain more advanced experience in research methods.

During the summer or early fall semester of the second year, the student should explore research interests with a member of the nutrition faculty. A field site for the Advanced Nutrition Field Experience should be identified, and the potential field counselor, the student and the academic faculty adviser should be included in the planning/development of the research project. Registration of courses in the spring semester should include NUTR 695 Nutrition Research, if applicable.

NUTR 695 Nutrition Research

The student should identify a faculty member willing to supervise the development of the research project. With the faculty advisor selected for this project, during the second year of study, the student will develop a proposal, conduct a literature review and/or develop data collection instruments as part of the independent study course NUTR 695. During the late fall and early spring semesters of the second year, the student will work with the faculty field experience coordinator to finalize a field placement and work with the field counselor to coordinator activities of NUTR 695 and make detailed plans for conducting the project. The student will implement the research project as a major part of the Advanced Nutrition Field Placement experience. The results will be incorporated into the NUTR 992 Master's Paper.

NUTR 728 Nutritional Translational Research and Application

This course has been designed to focus on translational nutrition research and its application in grant writing. Students will apply evidenced-based nutrition interventions (education, counseling and research) in clinical public health and policy arenas. This course is optional but recommended for students who are interested in grant writing.

Expanded Study Options:

MPH and MPH/RD students may wish to extend the period of study to include expanded study in an area related to nutrition professional practice. For example, some students wish to pursue additional coursework in exercise science, maternal and child health or health behavior. At this University, a formal minor in a subject area requires 9-credit hours for a master's student and requirements vary across departments and disciplines. However, many students take fewer credits to gain the desired knowledge and skill base. Students

are encouraged to discuss these interests with the faculty advisor early in the course of study in order to tailor the educational program of study. Many students extend the course of study for an additional semester to meet such goals.

IV. LEARNING OUTCOMES AND STUDENT EVALUATION

The MPH Program in the Department of Nutrition is designed to provide graduates with a breadth of integrated knowledge and skills in nutrition science, clinical nutrition, nutrition behavior, and public health principles and practice. The following learning outcomes describe the expected breadth of knowledge and competencies on completion of the MPH degree program in Nutrition (Appendix D).

Learning Outcomes:

Upon satisfactory completion of the MPH program in the Department of Nutrition, graduates will be able to:

- ◆ Critically think, problem solve and utilize decision-making skills as they relate to health nutrition practice, clinical public health nutrition program and/or policy development in the field of public practice, policy or research.
- ◆ Provide entry-level care and be able to assess and support the nutritional needs of individuals and communities.
- ◆ Define and interpret the anthropometric, biochemical, clinical, dietary and environmental elements needed for nutritional assessment of the individual
- ◆ Describe how social, cultural and economic characteristics influence dietary practices of individuals, groups and populations
- ◆ Describe the roles of diet in growth and development
- ◆ Describe the roles of medical nutritional therapy in the treatment of disease
- ◆ Plan menus to achieve optimal nutrition for individuals and groups in health and disease
- ◆ Communicate and educate effectively by using varied media and informational systems as appropriate for varied audiences
- ◆ Critically evaluate the epidemiological evidence linking nutritional indicators and public health problems
- ◆ Identify the data elements needed for community assessment, and summarize the criteria by which community problems are prioritized in program plans
- ◆ Distinguish among the elements of alternative theoretical frameworks to develop program or policy strategies which maximize efficacy and cost-effectiveness in achieving optimal dietary and nutritional status at the population level
- ◆ Develop an operational plan to implement nutrition-related interventions which are appropriate to a given community or subpopulation to promote health and prevent disease

- ◆ Write structure, process and outcome objectives for nutrition care plans at the individual level and nutrition program plans at the agency and community levels
- ◆ Develop and defend an operational budget, identifying resources needed to implement the nutrition program plan
- ◆ Design program evaluation strategies and data monitoring systems appropriate to agency mission and resource constraints
- ◆ Apply effective management principles in the administration of nutrition programs and services including human and financial resources
- ◆ Describe political and ethical considerations within and across organizations (public, private and voluntary sectors) involved in planning, decision making, and policy analysis

Learning outcomes are based in part on knowledge and skills articulated by the relevant professional accreditation associations such as the Accreditation Council for Education in Nutrition and Dietetics and the Association of Graduate Faculties in Public Health Nutrition. Learning outcomes are used to develop course-specific content and learning outcomes.

Student monitoring and evaluation

Graduate student progress is monitored in a variety of ways including monitoring of course grade performance, monitoring of experiential performance through individual conferences between students, faculty and field faculty, performance on the comprehensive exam, and the master's paper. The faculty advisor and the student have a mutual responsibility to work with each other to assure appropriate performance in coursework and planning, as needed, to prepare for successful completion of the comprehensive examination.

Formal and informal evaluation is built into field placements. Student assessment is part of course requirements. For example, during the Advanced Nutrition Field Experience, informal on-site evaluation is built into the experience to allow student and preceptor-designated time to assess performance and expectations. Formal evaluation is provided where the faculty paper advisor/mentor assigns a grade to the master's paper, which is written to fulfill graduate school requirements. The faculty field experience coordinator provides a course grade in conjunction with recommendations from the field faculty and student self-assessment.

Retention and Remediation Procedures

Graduate student performance is evaluated throughout the program. Any student who has earned a course grade of F, at any time during the program, will be dismissed. Students receiving a total of nine credit hours or more of L will also be dismissed.

When special circumstances warrant, a student made academically ineligible under the conditions stated above may be reinstated upon petition initiated through the student's academic program. Please see The Graduate School Handbook on the steps to take for this process.

V. RESOLUTION OF CONFLICTS

A variety of avenues exist for problem-solving. In the event that there is a dispute regarding a permanent course grade, the student shall first address his or her concerns to the instructor who assigned the grade. Thereafter, procedures are outlined in the Graduate School Handbook (<http://handbook.unc.edu/>). For other conflicts between students and staff or faculty, every attempt should first be made to solve the problem independently. If resolution is not gained, the Chair of the MPH committee should be consulted. If unresolved by the committee chair, a faculty member appointed by the department Chair to head the department grievance committee, an ombudsperson, can be asked to meet with both parties of a dispute. Subsequent steps to resolve disputes are set forth in the booklet, Teaching Assistants and Professors as a Teaching Team, available from The Center for Faculty Excellence (formerly The Center for Teaching and Learning, UNC-CH).

VI. INSURANCE FOR STUDENTS

While students are in Chapel Hill, their routine health needs are met through [Campus Health Services](#). All students dually enrolled in a graduate program and internship are required to have health insurance coverage.

Costs for services not covered by insurance are the responsibility of the student and not the Department. Students completing field experiences through both the MPH only and MPH-RD program are required to demonstrate health insurance to the sites. Proof of insurance is sent to sites prior to student's first day. Malpractice insurance is provided for all students involved in professional practice experiences. The Department presently covers the cost of this insurance.

VII. STUDENT EXPENSES

MPH in Nutrition Program

(MPH/RD program expenses listed on next page)

*Estimated expenses for a graduate student for a typical 24-month MPH program.
Based on 2016-2017 rates. Tuition and fees subject to change.*

YEAR 1	NC RESIDENT	NON-NC RESIDENT
Tuition/Fees Academic Year	\$17,981	\$34,435
Tuition/Fees 1 st Summer Session	\$624	\$1,812
Books and Supplies (2 Semesters)	\$1,442	\$1,442
Estimated Total for YEAR 1	\$20,047	\$37,689
Health Insurance – Semester (if not already covered)	Varies depending upon plan chosen by student	Varies depending upon plan chosen by student
YEAR 2	NC RESIDENT	NON-NC RESIDENT
Tuition/Fees Academic Year	\$18,017	\$34,471
Books and Supplies (2 Semesters)	\$1,442	\$1,442
Estimated Total for YEAR 2	\$19,459	\$35,913
Health Insurance – Semester (if not already covered)	Varies depending upon plan chosen by student	Varies depending upon plan chosen by student
Advanced Experience Fee (MPH-Only)	\$1,950	\$1,950
Estimated Total for 24 month program	\$41,456	\$75,552

NOTE: *This does not include additional expenses for housing, food, travel, etc. incurred during the Washington, D.C. trip and advanced nutrition experience for MPH degree.*

MPH/RD in Nutrition Program

*Estimated expenses for a graduate student for a typical 28-month MPH/RD program.
Based on 2016-2017 rates (summer – 2016 rates). Tuition and fees subject to change.*

YEAR 1	NC RESIDENT	NON-NC RESIDENT
Tuition/Fees Academic Year	\$17,981	\$34,435
Tuition/Fees 1 st Summer Session	\$624	\$1,812
Books and Supplies (2 Semesters)	\$1,442	\$1,442
Estimated Total for YEAR 1	\$20,047	\$37,689
Health Insurance – Semester (if not already covered)	Varies depending upon plan chosen by student	Varies depending upon plan chosen by student
YEAR 2	NC RESIDENT	NON-NC RESIDENT
Tuition/Fees Academic Year*	\$18,067	\$34,521
Books and Supplies (2 Semesters)	\$1,442	\$1,442
Estimated Total for YEAR 2	\$19,509	\$35,963
Health Insurance – Semester (if not already covered)	Varies depending upon plan chosen by student	Varies depending upon plan chosen by student
YEAR 3	NC RESIDENT	NON-NC RESIDENT
Tuition/Fees Fall Semester*	\$4,981	\$9,095
Books and Supplies:	\$742	\$742
Estimated Total for YEAR 3	\$5,723	\$9,837
Health Insurance – Semester (if not already covered)	Varies depending upon plan chosen by student	Varies depending upon plan chosen by student
MPH-RD Fees (internship)	Amount	NON-NC RESIDENT
	NC RESIDENT	
Registration for Program	\$1,950	\$1,950
Public Health Nutrition Experience	\$1,950	\$1,950
Clinical Nutrition Experience	\$1,950	\$1,950
Advanced Nutrition Experience	\$1,950	\$1,950
Total for MPH RD Fees	\$7,800	\$7,800
Estimated Total for 28-month program	\$53,079	\$91,289

NOTE: *This does not include additional expenses for housing, food, travel, etc. incurred during the Washington, D.C. trip, advanced nutrition experience for MPH degree and dietetic internship for MPH/RD program.*

VIII. THE STUDENT SERVICES REPRESENTATIVE

During the admissions process, most students will have interacted with the student services manager (SSM) in the Department of Nutrition. The SSM is available as a student advocate, to assist students in identifying and locating resources and requirements at the department, School of Public Health, and University levels. The SSM can assist students with a variety of needs including:

- **Obtaining** *Email addresses*
 UNC One Card

- **Finding** *Nutrition Student Workroom/Mailboxes*
 Health Science and other University libraries
 Health Affairs Bookstore within Student Stores

- **Seeking** *Financial assistance or department employment opportunities*
 Assistance with registering, adding/dropping courses or withdrawal from
 the University

- **University-wide**
 Resources *Student health, insurance and counseling services*
 Parking permits
 StudentCentral - on-line registration system
 The Writing Center

- **The SSM contact**
 Information: *260 Rosenau Hall, CB#7461*
 (919) 966-7212-OFC; (919) 966-7216-FAX
 Email: nutrition@unc.edu

For more information and graduate school policies pertaining to withdrawal from the university, refund of tuition and fees, protection of privacy of student information, access to health services, counseling, testing and financial aid, please view the [Graduate School Handbook](#).

IX. THE MPH COMMITTEE MEMBERSHIP

A committee of Department faculty is responsible for administration of the MPH program. Their responsibilities include admissions to the MPH program, curriculum requirements, and development and grading of the MPH Comprehensive Examination. For the 2016-2017 school year, Committee members include Professors, Peggy Bentley (co-chair), Amanda Holliday (co-chair), Beth Jenks, Michelle Mendez, Shu Wen Ng, Saroja Voruganti, and Heather Wasser.

X. MPH COMPREHENSIVE EXAMINATION

Upon completion of the program didactic requirements, each student must pass a written, comprehensive examination. This examination covers and integrates the general areas of:

- ◆ biological and clinical aspects of nutrition
- ◆ behavioral aspects of food and nutrition
- ◆ nutritional epidemiology
- ◆ public health nutrition programs and policy

The comprehensive examination will be offered in April only.

Students are asked to answer three questions; all three of which are closed book. The exam usually takes approximately 4 hours. Typical multicomponent questions might ask the student to:

- ◆ Characterize the epidemiology of a given public health problem
- ◆ Identify and evaluate potential metabolic or etiologic mechanisms
- ◆ Compare the role of one or more nutrients in condition etiology or treatment
- ◆ Describe and contrast efficacy and effectiveness of alternative intervention approaches
- ◆ Describe the political considerations involved in planning and decision making on influencing policy.

Students are required to pass the comprehensive examination. If a student fails the examination he/she may retake the examination at the next scheduled exam administration. No student may take an examination a third time without approval by the Administrative Board of the Graduate School.

XI. MASTER'S PAPER

The master's paper provides students an opportunity to synthesize, integrate and apply knowledge and skills learned in coursework and other learning experiences and require students to demonstrate attainment of program competencies. The master's paper is a requirement of graduate training in public health nutrition. It may take the form of:

1. A policy brief or white paper in which the student explores and analyzes an important nutrition policy issue and recommends a realistic approach to addressing it.
2. A manuscript suitable for publication in a scholarly peer review journal that adheres to the Instructions for Authors for a selected journal.
3. A grant proposal following a specific Request for Application (RFA) relevant to the field placement.
4. A clinical case report.
5. Other type of paper, for example a business plan (these alternate types must be discussed with and agreed upon by the student's academic advisor).

XII. APPLICATION FOR GRADUATION

Each student must be registered for 3-credits of NUTR 992 during the semester he/she expects to graduate signifying that he/she has completed all requirements for the master's degree, and is eligible to graduate at the end of the Advanced Nutrition Field Experience. Students must complete the *Application for Graduation* form online through ConnectCarolina student portal.

XIII. COURSE DESCRIPTIONS

NUTR 175 INTRODUCTION TO FOOD STUDIES: FROM SCIENCE TO SOCIETY (3)

Introduction to food studies covering a variety of topics including how food was consumed over history, land use and aquaculture, food in the arts, food and culture in the American South, food politics and nutrition science. Fall. Beck and Faculty.

NUTR 240 INTRODUCTION TO HUMAN NUTRITION (3)

Prerequisites, BIOL 101/101L and CHEM 102/102L. Relationships of human nutrition to health and disease. Integration of biology, chemistry, and social sciences as related to human function. Nutrient composition of foods and safety of the food supply. Fall. Beck and Faculty.

NUTR 245 SUSTAINABLE LOCAL FOOD SYSTEMS: INTERSECTION OF LOCAL FOODS AND PUBLIC HEALTH (3)

Examines the intersection of local foods and public health in respect to nutrition, environmental, economic, and community issues. Students explore impacts of the increasingly industrialized and centralized food system, as well as, potential solutions, while assisting community partners increase opportunities for farmers, local food marketers, distributors, and entrepreneurs. Spring. De Marco and Ammerman.

NUTR 295 UNDERGRADUATE RESEARCH EXPERIENCE IN NUTRITION (3)

Permission of the instructor. For undergraduates enrolled in the department's baccalaureate degree program. Directed readings or laboratory study on a selected topic. May be taken more than once for credit. Fall, Spring, Summer. Faculty.

NUTR 400 INTRODUCTION TO NUTRITIONAL BIOCHEMISTRY (3)

Prerequisites, BIOL 101, CHEM 101, 102 and NUTR 240. Permission of the instructor for students lacking the prerequisites. Function of the human body focusing on chemical properties, function and metabolism of nutrients. Biochemistry of nutrients with a limited focus on medical aspects of nutrient metabolism. For advanced undergraduates and graduate students needing to enhance background prior to NUTR 600. Spring. Styblo and Krupenko, S.

NUTR 600 HUMAN METABOLISM: MACRONUTRIENTS (3)

Prerequisite, NUTR 400. Permission of the instructor for students lacking the prerequisites. Cell biochemistry and physiology emphasizing integration of proteins, carbohydrates and lipids in whole-body metabolism, regulation of energy expenditure, food intake, metabolic adaptations, and gene expression, and macronutrient-related diseases (atherosclerosis, obesity). Fall. Coleman.

NUTR 611 NUTRITION ACROSS THE LIFE CYCLE (3)

Prerequisite, NUTR 400. This course covers nutrition during the life cycle. Units include women during preconception, pregnancy, and lactation; infancy; childhood; adolescence; and older adults (65+). Nutrient and energy needs, assessment of nutritional status, and cultural and socioeconomic barriers are discussed for each phase. Fall. Holliday, Samuel-Hodge, and Wasser.

NUTR 620 HUMAN METABOLISM: MICRONUTRIENTS (3)

Prerequisite, NUTR 400 and 600. Permission of the instructor for students lacking the prerequisites. Cell biochemistry and physiology emphasizing metabolism of vitamins and minerals including antioxidant protection, immune function, nutrient control of gene expression and disease states induced by deficiencies (e.g., iron-deficient anemia). Spring. Krupenko, N. and Makowski.

NUTR 630 NUTRITION COMMUNICATION, COUNSELING AND CULTURE (3)

Prerequisite, NUTR 240. Permission of the instructor for students lacking the prerequisite. Course teaches the future nutrition professional the art and science of communicating with individuals, groups, and the public. Students will enhance cultural awareness, practice counseling individuals and facilitating groups, and frame nutrition messages for mass media including social media. Fall. Sayre.

NUTR 640 MEDICAL NUTRITION THERAPY I: CHRONIC DISEASE MNGT. (3)

Prerequisite, NUTR 630. Course designed to examine the rationale and implementation of diet therapy and nutrition support in the prevention or treatment of chronic diseases. Spring. Holliday.

NUTR 642 MEDICAL NUTRITION THERAPY II: ACUTE DISEASE MNGT. (3)

Prerequisite, NUTR 640. Course designed to examine the rationale and implementation of diet therapy and nutrition support in the prevention or treatment of acute diseases. Fall. Holliday.

NUTR 650 FOOD SCIENCE AND CULINARY ARTS (2)

Prerequisite, NUTR 400. Introduction to foods, chemical and physical properties, nutritional composition, food safety, production, and regulation. NUTR 650 Lab required. Spring. Jenks.

NUTR 650L FOOD SCIENCE AND CULINARY ARTS LAB (1)

Concurrent with NUTR 650. Classes illustrate biochemical processes and food properties covered in lecture. Introduction to new foods and food ideas. Critical evaluation of recipes. Lab fee required. Three lab hours per week. Spring. Jenks.

NUTR 692H HONORS RESEARCH IN NUTRITION (3)

Permission of instructor. Directed readings or laboratory study of a selected topic. Requires a written proposal to be submitted to and approved by BSPH Committee and faculty research director. A written report is required. May be taken more than once for credit. Six laboratory hours per week. Fall, spring, summer. Faculty.

NUTR 695 NUTRITION RESEARCH (VAR. 1-9)

Permission of the instructor. Individual arrangements with faculty for bachelor and master students to participate in ongoing research. Fall, spring, and summer. Faculty.

NUTR 696 READINGS IN NUTRITION (VAR. 1-9)

Permission of the instructor. Reading and tutorial guidance in special areas of nutrition. Fall, spring, and summer. Faculty.

NUTR 700 NUTRITION IN MEDICINE (2)

Prerequisite, BIOL 252 and NUTR 600 or equivalent. Comprehensive review of nutrition basics with strong clinical perspective. Integrates nutrient biochemistry and metabolism into a framework of nutritional assessment and dietary intervention. Fall. Kohlmeier.

NUTR 720 PUBLIC HEALTH NUTRITION MANAGEMENT I (2)

Prerequisites, NUTR 630 and 640, HBEH 600. Focuses on the roles and functions of the public health nutritionist in providing nutrition services at the community level that includes domestic and international nutrition programs, essential public health services, community assessment methods, and community engagement. For the MPH-RD student, it includes the 336 hours of field experience. Summer. Samuel-Hodge.

NUTR 725 PUBLIC HEALTH NUTRITION MANAGEMENT II (3)

Prerequisite, NUTR 720. An overview of the planning and management of local, state, federal, and voluntary public health nutrition programs. Examines legislative and administrative structures. Fall. Samuel-Hodge.

NUTR 728 NUTRITION TRANSLATIONAL RESEARCH AND APPLICATION (2)

Prerequisite, EPID 600, NUTR 725, and NUTR 813 recommended. Permission of instructor for non-majors. Designed to focus on translational nutrition research and application, including grant writing, to prepare students in clinical, public health, and policy arenas. Spring. Mayer-Davis.

NUTR 735 NATIONAL NUTRITION ISSUES (1)

Prerequisite, NUTR 725 or permission of the instructor. Three-day in-depth seminar held in Washington, DC on national nutrition issues, policy formulation and program development with key congressional staff, federal agencies staff, and pertinent public interest/consumer advocacy groups. Paper required. Field fee required. Fall. Ng.

NUTR 745 INTERNATIONAL NUTRITION (3)

Provides a broad overview of international nutrition research issues, programs, and policies. Topics will include micronutrient deficiencies, child feeding and growth, determinants of under- and over-nutrition, chronic disease and nutrition, food fortification and supplementation, and nutrition intervention programs and policy. Fall. Adair and Bentley.

NUTR 746 TAXES, BANS, & BURGERS: DIRECTED READINGS IN GLOBAL FOOD POLICY (1)

Prerequisite, permission of the instructor for non-majors. Course will explore the social, historical, and political context of how individuals make decisions about what to eat; how this context shapes food policy; and how these policies in turn shape individual behavior, by employing a comparative framework over three countries (China, Mexico, and the U.S.) Spring. Smith-Taillie

NUTR 785 GRADUATE TEACHING EXPERIENCE (1)

Prerequisite, permission of the instructor. Individual arrangements with faculty for a graduate student to serve as a teaching assistant for a Nutrition course. Fall and Spring. Beck.

NUTR 803 ADVANCED NUTRITION INTERVENTION RESEARCH SEMINAR (1)

Prerequisite, permission of instructor. Development and application of critical thinking skills in the analysis of important nutrition and policy interventions. The course will examine conceptual models, research designs, intervention strategies, and measures of effectiveness in historical and innovative nutrition research. Fall, Spring. Faculty.

NUTR 808 GLOBAL CARDIOMETABOLIC DISEASE SEMINAR (1)

Prerequisite, permission of instructor. This core seminar addresses biology, genetics, epidemiology, intervention and policy strategies relevant for addressing global cardiometabolic disease, as well as, professional development and responsible conduct of research in global settings. Fall, Spring. Adair, Gordon-Larsen, and Smith-Taillie.

NUTR 810 PHYSICAL ACTIVITY EPIDEMIOLOGY AND PUBLIC HEALTH (3)

Prerequisite, EPID 600 or equivalent. Course provides an overview of major issues in physical activity measurement, population distribution, correlates, impacts (physically and economically), and public health recommendations. Interventions, including relevant theories, will be reviewed. Spring. Ward and Hales.

NUTR 811 DEVELOPMENT OF HEALTH PROMOTION AND DISEASE PREVENTION INTERVENTIONS (VAR. 1-3)

Prerequisite, permission of the instructor. Understanding of the role and application of both theory and empirical data in the design and development of effective behavior change interventions, with particular focus on changing nutrition behaviors. Fall. Tate and Lytle.

NUTR 812 INTRODUCTION TO OBESITY: CELL TO SOCIETY (3)

Prerequisite, permission of the instructor. This course provides a broad survey of obesity research including measurement issues, biological, social and economic etiologies, health and economic consequences, and prevention and treatment of obesity. Spring. Voruganti and Poti.

NUTR 813 NUTRITIONAL EPIDEMIOLOGY (3)

Prerequisites, EPID 600 or 710 and BIOS 600 or equivalent. This course introduces basic methods of dietary assessment, reviews various topics in nutrition epidemiology and teaches the skills needed for critical evaluation of the nutritional epidemiologic literature. Spring. Mendez and Albrecht.

NUTR 814 OBESITY EPIDEMIOLOGY (3)

Prerequisites, BIOS 545, EPID 715, 716 and NUTR 812 or NUTR/EPID 813. Examines epidemiology research on the causes, consequences, and prevention of obesity. Emphasis on methodological issues pertinent to obesity research. Spring, alternating years. Stevens and Poti.

NUTR 818 ANALYTICAL METHODS IN NUTRITIONAL EPIDEMIOLOGY (3)

Prerequisites, EPID 600 or 710, NUTR 813 and BIOS 545, or permission of the instructor. Skills and techniques to study how dietary exposures, physical activity and anthropometric status relate to disease outcomes. Focus is hands on data analysis using STATA, and interpretation of results from statistical analysis. Fall, alternate years. Adair and Meyer.

NUTR 845 NUTRITIONAL METABOLISM (3)

Prerequisite, NUTR 600 or equivalent. A problem-based approach to examine current topics in biochemistry relevant to nutrition and metabolism. Students interpret data and design experiments related to recent advances in nutritional biochemistry. Spring. Coleman and Makowski.

NUTR 861 ADV. NUTRITIONAL BIOCHEMISTRY: NUTRITION & IMMUNOLOGY (2)

Prerequisites, NUTR 600 and 620 or equivalent. Presents an understanding of basic immunology and the role of nutrition in modifying the immune response. Fall, alternate years. Beck.

NUTR 863 ADV. NUTRITIONAL BIOCHEMISTRY: MICROENVIRONMENTS: INFLAMMATION IN OBESITY, ATHEROSCLEROSIS AND CANCER (2)

Prerequisite, NUTR 600. Permission of the instructor for students lacking the prerequisite. Will examine the interaction of cells in the microenvironment and recent advances in the role of metabolism and inflammation. Fall, alternate years. Makowski.

NUTR 864 ADV. NUTRITIONAL BIOCHEMISTRY: OXIDATIVE STRESS AND NUTRITIONAL ANTIOXIDANTS IN HUMAN HEALTH AND DISEASE (2)

Prerequisite, BIOL 101, CHEM 102, NUTR 400 (or equivalent). *Permission of the instructor for non-majors.* Provide basic information about the cellular and molecular mechanisms that are responsible for generation of reactive oxygen and nitrogen species, about key cellular structures targeted by these species, and about the role of oxidative stress and antioxidants in etiology and prevention of human diseases. Fall, alternate years. Styblo.

NUTR 865/GNET 865 ADV. NUTRITIONAL BIOCHEMISTRY: NUTRIGENETICS AND NUTRIGENOMICS (2)

Permission of Instructor. Course focuses on nutrigenetics and nutrigenomics with an emphasis on the genetic and dietary interactions predisposing one to increased risk of disease. Spring. Bennett and Voruganti.

NUTR 867 ADV. NUTRITIONAL BIOCHEMISTRY: VITAMINS AND DISEASE (2)

Prerequisites, NUTR 600 and 620, or permission of the instructor. An advanced graduate seminar course focusing on the molecular processes involving B and D-group vitamins, mechanisms of pathologies caused by their deficiency, as well as, the latest studies on the nutritional requirements, population consumption levels and use of the vitamins for treatment and prevention of human disease. Special emphasis will be given to the role of individual genetic polymorphisms in the specific vitamin status. Fall, alternate years. Krupenko, N.

NUTR 868 ADV. NUTRITIONAL BIOCHEMISTRY: NUTRITION AND CANCER (2)

Prerequisites, NUTR 600 or equivalent. The course will cover the biology of cancer as well as the metabolic and physiological functions of nutritional factors and how they impact the cancer process. The course will focus on aspects of current research that are relevant to links between nutritional factors, with emphasis on mechanism-based cancer prevention approaches. Spring, alternate years. Hursting and S. Krupenko.

NUTR 875 NUTRITION POLICY SEMINAR (1)

Prerequisite, permission of the instructor for undergraduates. Graduate seminar addressing current public health nutrition policy challenges and controversies including school lunch standards, sugar sweetened beverages, the Farm Bill, federal food programs, the Affordable Care Act, and policies affecting local food systems such as food policy councils, farm to school programs, and good agricultural practices (GAP) certification. Fall. Ammerman.

NUTR 880 ELEMENTS OF BEING A SCIENTIST (3)

Prerequisites, for doctoral students permitted by instructor/prepared with PHD aims/focus. Course focuses on key elements that contribute to a successful career as a scientific researcher. These include scientific presentations, NIH proposal grant writing, evaluating published manuscripts, sources of funding, peer review, use of animals and humans in research, and scientific ethics. Fall. Zeisel, Ward, and Gordon-Larsen.

NUTR 885 DOCTORAL SEMINAR (1)

This course is designed for doctoral and master of science students only. Critical review of current literature in nutritional biochemistry, intervention and policy, and population-based nutrition science. Focuses on the development of skills in reviewing and criticizing articles. Fall/Spring. Faculty.

NUTR 910 NUTRITION RESEARCH (VAR. 1-9)

Individual arrangements with faculty for doctoral students to participate in ongoing research. Fall, spring, and summer. Faculty.

NUTR 920 RESEARCH ROTATIONS FOR NUTRITIONAL BIOCHEMISTRY DOCTORAL STUDENTS (VAR. 1-3)

Two laboratory or research group rotations supervised by nutritional biochemistry faculty. Provides a breadth of research experience for students prior to selecting dissertation adviser. Up to six laboratory hours per week. Fall, spring, and summer. Beck.

NUTR 992 MASTER'S PAPER (3)

Fall, spring, and summer. Faculty.

NUTR 993 MASTER'S THESIS (3)

Fall, spring, and summer. Faculty.

NUTR 994 DOCTORAL DISSERTATION (3)

Fall, spring, and summer. Faculty.

XIV. APPENDIX A

COURSES THAT MEET SCHOOL OF PUBLIC HEALTH REQUIREMENTS FOR THE MPH DEGREE:

Approved basic core courses are noted for each category with alternative courses listed below.

BIostatistics (BIOS 600)

Any BIOS course higher than BIOS 600

EPIDEMIOLOGY (EPID 600 or 710)

EPID 711/ Clinical Measurement/Evaluation
PUBH 760

ENVIRONMENTAL HEALTH (ENVR 600) ~ online

ENVR 430 Health Effects on Environmental Agents

HEALTH POLICY AND MANAGEMENT (HPM 600) ~ online

HPM 660 International and Comparative Health Systems
MHCH 701 Foundations of Maternal and Child Health I
MHCH 702 Foundations of Maternal and Child Health II

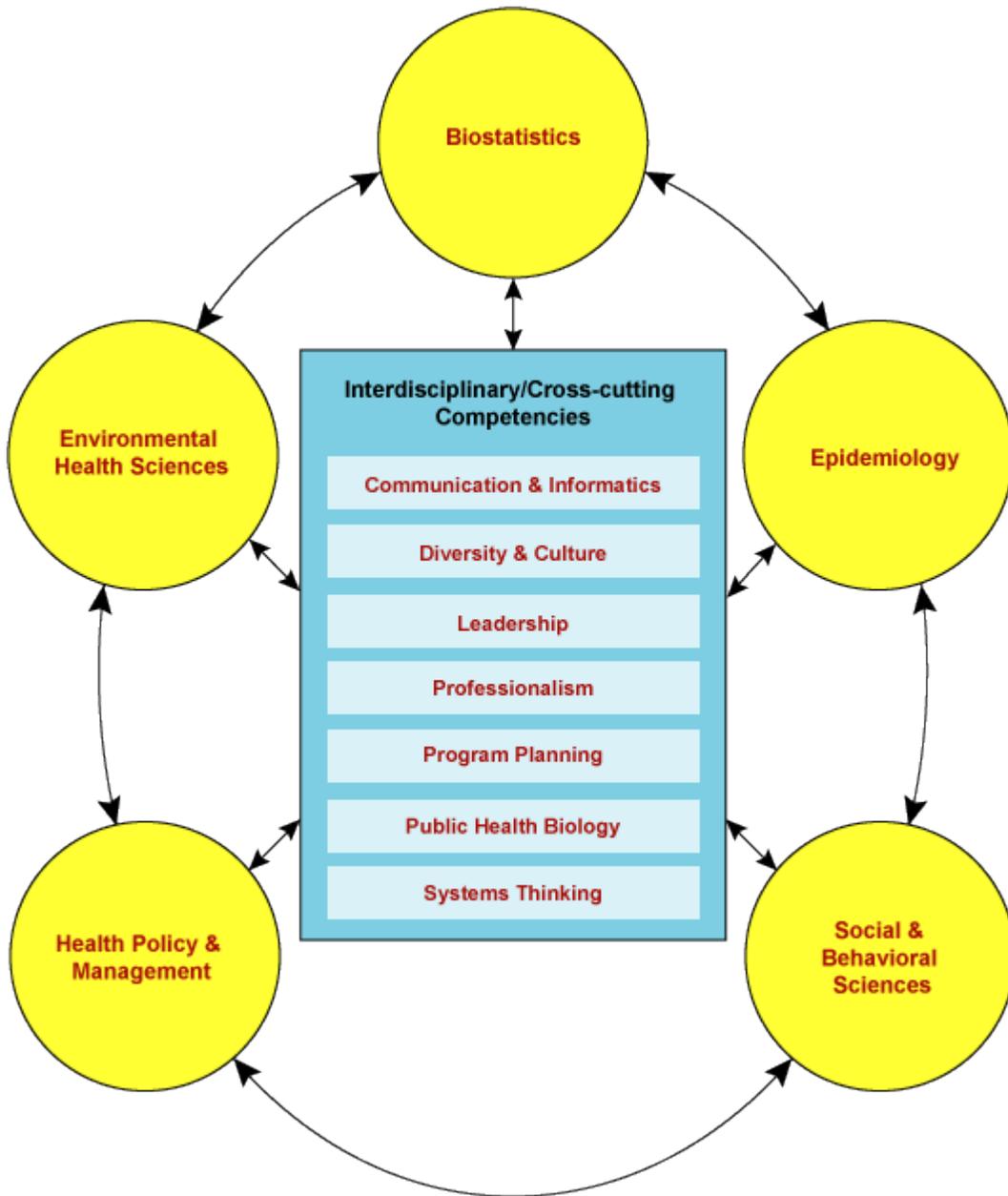
SOCIAL AND BEHAVIORAL SCIENCE (HBEH 600) ~ online

APPENDIX B.

**ASSOCIATION OF
SCHOOLS OF PUBLIC HEALTH**

www.asph.org

Model and Definition



Discipline-specific Definitions*

§ Biostatistics

Biostatistics is the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research.

§ Environmental Health Sciences

Environmental health sciences represent the study of environmental factors including biological, physical and chemical factors that affect the health of a community.

§ Epidemiology

Epidemiology is the study of patterns of disease and injury in human populations and the application of this study to the control of health problems.

§ Health Policy and Management

Health policy and management is a multidisciplinary field of inquiry and practice concerned with the delivery, quality and costs of health care for individuals and populations. This definition assumes both a managerial and a policy concern with the structure, process and outcomes of health services including the costs, financing, organization, outcomes and accessibility of care.

§ Social and Behavioral Science

The behavioral and social sciences in public health address the behavioral, social and cultural factors related to individual and population health and health disparities over the life course. Research and practice in this area contributes to the development, administration and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations.

Interdisciplinary/Cross-cutting Definitions*

§ Communication and Informatics

The ability to collect, manage and organize data to produce information and meaning that is exchanged by use of signs and symbols; to gather, process, and present information to different audiences in-person, through information technologies, or through media channels, and to strategically design the information and knowledge exchange process to achieve specific objectives.

§ Diversity and Culture

The ability to interact with both diverse individuals and communities to produce or impact an intended public health outcome.

§ Leadership

The ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals.

§ Public Health Biology

Public health biology is the biological and molecular context of public health.

§ Professionalism

The ability to demonstrate ethical choices, values and professional practices implicit in public health decisions; consider the effect of choices on community stewardship, equity, social justice and accountability; and to commit to personal and institutional development.

§ Program Planning

The ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health.

§ Systems Thinking

The ability to recognize system level properties that result from dynamic interactions among human and social systems and how they affect the relationships among individuals, groups, organizations, communities, and environments.

**Definitions are provided to define the context by which the workgroups' competency modeling development activities took place and are not intended to describe the entire field of the particular discipline's scholarship and practice.*

For more information, contact ASPH at
(202) 296-1099 or visit our website at www.asph.org.

Original URL: <http://www.asph.org/document.cfm?page=929>

Posted on: 04/26/2006

Last Updated on: 06/27/2006

APPEXDIX C. MPH Nutrition Prerequisite Requirements (including MPH and MPH/RD programs)

Department of Nutrition, School of Public Health and School of Medicine

The University of North Carolina at Chapel Hill

Prerequisites for admission: Please circle courses completed at UNC or write course number and college/university where alternative courses were completed if taken at another educational institution.

COURSES REQUIRED	DPD APPROVED UNC COURSES		ALTERNATE UNC COURSES		ALTERNATE COURSES AT OTHER INSTITUTIONS		
	Subject	Course/Number	Credit Hours	Course/Number	Credit Hours	Course #/Name	Credit Hours
Anthropology OR Sociology	ANTH 101 OR SOC 101	3 3	ANTH 102 ANTH 142 ANTH 144 ANTH 147 ANTH 151 ANTH 175* ANTH 322 ANTH 470 PSYC 245 PSYC 260 SOC 111 SOC 112 SOC 469	3 3 3 3 3 3 3 3 3 3 3 3 3			
Psychology	PSYC 101	3					
Chemistry Inorganic	CHEM 101 CHEM 101L CHEM 102 CHEM 102L	3 1 3 1	CHEM 102H CHEM 105L	3 1			
Chemistry Organic	CHEM 261	3					
Microbiology	MCRO 251	4	MCRO 255	4			
Human Anatomy and Physiology	BIOL 252 BIOL 252L	3 1	BIOL 251 EXSS 175 EXSS 276 PHYI 202 PHYI 203	3 3 3 5 4			

* ANTH 175 is cross-listed with NUTR 175 and AMST 175.

COURSES REQUIRED	DPD APPROVED UNC COURSES		ALTERNATE UNC COURSES		ALTERNATE COURSES AT OTHER INSTITUTIONS		
Human Nutrition	NUTR 240	3					
Biochemistry	NUTR 400	3					
COURSES TAKEN ONCE ENROLLED IN THE PROGRAM:							
Human Metabolism	NUTR 600 NUTR 620	3 3					
Life-cycle Nutrition	NUTR 611	3					
Foods & Food Science	NUTR 650 NUTR 650L	3 1					
Cultural & Behavioral Nutrition	NUTR 630	3					
Nutrition and Community Health	HPM 600 NUTR 720 NUTR 725	3 5 3					
Nutrition and Disease	NUTR 620 NUTR 640 NUTR 642	3 3 3					
Food Service Systems Management	Food Systems Management Online Module						
Learning Theory	NUTR 630 HBEH 600	3 3					
Data Evaluation	BIOS 600	3					
Management Theory & Principles	NUTR 725	3	HPAA 730	3			
Political & Legislative Process	NUTR 735	1					
Environmental Issues	ENVR 600	3					

APPENDIX D. Learning Outcomes define what students should know and be able to do upon completion of their degree program. Learning Outcomes guide our curriculum planning process and serve as a measure against which student achievement is assessed. Listed below are the degree-specific learning outcomes for the MPH program in the Department of Nutrition.

Learning Outcome
-Critically think, problem solve and utilize decision-making skills as they relate to health nutrition practice, clinical public health nutrition program and/or policy development in the field of public practice, policy or research.
-Provide entry-level care and be able to assess and support the nutritional needs of individuals and communities.
-Define and interpret the anthropometric, biochemical, clinical, dietary and environmental elements needed for nutritional assessment of the individual
-Describe how social, cultural and economic characteristics influence dietary practices of individuals, groups and populations
-Describe the roles of diet in growth and development
-Describe the roles of medical nutritional therapy in the treatment of disease
-Plan menus to achieve optimal nutrition for individuals and groups in health and disease
-Communicate and educate effectively by using varied media and informational systems as appropriate for varied audiences
-Critically evaluate the epidemiological evidence linking nutritional indicators and public health problems
-Identify the data elements needed for community assessment, and summarize the criteria by which community problems are prioritized in program plans
-Distinguish among the elements of alternative theoretical frameworks to develop program or policy strategies which maximize efficacy and cost-effectiveness in achieving optimal dietary and nutritional status at the population level
-Develop an operational plan to implement nutrition-related interventions which are appropriate to a given community or subpopulation to promote health and prevent disease
-Write structure, process and outcome objectives for nutrition care plans at the individual level and nutrition program plans at the agency and community levels
-Develop and defend an operational budget, identifying resources needed to implement the nutrition program plan
-Design program evaluation strategies and data monitoring systems appropriate to agency mission and resource constraints
-Apply effective management principles in the administration of nutrition programs and services including human and financial resources
-Describe political and ethical considerations within and across organizations (public, private and voluntary sectors) involved in planning, decision making, and policy analysis

APPENDIX E. Learning outcomes define what students should know and be able to do upon completion of their degree program. Learning outcomes guide our curriculum planning process and serve as a measure against which student achievement is assessed. Listed below are the degree-specific learning outcomes for the MPH/RD program.

Student Learning Outcomes in UNC Coordinated Master’s Program/Dietetic Internship in Public Health Nutrition

Learning Outcome	Assessment Location (Course or Experience)
CRD 1.1 Select indicators of program quality and/or customer service and measure achievement of objectives.	Nutrition 725
CRD 1.2 Apply evidence-based guidelines, systematic reviews and scientific literature (such as the Academy’s Evidence Analysis Library and Evidence-based Nutrition Practice Guidelines, the Cochrane Database of Systematic Reviews and the U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, national Guideline Clearinghouse Web sites) in the nutrition care process and model and other areas of dietetic practice.	Clinical Nutrition Experience
CRD 1.3 Justify programs, products, services and care using appropriate evidence or data	Nutrition 725
CRD 1.4 Evaluate emerging research for application in dietetics practice	Nutrition 725
CRD 1.5 Conduct projects using appropriate research methods, ethical procedures and statistical analysis	Nutrition 720
CRD 2.1 Practice in compliance with current federal regulations and state statutes and rules, as applicable and in accordance with accreditation standards and the ADA Scope of Dietetics Practice Framework, Standards of Professional Performance and Code of Ethics for the Profession of Dietetics	Nutrition 720
CRD 2.2 Demonstrate professional writing skills in preparing professional communications (such as research manuscripts, project proposals, education materials, policies and procedures)	Nutrition 992
CRD 2.3 Design, implement and evaluate presentations to a target audience	Nutrition 720
CRD 2.4 Use effective education and counseling skills to facilitate behavior change	Nutrition 630
CRD 2.5 Demonstrate active participation, teamwork and contributions in group settings	Clinical Nutrition Experience

CRD 2.6 Assign patient care activities to DTRs and/or support personnel considering the needs of the patient/client or situation, the ability of support personnel, jurisdictional law, practice guidelines and policies within the facility	Clinical Nutrition Experience
CRD 2.7 Refer clients and patients to other professionals and services when needs are beyond individual scope of practice	Clinical Nutrition Experience
CRD 2.8 Apply leadership skills effectively to achieve desired outcomes	Advanced Nutrition Experience
CRD 2.9 Participate in in professional and community organizations	Nutrition 720
CRD 2.10 Establish collaborative relationships with other health professionals and support personnel to deliver effective nutrition services.	Clinical Nutrition Experience
CRD 2.11 Demonstrate professional attributes within various organizational cultures	Advanced Nutrition Experience
CRD 2.12 Perform self-assessment, develop goals and objectives and prepare a draft portfolio for professional development as defined by the Commission on Dietetic Registration	Professional Development Portfolio
CRD 2.13 Demonstrate negotiation skills	Clinical Nutrition Experience
CRD 3.1 Perform the Nutrition Care Process (a through e below) and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings	Clinical Nutrition Experience and NUTR 720
CRD 3.1a Assess the nutritional status of individuals, groups and populations in a variety of settings where nutrition care is or can be delivered	Clinical Nutrition Experience
CRD 3.1b Diagnose nutrition problems and create problem, etiology, signs and symptoms (PES) statements	Clinical Nutrition Experience
CRD 3.1c Plan and implement nutrition interventions to include prioritizing the nutrition diagnosis, formulating a nutrition prescription, establishing goals and selecting and managing intervention	Clinical Nutrition Experience
CRD 3.1d Monitor and evaluate problems, etiologies, signs, symptoms and the impact of interventions on the nutrition diagnosis	Clinical Nutrition Experience
CRD 3.1e Complete documentation that follows professional guidelines, guidelines required by health care systems and guidelines required by the practice setting.	Clinical Nutrition Experience
CRD 3.2 Demonstrate effective communication skills for clinical and customer services in a variety of formats.	Nutrition 630

CRD 3.3 Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management.	Nutrition 650/650L
CRD 3.4 Deliver respectful, science-based answers to consumer questions concerning emerging trends	Nutrition 630
CRD 3.5 Coordinate procurement, production, distribution and service of goods and services	Clinical Nutrition Experience
CRD 3.6 Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals	NUTR 650
CRD 4.1 Participate in management of human resources	Nutrition 725
CRD 4.2 Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food	Foodservice Self-Study
CRD 4.3 Participate in public policy activities, including both legislative and regulatory initiatives	Nutrition 735
CRD 4.4 Conduct clinical and customer service quality management activities	Clinical Nutrition Experience
CRD 4.5 Use current informatics technology to develop, store, retrieve and disseminate information and data.	Clinical Nutrition Experience
CRD 4.6 Analyze quality, financial or productivity data and develop a plan for intervention	Clinical Nutrition Experience
CRD 4.7 Propose and use procedures as appropriate to the practice setting to reduce waste and to protect the environment.	Clinical Nutrition Experience
CRD 4.8 Conduct feasibility studies for products, programs or services with consideration of costs and benefits.	Nutrition 725
CRD 4.9 Analyze financial data to assess utilization of resources.	Nutrition 650/650L
CRD 4.10 Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.	Nutrition 725
CRD 4.11 Code and bill for dietetic/nutrition services to obtain reimbursement from public or private insurers.	Nutrition 725

