



DEPARTMENT OF BEHAVIORAL HEALTH AND NUTRITION

**MASTER'S IN HUMAN NUTRITION
DEGREE PROGRAM**

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Program Director**

Program Policy Statement, January 2011

• UNIVERSITY OF DELAWARE
 Department of Behavioral Health and Nutrition
 Requirements for Master's Degree in Human Nutrition
MASTER'S DEGREE MATRIX

	MS - THESIS	MS - NON-THESIS
PREREQUISITES	Inorganic Chemistry Organic Chemistry Biochemistry Physiology Nutrition*	Inorganic Chemistry Organic Chemistry Biochemistry Physiology Nutrition*
MINIMUM ADMISSION REQUIREMENTS	1000 GRE (V+Q) 2.75 GPA Overall 3.00 GPA based on major courses	1000 GRE (V+Q) 2.75 GPA Overall 3.00 GPA based on major courses
COURSE REQUIREMENTS NTDT courses	NTDT611 Advanced Nutrition (3) NTDT630 Trace Minerals & Vitamins(3) NTDT Electives (3-6)	NTDT611 Advanced Nutrition (3) NTDT630 Trace Minerals & Vitamins(3) NTDT Electives (6-9)
Non-NTDT courses	CHEM527 (3) STAT (3) Research Design (3) Electives (3-6)	STAT (3) Research Design. (3) Electives (6-9)
Seminar	NTDT665 (1)	NTDT665 (1)
Thesis/Field Study	NTDT869 (6)	NTDT669 (3)
TOTAL CREDITS	(31)	(31)
OTHER	Thesis Defense/Oral Exam	Comprehensive Exam

* Requiring Biochemistry as a prerequisite

Program History and Description

The Master of Science in Human Nutrition has been in existence for more than 40 years. The program emphasizes advanced knowledge of core nutrition principles and prepares students for advanced practice, research, and leadership roles. Potential areas of specialization include nutrition science, nutrition education, and community nutrition.

The program enables students to pursue their interests through an individualized program of study with either a thesis or non-thesis option. Both options include a core of required credits in nutrition and research methods and a customized elective program that fulfills the remainder of the program credits.

A variety of courses within the department and across the University provide exceptional opportunities for tailoring the degree to the student's interests in areas such as health promotion, obesity management, public policy, media, and physiology.

Mission Statement

To promote and develop advanced nutrition knowledge and skills in research and education. Graduates will be prepared to design and implement nutrition studies or evaluate current nutrition issues for populations.

THESIS OPTION

POLICIES AND PROCEDURES

THESIS OPTION POLICIES and PROCEDURES

I. ADMISSION REQUIREMENTS/POLICIES

An advanced degree, thesis option, at the University of Delaware in Human Nutrition implies in-depth attention to an area of the field and also involves a research program resulting in a thesis. Prior course work and experiences of the candidate and the focus of courses and thesis in the graduate program should build and complement each other and direct the candidate's preparation towards his/her future goals.

The evaluation of eligibility for admission is done by a human nutrition graduate program committee. The prerequisite courses listed below should be completed prior to initiating the human nutrition graduate program. Specific prerequisites as conditions of acceptance to regular or provisional status will be considered in context of the total application credentials. Any course deficits should be completed during the first year of graduate study.

A. Credentials to be supplied:

Application form, transcript(s) of all undergraduate and post-baccalaureate course work completed, Graduate Record Examination (GRE) Scores, TOEFL scores where appropriate, three references from individuals able to evaluate the applicant's potential for successful graduate work, rank in class (if available).

B. Regular status requires:

1. Minimum Graduate Record Exam Scores (GRE's) of 1000 (total for Verbal and Quantitative scores).
2. Overall undergraduate Grade Point Average (GPA) of 2.75 or higher.
3. GPA of 3.0 or higher in major.
4. International students applying for a teaching assistantship must report a paper-based TOEFL score of at least 600 (250 or better on the computer-based TOEFL, 100 or better iBT-based TOEFL) and Test of Spoken English (TSE) score of at least 45. A score of 575 or better (231 or better on the computer-based TOEFL and 90 or better iBT-based TOEFL) is required for international students who do not apply for a teaching assistantship.

For students emphasizing the nutritional sciences, prerequisite courses to regular status are: human or animal physiology, inorganic and organic chemistry, biochemistry (preferable with lab), and one course in human nutrition with a biochemistry prerequisite. Students wishing to pursue thesis research topics related to social science aspects of nutrition and food habits should have some courses in sociology, psychology, anthropology, etc.

C. Provisional status may be designated if:

1. The baccalaureate degree is still in progress at the time the applicant's credentials are reviewed. Admission to regular status is contingent on successful completion of the baccalaureate degree.
2. Prerequisite courses are incomplete. Any course deficits should be completed during the first year of graduate study.

Provisional status will be changed to regular status when all the contingencies set at admission have been satisfied. To change status, the student must complete a Graduate Student Change of Status form.

Students on provisional status are not eligible for tuition scholarships or graduate teaching assistantships.

D. Application Deadlines:

The general university deadline for application submission is December 1 for spring admission, July 1 for fall admission. Early submission of application is recommended, especially if you would like to be considered for a teaching or research assistantship.

II. PROGRAM REQUIREMENTS

A. Program requirements for thesis option.

<u>Minimum</u> total credits – 31*:	<u>Credits</u>
NTDT Graduate Courses	9-12**
Non-NTDT Graduate Courses	12-15***
NTDT869 – Thesis	6****
NTDT665 – Seminar	1

*Includes completion of one credits of nutrition program seminar. Attendance and participation are required each semester seminar is offered, but only one semester is taken for credit.

**NTDT Requirements: NTDT611, NTDT630

***Non-NTDT requirements: CHEM527 or equivalent and at least three credits of coursework in Statistics and three credits of coursework in Research Methods/Design; e. g., FREC608 Research Methods.

****These six credits may be spread out over multiple semesters.

III. PROGRESS EVALUATION

Students must have at least a 3.0 cumulative index to be classified “in good standing” and to receive degree clearance. The student is referred to the University of Delaware Graduate Catalog for further information considering academic standards and status.

A. Human Nutrition MS Degree Program Expectations:

The Human Nutrition Graduate Program Coordinator will assign each graduate student an academic advisor. The academic advisor will supervise the academic progress of the candidate from entrance till the time when a Thesis Advisor is identified (or unless another advisor is chosen).

Students completing the thesis option are expected to develop and conduct an independent research project, under the supervision of a thesis research advisor. They will collect and analyze appropriate data or conduct a secondary data analysis of appropriate rigor, and prepare and defend the thesis to a faculty committee based on the research conducted.

IV. SEQUENCE OF EVENTS FOR COMPLETION OF GRADUATE DEGREE

The succeeding paragraphs describe in detail each major event.

A. Selection of Thesis Research Advisor:

Early identification of a thesis research advisor and the thesis advisory committee is strongly recommended. It is expected that students will file their Thesis Advisor Agreement form by the end of the first semester or upon completion of nine credits of course work. The graduate student’s advisory committee should be constituted, in consultation with the thesis research advisor, no later than upon completion of twelve course credit hours.

It is not recommended that students change thesis research advisors after initiating their thesis research project. If a decision to do so is considered, any change requires joint discussion and signed agreement between the student, the original thesis advisor and the prospective thesis advisor. Written notification is then forwarded to the departmental graduate program secretary.

Any student changing thesis research advisors must convert all thesis credits (NTDT869) taken with the original advisor to special problem credits (NTDT666) and take 6 additional research/thesis credits with the new thesis research advisor.

NOTE: Use of Special Problems credits (666/866) to meet minimum credit hour course requirements for the MS degree is discouraged; a maximum of three departmental and three non-departmental Special Problems credits may be accepted on recommendation by the Thesis Advisory Committee. Special Problems require a title to be determined by instructor.

B. Thesis Advisory Committee Composition:

The minimum composition shall be: the thesis research advisor and at least one other nutrition graduate faculty from the nutrition program and a third member from outside the nutrition program that meets the approval of the other two committee members. Composition of the Thesis Advisory Committee should be communicated by memo to the nutrition graduate program secretary.

C. Advisory Committee Responsibilities:

1. Evaluate student's progress toward achievement of degree.
2. Review and make recommendations on student's program (graduate courses and research).
3. Serve as a review body for student's research proposal.
4. Serve as a reading committee for the thesis defense.
5. Serve as the examining group for the thesis defense.

D. Thesis Proposal Meeting:

After the candidate and the thesis research advisor have determined that the proposal provides sufficient background information, research design and budget for evaluation by Thesis Advisory Committee members, a meeting of the candidate with all members of the advisory committee is scheduled. This meeting is scheduled prior to data collection related to the thesis research.

The candidate is responsible for scheduling the date, time and location for this meeting. Ten working days prior to the meeting, each Thesis Advisory Committee member is to receive: (1) a copy of the thesis research proposal; (2) a résumé; and (3) a completed graduate program plan.

At the beginning of the thesis proposal meeting, the candidate will give a formal presentation (approximately 15-20 minutes) describing the proposed research. Following this presentation, modifications of the thesis research and/or budget will be discussed, and **any** revisions deemed appropriate will be incorporated. Then the candidate's graduate course work will be reviewed and recommendations for additional course work may be made. Finally, the Thesis Proposal Meeting form is to be completed and filed with both the thesis research advisor and graduate program secretary. This form will delineate any modifications and any specific additional courses recommended by the Thesis Advisory Committee members.

If the thesis involves human subjects, a request for Human Subjects Approval or Exemption must be completed and submitted to the University Research Office. Approval must be obtained **before** any data collection can begin. A copy of the approval letter must also be submitted to the University Office of Graduate

Studies either at time of approval or when thesis is delivered to graduate office. The Human Subjects approval letter may be included in the thesis or submitted separately.

If the thesis research involves animals, experimentation must comply with the University of Delaware Standard Operating Procedures Laboratory Animal Care and Maintenance manual and an Animal Subjects Review Certification for Teaching and Research form must be completed and submitted for approval to the Director of Laboratory Animal Care.

E. Application for Degree:

The candidate is responsible for filing an Application for Advanced Degree form with the University Office of Graduate Studies.

F. Thesis:

A thesis is a substantial Master's level paper presenting independent research, which makes a contribution to the current body of knowledge in a scholarly field. A thesis describing the results of a candidate's research is required. The thesis must reflect the ability to conduct scholarly research and to report the results in a manner worthy of publication.

A copy of the most current Regulations Governing Theses and Dissertations (available online at <http://www.udel.edu/gradoffice/current/thesismanual.html>) should be obtained for use in preparing the thesis. There are UD Macros available for students to use for formatting their theses (see Thesis Manual). Thesis may also be done in publishable paper format. (see Publishable Paper Guidelines included in this manual)

G. Oral Examination:

A final oral examination is required. This examination will consist of, but is not limited to, a defense of the thesis. Questions to assess the student's subject matter knowledge, comprehension and application will also be incorporated.

After approval from the thesis advisor, the thesis should be distributed by the candidate to all Thesis Advisory Committee members within ten working days prior to the oral examination.

The candidate is responsible for scheduling the date, time and location of a two-hour oral examination. An invitation should be also sent by Email to all departmental faculty and graduate students to attend a formal presentation given by the candidate at the beginning of the oral examination (approximately twenty-thirty minutes).

Prior to the time of the examination, the Department of Behavioral Health & Nutrition for Master's Degree in Human Nutrition form should be prepared for

the necessary signatures as specified on the form (also available in the graduate secretary's office, 042 Carpenter Sports Building in the file cabinet marked "Graduate Student Forms").

The following individuals must attest to the satisfactory performance of the candidate in the oral examination:

1. The thesis research advisor.
2. The Thesis Advisory Committee members.

Upon successful completion of the oral exam, a copy of the signed oral exam form is to be forwarded to the graduate office.

H. Seminar Presentation:

Students are required to present results of their research in a seminar format to the Department (preferable in NTDT665).

I. Manuscript Preparation:

Students are encouraged to submit to the thesis research advisor a reasonable first draft of a manuscript, based on the thesis, suitable for publication, prior to the oral examination if not prepared in Publishable Paper Format.

J. Final Grades:

The candidate should check that his/her instructor has submitted all final grades. NTDT869 (Master's Thesis) course receives a temporary grade of S or U which must be converted to final letter grades by the instructor using the Change of Grade form.

K. Transfer to the Non-Thesis Option:

Any MS student in good academic standing may switch from the Thesis to the Non-Thesis Option with the following provisions:

1. The student must submit a statement explaining the basis for the decision, a plan of study for the new option, and identification of a faculty member willing to serve as scholarly project advisor to the Human Nutrition Graduate Coordinator.
2. Credits taken as NTDT869 may be converted to NTDT elective credits provided that there is a written submission of activities/outcomes achieved.
3. The student must complete and satisfactorily pass the MS/Non-Thesis Comprehensive Written/Oral Examination.
4. Any future financial support for the student would be reconsidered and is unlikely to continue.
5. After committee approval, submit a Change of Classification form to the University Office of Graduate Studies.

L. Submitting your thesis

Please refer to the Thesis Procedures section in the University of Delaware Graduate Manual at the graduate school website for instructions on submitting a thesis to the graduate office. Once your thesis is approved by the graduate office, a copy of the final thesis and the original approval page with signatures must be sent to the Nutrition Program Secretary in 042 CSB no later than the reading day of the semester. This copy of the thesis should be submitted as a PDF file recorded on a CD supplied by the student.

Copies of the final version of the thesis are to be provided by the graduate student to those committee members who wish one, and a bound copy provided to the thesis advisor, upon request. A hard copy on bond paper must be submitted to the Deans' office.

NON-THESIS OPTION

POLICIES AND PROCEDURES

POLICIES and PROCEDURES NON-THESIS OPTION

I. ADMISSION REQUIREMENTS/POLICIES

An advanced degree, non-thesis option, at the University of Delaware in Human Nutrition implies in-depth attention to an area of the field and also involves a Scholarly Project. Prior course work and experiences of the candidate and the focus of courses and field study/theoretical paper in the human nutrition graduate program should build and complement each other and direct the candidate's preparation towards his/her future goals.

The evaluation of eligibility for admission is done by a nutrition faculty review committee. The prerequisite courses listed below should be completed prior to initiating the human nutrition graduate program. Specific prerequisites as conditions of acceptance to regular or provisional status will be considered in context of the total application credentials. Any course deficits should be completed during the first year of graduate study.

A. Credentials to be supplied:

Application form, transcript(s) of all undergraduate and post-baccalaureate course work completed, Graduate Record Examination (GRE) Scores, TOEFL scores where appropriate, three references from individuals able to evaluate the applicant's potential for successful graduate work, rank in class (if available).

B. Regular status requires:

1. Minimum Graduate Record Exam Scores (GRE's) of 1000 (total for Verbal and Quantitative scores).
2. Overall undergraduate Grade Point Average (GPA) of 2.75 or higher.
3. GPA of 3.0 or higher in major.
4. International students applying for a teaching assistantship must report a paper-based TOEFL score of at least 600 (250 or better on the computer-based TOEFL and 100 or better iBT-based TOEFL) and Test of Spoken English (TSE) score of at least 45. A score of 575 or better (231 or better on the computer-based TOEFL and 90 or better iBT-based TOEFL) is required for international students who do not apply for a teaching assistantship.

For students emphasizing the nutritional sciences, prerequisite courses to regular status are: human or animal physiology, inorganic and organic chemistry, biochemistry (preferably with lab), and one course in human nutrition with a biochemistry prerequisite.

C. Provisional status may be designated if:

1. The baccalaureate degree is still in progress at the time the applicant's credentials are reviewed. Admission to regular status is contingent on successful completion of the baccalaureate degree.
2. Prerequisite courses are incomplete. Any course deficits should be completed during the first year of graduate study.

Provisional status will be changed to regular status when all the contingencies set at admission have been satisfied. To change status the student must complete a Graduate Student Change of Status form

Students on provisional status are not eligible for tuition scholarships or graduate teaching assistantships.

D. Application Deadlines:

The general university deadline for application submission is December 1 for spring admission, July 1 for fall admission. Early submission of application is recommended, especially if you request for teaching or researching assistantship.

II. PROGRAM REQUIREMENTS

A. Program requirements for non- thesis option.

<u>Minimum</u> total credits – 31*:	<u>Credits</u>
NTDT Graduate Courses	12-15**
Non-NTDT Graduate Courses	12-15***
NTDT 669 – Scholarly Project	3****
NTDT 665 – Seminar	1

*Includes completion of 1 credit of nutrition program seminar. (Attendance and participation are required each semester seminar is offered, but only 1 semesters is taken for credit.)

**NTDT Requirements: NTDT611, NTDT630

***Non-NTDT requirements: three credits of coursework in Statistics and three credits of coursework in Research Methods/Design; e.g., FREC608 Research Methods.

****These three credits may be spread out over multiple semesters.

Course Schedule.

III. PROGRESS EVALUATION

Students must have at least a 3.0 cumulative index to be classified “in good standing” and to receive degree clearance. The student is referred to the University of Delaware Graduate Catalog for further information considering academic standards and status.

IV. SEQUENCE OF EVENTS FOR COMPLETION OF GRADUATE DEGREE

The succeeding paragraphs describe in detail each major event.

A. MS Degree Program Expectations

The Human Nutrition Graduate Program Coordinator will assign each graduate student an academic advisor. The academic advisor will supervise the academic progress of the candidate from entrance till the time when a Scholarly Project Advisor is identified (or unless another advisor is chosen).

Students completing the non-thesis option are required to present evidence of critical thinking and writing skills in the form of a paper based on a scholarly project. This project may take a variety of forms, e.g., field study; case study; development and pilot testing of questionnaires, evaluation of instruments; development and evaluation of a specific worksite project; comprehensive literature review of a defined area of knowledge which identifies a current area of concern for analysis, generates hypotheses, suggests a methodology and statistical analysis for testing hypotheses, and/or develops a rationale for change in current practice.

A written comprehensive examination will be administered upon completion of the majority of course requirements (excluding the scholarly project). The student should notify the Human Nutrition Graduate Program Coordinator in writing of his/her intent to take the comprehensive exam within the first two weeks of the semester in which the exam is to be scheduled. There will be no exam given in the summer or winter sessions.

The four-hour examination will be administered at a common time for all exam takers of the semester. It will be developed by a committee of three faculty appointed by either the Department Chair or the Human Nutrition Graduate Program Coordinator. The exam will consist of three categories, Metabolism, Current Issues, and Statistics/Research. A study guide will be provided. A student who fails the comprehensive examination may petition for a re-exam at the next scheduled testing date and will receive suggestions for remediation. A Letter of Intent to Retake Exam should be submitted to the project advisor. The exam may not be taken a third time.

Failure to pass the comprehensive exam will result in removal from the graduate program. Student will be notified in writing of successful completion of exam. Successful completion of the exam must also be reported by memo to the degree auditor in the university graduate office by the last day of classes.

B. Selection of Scholarly Project Advisor and Reader

The candidate will select a project advisor from among the nutrition program graduate faculty to guide their scholarly activity. Selection and identification of the specific project will be determined by the student in consultation with the project advisor.

The student will also choose a second “reader” to provide additional critical review and perspective for the final report/paper prepared by the student. This reader may be selected from the nutrition program or the university at large, and may include joint or adjunct faculty.

If the project involves human subjects, a request for Human Subjects Approval or Exemption must be submitted to the University Research Office. Approval must be obtained **before** any data collection can begin.

C. Application for Degree

The candidate is responsible for filing an Application for Advanced Degree form with the University Office of Graduate Studies.

D. Scholarly Project

The scholarly project will result in a written paper which may be presented either in traditional or manuscript form according to the guidelines of the Journal of The American Dietetic Association, or other subject-appropriate peer-reviewed journal as approved by the project advisor. (see Publishable Paper Guidelines included in this manual)

E. Seminar Presentation

Students are required to present results of their scholarly project in a seminar format to the nutrition program (preferably in NTDT665).

F. Final Grades:

The candidate should check that his/her instructor has submitted all final grades NTDT669 receives a temporary grade of S or U which must be converted to final letter grades by the instructor using the Change of Grade form.

G. Transfer to the Thesis Option

In the event that a student pursuing the MS/non-Thesis Option wishes to change to the MS/Thesis Option:

1. A written request, including a statement explaining the basis for the decision, outline of proposed thesis research, the plan of study, and

- identification of faculty member willing to serve as thesis advisor is submitted to the Human Nutrition Graduate Program Coordinator.
2. The Nutrition Graduate Faculty Committee will review the request and recommend action.
 3. Credit taken as NTDT 669 may be converted to NTDT elective credits provided there is a written submission of activities/outcomes achieved.
 4. The student must meet all course requirements for the thesis option.
 5. After committee approval, submit a Change of Classification form to the University Office of Graduate Studies.

H. Submitting Scholarly Project Report

Your report needs to be approved by your project advisor, the reader and the Department Chairperson. Once it is finalized, please convert the report to a PDF version. A copy of the final report and the original page with approval signatures must be sent to the Nutrition Program Secretary in 042 CSB no later than the reading day of the semester. This copy of the report should be submitted as a PDF file recorded on a CD supplied by the student. The first 3 pages must be submitted on bond paper to the graduate office. A hard copy in a file folder must be submitted to the Dean's office.

Financial Aid

Available financial aid will be awarded to full-time students (registered in at least 6 graduate credits each semester) based on admission ranking, needs of the program, and experience and expertise of the graduate student. Students who receive financial aid will be obligated to work an average of 20 hours per week in an assigned position during the fall and spring semesters. Some forms of financial aid may provide support for tuition while others may not. Continuation of this award is contingent upon the evaluation of the program director and Health Promotion Graduate committee. The student must remain in good academic standing to be eligible for the continuation of the award.

Departmental Operations

It is the responsibility of the students to keep the program director and faculty aware of their current contact information. Communication between faculty and students is essential in the program. Students are encouraged to attend professional meetings and conferences. However currently, the Department of Behavioral Health and Nutrition does not provide travel to such meetings. The Arlette Rasmussen scholarship is available on a competitive basis to those who present their research at professional meetings.

Assessment of Student Learning
Master's Degree Program in Human Nutrition

Mission Statement:

To promote and develop advanced nutrition knowledge and skills in research and education. Graduates will be prepared to design and implement nutrition studies or evaluate current nutrition issues for populations.

Learning Goals/Outcomes:

1. Students will be able to give a professional level presentation designed to communicate/disseminate research-based nutrition findings.
2. Students will be able to conduct/evaluate research.
3. Students will attain an advanced level of nutrition knowledge
4. Students will be able to demonstrate critical thinking and writing skills.

Learning Objectives:

Available in each course syllabus.

Curriculum Map - see next page

Curriculum Map

Program Learning Outcomes	Core Courses	Level of Emphasis (I, R, E)*	Assessment Methods (D or I)** /Proficiency Level
Conduct/evaluate research	<u>Research methods</u> <u>STATS</u> NTDT 669 NTDT 869		Scholarly project- <u>D</u> Thesis- <u>D</u>
Demonstrate critical thinking/writing	NTDT 669 NTDT 869 NTDT 611 NTDT 630 Electives?		Scholarly project- <u>D</u> Thesis- <u>D</u>
Present professional level podium talk	NTDT 665 NTDT 869		<u>D</u>
Demonstrate breadth/depth of advanced nutrition knowledge	NTDT 611 NTDT 630 NTDT 669 Electives?		<u>D</u> Comprehensive Exam

* Level of Emphasis

I = Introduce

R = Reinforce

E= Emphasize/Apply

** Assessment Method

D = Direct

I = Indirect

Levels of Proficiency - courses must be passed with a grade of B, with the exception of NTDT 665 which must receive a grade of pass.. Committee members must agree on a grade of "pass" for thesis and scholarly projects.

Other Direct Measures

Published papers

Presentations at professional meetings

Other Indirect Measures

Graduation Rates

Alumni Surveys

Time to Degree

Current student sits on Graduate program committee

Use of Assessment Results

Action Plan

Develop current student survey for end of year 1 progress