

PROGRAM POLICY STATEMENT Master of Science in Human Nutrition (MSHN) Department of Health Behavior and Nutrition Sciences

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I: Program Overview

A. Introduction

The Master of Science in Human Nutrition (MSHN) program at University of Delaware emphasizes advanced knowledge of core nutrition principles and prepares students for advanced practice, research, and leadership roles. The focus of the MSHN is nutritional science, and the application of biochemistry, physiology, psychology, and biology principles to human nutrition in health and disease.

The Master of Science in Human Nutrition (MSHN) enables students to pursue their degree through either a thesis or non- thesis option. The non-thesis option offers students three concentration areas: dietetics, public health, or health coaching. Students are also able to complete the non-thesis option without a concentration. Both thesis and non-thesis options include a core of required credits in nutrition and research methods, and elective courses fulfill the remainder of the program credits.

B. Current Status

The MSHN was approved as a program in 1971.

C. Degree Offered

The degree awarded to those who complete this program is a MS in Human Nutrition.

II: Admission

A. Admission Criteria and Requirements

A.1. Criteria

Applicants from diverse educational and professional backgrounds in nutrition or a related science/health field who have a strong interest in nutrition science and human behavior are encouraged to apply. Each application will be evaluated on the basis of these key areas:

- 1. Academic record/achievement;
- 2. Work, research, and/or community health experience; and
- 3. Matching interest with and availability of current graduate Nutrition program faculty to serve as the student's faculty advisor.

A.2. Requirements

Applicants must submit all materials directly to the University of Delaware Graduate College using the online admission process to be considered for admission. Admission decisions will be made by the Nutrition Graduate Programs Committee. Students will be admitted to the program based on enrollment availability, the availability of faculty mentorship, and having met the following **minimum** entrance requirements:

- 1.
- 2. Overall undergraduate Grade Point Average (GPA) of 2.75 or higher;
- 3. GPA of 3.0 or higher in major;

- 4. For international students who do not apply for a teaching assistantship, a TOEFL score of 575 or higher (paper-based), TOEFL iBT of 90 or higher, or IELTS of 6.5 is required. International students applying for a teaching assistantship must have a paper-based TOEFL score of 600 or higher, TOEFL iBT of 100 or higher or IELTS of 7.0; and
- 5. Prerequisite courses: human or animal physiology (one course), inorganic chemistry (two courses, Chem 1 and Chem 2), organic chemistry (one course), biochemistry (one course, preferably with lab), and human nutrition with a biochemistry prerequisite (one course). Students wishing to pursue thesis research topics related to social science aspects of nutrition and eating behaviors should have courses in sociology, psychology, anthropology, etc.

Provisional status may be designated if:

- 1. The baccalaureate degree is still in progress at the time the applicant's credentials are reviewed, unless the applicant has been accepted into the 4+1 Program. 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 admission contingencies 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.

Admission to the MSHN program is limited, and not all qualified applicants will be admitted.

B. Prior Degree Requirements

A completed baccalaureate degree in a nutrition and/or dietetics related field is required for direct admittance to the MSHN Program.

Students enrolled in the undergraduate Nutrition and Dietetics major (within the Department of Health Behavior and Nutrition Sciences (HBNS) at the University of Delaware), may apply to the 4+1 Program in Spring of their sophomore year. If admitted, students will take Advanced Macronutrient Metabolism (NTDT611) and Advanced Micronutrient Metabolism (NTDT631) instead of Macronutrients (NTDT400) and Micronutrients (NTDT401) respectively during their baccalaureate degree. In addition, one credit of Seminar (NTDT665) will be taken during Spring of their senior year. Students applying to the 4+1 Program must: (1) have exceptional performance during the first three semesters of the Nutrition and Dietetic major, (2) have the approval of the Nutrition Graduate Programs Committee, and (3) currently enrolled in the Nutrition and Dietetics major in HBNS.

C. Application Deadlines

All application materials for the MSHN Program will be reviewed on a rolling basis between January 15 and March 15 for admission to the program at the beginning of the following fall semester. Since application decisions will be made on a rolling basis within this timeframe (January 15th – March 15th), early submission of applications is recommended for students interested in a funded teaching or research assistantship.

The admission process at the Department level will be completed as follows: completed applications will be reviewed by the Nutrition Graduate Programs Committee and applicants who meet the admission criteria will then have their application file circulated to the entire graduate faculty. Graduate faculty members will provide feedback on each applicant to the Nutrition Graduate Programs Committee.

D. Admission Categories

Students may be admitted into the MSHN program in one of four categories:

- 1. Admitted full-time with <u>full</u> assistantship that provides tuition and a stipend support;
- 2. Admitted full-time with partial assistantship that provides tuition support;
- 3. Admitted full-time with no assistantship support; or
- 4. Admitted part-time with <u>no</u> assistantship support.

Different types of assistantships (Department-funded and Faculty-funded) may be awarded to full-time students (registered for at least 6 graduate credits each semester) based on admission ranking, needs of the program, and experience and expertise of the graduate student and funding availability. Students awarded assistantships who are on contract are provided experiences that can only be gained by performing instructional or research activities that are compensated based on the University's Graduate College guidelines and policies. Students may pursue additional employment beyond their contract; however, it must be within the Graduate Contract Additional Employment Policy.

E. Application Documents Required

MSHN applicants are expected to submit:

- 1. A graduate application essay;
- 2. Current curriculum vitae or resume;
- 3. A minimum of three letters of recommendation from individuals able to evaluate the applicant's potential for successful graduate work; it is recommended that at least one letter be from an academic reference
- 4. Official transcripts and
- 5. TOEFL, TOEFL iBT, or IELTS scores (for international applicants only).

4+1 Program applicants are expected to submit:

- 1. A personal statement that clearly explains how admission to the program will facilitate the student's professional objectives;
- 2. Current curriculum vitae or resume;
- 3. A minimum of two letters of recommendation from individuals able to evaluate the applicant's potential for successful graduate work; it is recommended that at least one letter be from an academic reference; and
- 4. Official transcripts.

F. Statement of Diversity, Equity and Inclusion

The Department of HBNS is committed to sharing values of diversity, equity, and inclusion. We believe that we can best promote and endorse these values by recruiting and retaining a diverse group of students, faculty, and staff and by creating a climate of respect that is supportive of their academic success. This climate of diversity, equity, and inclusion is central to achieving our academic potential through research and scholarship, teaching, and service.

The Department of HBNS strives for a climate of a diverse, equitable, and inclusive community as it is related to:

- <u>Access to our Department's Programs and Practices:</u> We implement academic programs and scholarly practices that seek to provide equitable access and enable all students to grow academically. Specific strategies that we are strongly committed to include:
 - a. Active participation in the annual, 6-day College of Health Sciences Summer Camp that provides a deep exploration into health sciences majors and careers for traditionally underrepresented students (e.g., minority, low-income, or [soon to be] first generation students).
 - b. A dynamic and up-to-date HBNS website that utilizes culturally diverse images and allows current and potential students, as well as their families, in learning about our ongoing programs.
 - c. Engagement with the Ronald E. McNair Post Baccalaureate Achievement Program (the McNair Scholars Program). The McNair Scholars Program is renowned for preparing traditionally underrepresented groups for graduate education.
 - d. Recruitment of students from Historically Black Colleges and Universities and other Minority Serving Institutions and organizations. <u>Specifically</u>, we engage with central organizations such as The Delaware Valley Consortium for Excellence & Equity (formerly the Delaware Valley Minority Student Achievement Consortium or DVMSAC), and The New Jersey Network to Close the Achievement Gaps to market our academic programs to traditionally underserved groups.
- <u>Teaching and Learning</u>: We are rigorous and empathetic teachers who collectively examine and revise our curriculum and teaching practices to ensure effectiveness in helping all students achieve their academic potential. Specific strategies that we use to promote inclusive teaching and learning include:
 - a. Prior to the start of each academic year, graduate students and faculty can participate in an intensive in-service training related to diversity, equity and inclusion. This interactive training focuses on individual cultural competence and works to build participants' cultural awareness, knowledge, and skills. At the conclusion of the training, attendees are encouraged to develop a cultural competence plan for an aspect of their work in the coming academic year.
 - b. Faculty are trained and actively encouraged to connect students (both direct advisees and any student who solicits help) with professional groups and organizations that promote diversity and assist in establishing networks as per the Office of Equity and Inclusion at the University of Delaware.

G. University Statement

Admission to the MSHN program is competitive. Those who meet stated requirements are not guaranteed admission, nor are those who fail to meet all of those requirements necessarily precluded from admission if they offer other appropriate strengths as determined by the Nutrition Graduate Programs Committee.

III: Academic Degree: MS in Human Nutrition

The MSHN Program prepares students for advanced practice, research, and leadership roles with the opportunity to focus in dietetics, public health or health coaching through a concentration. Students can pursue the MSHN degree through a thesis or non-thesis option. The MSHN degree requires 32 credit hours with 20 credit hours in core courses and an

additional 12 credit hours in courses customized to fulfill degree requirements based on the student's selection of the thesis option, non-thesis option with no concentration, or non-thesis option with a dietetic, public health or health coaching concentration.

A. Degree Requirements, Thesis Option

The thesis option for the MSHN Program requires successful completion of a minimum of 32 credit hours and a thesis which includes oral and written components. The thesis option for the MSHN Program is designed to be completed over a 2-year period. In addition to the minimum of 32 credit hours, degree requirements for the thesis option for the MSHN Program include:

- 1. Oral thesis proposal defense and oral thesis defense (section A.2a) and
- 2. Written thesis (section A.2b).

Students are required to develop a curricular program of study plan with their advisor during the first semester of study. Depending on the student's background and interests, the program of study may include courses beyond the minimum number required for the degree. The planned program of study must first be approved by the student's advisor by the end of the first semester. Students who are admitted on a part-time basis will develop an individual plan with their Advisor that will outline completion degree requirements which will differ from the typical plan of study for students admitted full-time.

A.1. Thesis Option

An outline of the coursework and 32 required credit hours for the thesis option is provided in Table A.1. The 32 credit hours include 20 credit hours of core courses, 6 credits of master's thesis, and 6 credits of elective courses.

	# Credits
Core Courses	
NTDT611: Advanced Macronutrient Metabolism	3
NTDT631: Advanced Micronutrient Metabolism	3
Statistics Elective (600 level or higher)	3
Research Design Elective (600 level or higher)	3
NTDT665: Seminar	2
Non-NTDT Electives	6
Master's Thesis	
NTDT869: Master's Thesis	6
Elective Courses	
NTDT Electives	6
TOTAL CREDITS	32

Table A.1: Outline of MSHN Program Coursework for the Thesis Option

A.2 Thesis

A student's thesis is a substantial original study that requires approval at the thesis proposal stage by the thesis committee. All work included in a student's thesis must be formally approved by all members of the student's thesis committee, at thesis committee meetings, and at the oral thesis proposal defense. The thesis includes both oral and written components.

If the thesis involves human subjects, a request for *Human Subjects Approval or Exemption* must be obtained from the Institutional Review Board at the University of Delaware. Approval must be obtained before any data collection can begin. A copy of the approval letter must also be submitted to the University Graduate College either at time of approval or when thesis is delivered to the Graduate College. 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.

A.2a. Oral Thesis Proposal and Oral Thesis Final Defense Requirements

Students in the thesis option of the MSHN Program must complete an oral thesis proposal preferably by no later than September 1 of Year 2.

Procedures for the oral thesis proposal and the oral thesis final defense are the same. The written thesis proposal and the written final thesis will be made available to the student's thesis committee members <u>at least two weeks prior</u> to the respective oral thesis proposal date and oral these final defense date. The candidate is responsible for scheduling the date, time and location for this meeting.

At least two weeks prior to the oral defense, each Thesis Committee member is to receive:

- 1. A copy of the written thesis proposal or final thesis;
- 2. The student's curriculum vitae or resumé; and
- 3. The student's curricular program of study plan.

The oral thesis proposal and oral thesis final defense meetings will include both a defense of the student's proposed or completed thesis research with sufficient background information to allow for in-depth examination of the student's knowledge of their research topic area. Students are expected to demonstrate competency in both oral and written communication skills.

Immediately following the oral thesis proposal or oral thesis final defense that is open to all faculty and students, the Thesis Committee will meet separately to pose questions to the student. Once all questions have been answered the student will leave the room and the Thesis Committee will vote on the outcome of the defense. The possible outcomes of the oral thesis proposal and oral thesis final defense are:

- 1. <u>Pass</u>. The student may proceed to the next stage of his/her degree training.
- 2. <u>Conditional pass</u>. In the event that the student's Thesis Committee finds the student's performance generally acceptable but with a specific deficiency, condition(s) will be

specified that the student must satisfy to achieve a Pass and remain in the MSHN Program.

- 3. <u>Re-examination</u>. This result is appropriate for a student whose performance was unsatisfactory but displayed evidence of the potential to complete graduate degree training. Re-examination must be completed by the end of the next semester. The possible outcomes of the re-examination are pass or failure. The student may not take the exam a third time.
- 4. <u>Failure</u>. This outcome would indicate that the student's Thesis Committee considers the student incapable of completing degree training and the student would be recommended for dismissal from the program.

The outcome will be presented to the student. If 'conditional pass' or 're-examination' is the outcome, all conditions or requirements for proposal or thesis revisions will be documented in a written format that is signed by the student, the Thesis Advisor and all members of the Thesis Committee. For 're-examination', the reason why the student failed and a description of what a 're-examination' means needs to be detailed in the written documentation. For conditional pass, specific deficiencies or conditions must be addressed within two months of the original oral proposal or defense date. For re-examination, the revised written thesis and revised oral defense must be completed by the end of the next semester. The possible outcomes of the re-examination are pass or failure. The student may not take the exam a third time.

A.2b. Written Thesis Format

The student may report thesis research findings in one of two forms: A traditional thesis or a publishable paper thesis format. The intent of the latter is to enhance the possibility of early submission to a refereed journal while simultaneously fulfilling degree requirements. The requirements of thoroughness and scholarship do not differ between the two formats.

Traditional Thesis Format

A thesis is a substantial Master's level paper presenting independent research, that makes a contribution to the current body of knowledge in a scholarly field. 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 UD Thesis/Dissertation Styles should be obtained for use in preparing the thesis. There are UD Macros available on the Graduate College website for students to use for formatting their theses. Theses may alternatively be formatted as a publishable paper. (see Publishable Paper Format included in this manual).

Publishable Paper Format

The student should inform his/her Thesis Committee of intent to follow the publishable paper thesis format, identifying the refereed journal and providing a copy of the current author's guidelines. The following must be included:

- 1. Preliminary pages (similar to thesis format; includes title page, abstract, signature page, and table of contents);
- Introduction. Provides an overview to the entire project and includes a statement of the hypotheses/research question(s) to be examined;
- 3. Literature review (at discretion of Thesis Advisor). Description, summary, and critical evaluation of the literature in relation to the research problem being investigated;
- 4. Journal manuscript. All significant research results must be included. The discussion should include a thorough examination of interpretation of data with appropriate

comparisons to previously publishable data and discussion of significance to the field and recommendations for future research. If the journal requires only a minimal methods section, a detailed description of methods may be included as a separate chapter or as an appendix (check with your Thesis Advisory Committee);

- a. Style, content organization, literature citation and reference list format will be dictated by the author guidelines in the journal for which the manuscript is prepared.
- 5. Conclusion. Summary of key points and discussion of future directions.

If the student has not prepared a manuscript for publication using the data collected within six (6) months of degree completion, faculty may publish the data and include the student as a co-author.

Regardless of the thesis format the student needs to submit their written final thesis to the Graduate College. After the student submits the Advanced Degree Form they will receive an email with instructions on how to submit their thesis electronically to the Graduate Office. The student will need a copy of the signed Oral Examination Form (available in the student manual) for the submission. After the student submits their thesis, the Graduate Office will review the document for compliance with graduate school policy and format and will either accept the document as completed or request revisions. If revisions are needed, they will be requested by e-mail and the student will be able to submit their Committee signature page, the Dean's signature page, the title page and the abstract to their College Dean upon notification that they are ready to submit. Required document pages <u>cannot be taken directly</u> to an office. If the pages to the Dean's office will take appropriate steps to send the signed signature pages to the Graduate College. Electronic signatures accepted.

Please refer to the Step-by-Step Guide to Graduation, on the University of Delaware Graduate College website, for instructions on submitting a thesis or publishable paper to the Graduate Office. Typically, the Graduate Office requires an electronic copy of the thesis, as well as 4 copies of each of the following on bonded paper: 4 copies of the title page, abstract, signature page, and table of contents. **Please see the Graduate College website however for the most up to date details on what is required** <u>https://grad.udel.edu/students/</u>.

A.3. Thesis Advisors and Thesis Committees

A.3a. Thesis Advisor

The candidate is responsible for identifying a Thesis Advisor from the Graduate Faculty from the Nutrition Program. The Thesis Advisor must be a Nutrition faculty member. A Thesis Advisor should be identified by the end of the first semester. The Thesis Advisor must be willing to serve as an advisor and accept responsibility for oversight of the student's academic progress in the program.

If, during the course of a student's academic program, the Thesis Advisor is unwilling to continue as advisor, the student will work with the Nutrition Graduate Programs Committee to identify another faculty member willing to be the new advisor. The new advisor must be identified within two months in order for the student to be considered making satisfactory progress toward the degree. Switching advisors does not change the deadlines for completing the degree requirements.

It is not recommended that students change Thesis Research Advisors after initiating their thesis research project. However, if a new Thesis Research Advisor is decided upon, any changes to the project require joint discussion and signed agreement between the student, the original Thesis Research Advisor and the prospective Thesis Research Advisor. Written notification is then forwarded to the Graduate Services Coordinator. Any student changing Thesis Research Advisors must complete the remaining Thesis Research credits under the direction of the new Thesis Advisor.

A.3b. Thesis Committee

The student is expected to work with their Thesis Advisor to assemble a Thesis Committee by the first semester of the program. The Thesis Committee will consist of:

- 1. the Thesis Advisor
- 2. at least one other Graduate Nutrition Program faculty member; and
- 3. at least one member from outside the Nutrition Program faculty that meets the approval of the other Committee members.

Faculty members who have retired or resigned from the University may chair committees of students whose work began under their direction prior to their retirement or departure from the University. A faculty advisor/committee chairperson who is not employed by the University of Delaware may serve as co-chair of the committee providing that the other co-chair meets the conditions stated above.

The responsibilities of the Thesis Committee include: evaluating student's progress toward achievement of degree, reviewing and make recommendations on student's planned program of study and research, reviewing and providing critical feedback on the student's research proposal, and serving as a reading committee and examining group for the thesis proposal defense and thesis defense.

A.4. Transfer to Non-Thesis Option

Any MSHN 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 MSHN Graduate Director;
- Credits taken as NTDT869 may be converted to NTDT 669 credits provided that there is a written submission of activities/outcomes achieved and an additional 3 graduate credits of NTDT electives must be taken;
- 3. The student must complete and satisfactorily pass the Non-Thesis Comprehensive Written/Oral Examination;
- 4. Any future financial support for the student may be reconsidered if needed; and
- 5. After committee approval, submit a Change of Classification form to the Graduate Office.

B. Degree Requirements, Non-Thesis Options

The non-thesis options for the MSHN Program requires successful completion of a minimum of 32 credit hours. The 32 credit hours include 20 credit hours of core courses, 3 credit hours of a field project/paper or health coaching practicum, 9 credits of elective or concentration-specific courses, and a comprehensive exam. The non-thesis thesis options for the MSHN Program is designed to be completed over a 2-year period. Students can choose to have no concentration,

a dietetic concentration, a public health concentration or a health coaching concentration. The coursework and credit hours for each option are outlined below.

Students are required to develop a curricular program of study plan with their advisor during the first semester of study. Depending on the student's background and interests, the program of study may include courses beyond the minimum number required for the degree. The planned program of study must first be approved by the student's advisor by the end of the first semester.

B.1. Non-Thesis Option, No Concentration

An outline of the coursework and 32 required credit hours for the non-thesis option with no concentration is provided in Table B.1. The 32 credit hours include 20 credit hours of core courses, 3 credits of a field project, and 9 credits of elective courses.

Table B.1: Outline of MSHN Program Coursework for the Non-Thesis Option with No Concentration

	# Credits
Core Courses	
NTDT611: Advanced Macronutrient Metabolism	3
NTDT631: Advanced Micronutrient Metabolism	3
Statistics Elective (600 level or higher)	3
Research Design Elective (600 level or higher)	3
NTDT665: Seminar	2
Non-NTDT Electives	
Field Project or Paper	
NTDT669: Field Project	
Elective Courses	
NTDT Electives	6-9
Non-NTDT Electives	0-3
TOTAL CREDITS	32

B.2. Non-Thesis Option, Dietetics Concentration

An outline of the coursework and 32 required credit hours for the non-thesis option with a Dietetics Concentration is provided in Table B.2. The 32 credit hours include 20 credit hours of core courses, 3 credit hours of a field project, and 9 credit hours of concentration-specific courses.

Table B.2: Outline of MSHN Program Coursework for the Non-Thesis Option with a Dietetic Concentration

	# Credits
Core Courses	
NTDT611: Advanced Macronutrient Metabolism	3
NTDT631: Advanced Micronutrient Metabolism	3
Statistics Elective (600 level or higher)	3
Research Design Elective (600 level or higher)	3
NTDT665: Seminar	2
Non-NTDT Electives	6
Field Project or Paper	
NTDT669: Field Project	
Concentration Courses	
NTDT810: Nutrition Informatics	3
NTDT812: Current Topics in Nutrition	3
NTDT822: Nutrition Assessment	3
TOTAL CREDITS	32

B.3. Non-Thesis Option, Public Health Concentration

An outline of the coursework and 32 required credit hours for the non-thesis option with a Public Health Concentration is provided in Table B.3. The 32 credit hours include 20 credit hours of core courses, 3 credit hours of a field project, and 9 credit hours of concentration-specific courses.

Table B.3: Outline of MSHN Program Coursework for the Non-Thesis Option with a Public Health Concentration

	# Credits
Core Courses	
NTDT611: Advanced Macronutrient Metabolism	3
NTDT631: Advanced Micronutrient Metabolism	3
Statistics Elective (600 level or higher)	3
Research Design Elective (600 level or higher)	3

NTDT665: Seminar	2
Non-NTDT Electives	6
Field Project or Paper	
NTDT669: Field Project	3
Concentration Courses	
NTDT608: Nutrition Program Planning and Evaluation	3
BHAN820: Social Determinants of Health	3
HLPR605: Chronic Disease Management	3
TOTAL CREDITS	32

B.4. Non-Thesis Option, Health Coaching Concentration An outline of the coursework and 32 required credit hours for the non-thesis option with a Health Coaching Concentration is provided in Table B.4. The 32 credit hours include 20 credit hours of core courses, 3 credit hours of a health coaching practicum, and 9 credit hours of concentrationspecific courses.

Table B.4: Outline of MSHN Program Coursework for the Non-Thesis Option with a Health Coaching Concentration

	# Credits
Core Courses	
NTDT611: Advanced Macronutrient Metabolism	3
NTDT631: Advanced Micronutrient Metabolism	3
Statistics Elective (600 level or higher)	3
Research Design Elective (600 level or higher)	3
NTDT665: Seminar	2
Non-NTDT Electives	6
Health Coaching Practicum	
HLPR664: Health Coaching Practicum	3
Concentration Courses	
-HLPR630: Behavior Change Strategies-HLRP605 Chronic Disease Management	3
HLPR631: Health Coaching	3

HLPR809: Health Behavior	3
TOTAL CREDITS	32

B.5. Comprehensive Exam Requirement

For students in the non-thesis option of the MSHN program, a written comprehensive examination will be administered upon completion of the majority of course requirements. For full-time students, the written comprehensive exam is typically taken during Winter session during the second year of study. Students must pass a comprehensive examination that tests their general knowledge base in human nutrition and their ability to critically evaluate scientific literature.

The four-hour examination will be administered at a common time for all exam takers. It will be developed by a committee of three faculty appointed by the Human Nutrition Graduate Program Director. The exam will consist of three categories: Metabolism, Current Issues, and Statistics/Research. A study guide will be provided.

Students who do not submit all sections of the comprehensive examination are not eligible for a retake of the missed section(s). A student who fails any section of the comprehensive examination may petition for a re-exam of that section 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 (after two attempts) will result in removal from the graduate program. The student will be notified in writing of successful completion of exam. Successful completion of the exam must also be reported by e-mail to the degree auditor in the university Graduate College by the last day of classes.

B.6. Transfer to a Thesis Option

In the event that a student pursuing the non-thesis option of the MSHN program wishes to change to the thesis option, the student must complete the following steps:

- 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 869 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 Graduate College.

C. Timetable and Definition of Satisfactory Progress toward Degree

C.1. Time Limit for Completing the Degree

The time limit for completion of the MSHN Program degree requirements begins with the date of matriculation into the program and is detailed in the student's letter of admission. Full-time

students entering the MSHN Program will need 4 academic semesters to complete the MSHN Program degree; self-funded students with exceptional progress towards their degree may complete the requirements in fewer semesters and part-time students may complete the requirements in more semesters. A maximum length of up to 10 consecutive semesters is allowed to complete the requirements.

An extension of time limit may be granted on a case-by-case basis. The student, advisor and MSHN Director will discuss and outline the extension of time being requested. The MSHN Program Director will forward the request to the Graduate College.

C.2. Submission of Required University Forms

The Graduate College is the official degree audit officer for all graduate degrees and certificates that are awarded. All graduate students must file an <u>Application for Advanced Degree</u> in order for the degree to be awarded. The deadline for degree application is Sept. 15 for December degree conferral, Dec. 15 for winter degree conferral, Feb. 15 for May degree conferral and May 15 for August degree conferral. Submit the completed and signed degree application form to the Office of Graduate and Professional Education with payment. You may attach a personal check made payable to the University of Delaware or pay at the Cashier's Office. The master's fee is \$50.

The application must be signed by the student's advisor, the MSHN Program Director and Department Chair. Therefore, routing of the Application for Advanced Degree must begin <u>at least two weeks prior</u> to the application deadline. Upon completion of the degree audit, the Graduate College notifies students in writing when they have met all degree requirements.

C.3. Grade Requirements for Satisfactory Progress

Failure to satisfactorily progress in the program will be based on the University Graduate Policy as noted below (Table 4).

The Graduate College monitors the academic progress of all graduate students and notifies students in writing of all academic deficiencies. The cumulative GPA after each 9-hour increment determines academic standing.

If student is on:	And earns a GPA of:	The status becomes:
Any status	3.0 or above	Clear
Clear	2.99-2.5	Warning
Clear	2.49-2.0	Probation
Probation	Below 3.0	Dismissal
Warning	Below 3.0	Probation
Any status	Below 2.0	Dismissal

Toble 1. The University	y's Academic Probation Policy is expressed in the following c	hort
Table 4 The University	v s academic Prodanon Policy is expressed in the tollowing c	nan
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C.4. Reasons for Dismissal from the Program

The Graduate College notifies students when they are dismissed from graduate programs without completing a degree. Dismissals usually take place at the end of a term. Students may be dismissed for the following reasons:

- 1. Upon the expiration of the five-year time limit for master's degree programs or for those students in a doctoral program who were admitted with a master's degree. Upon the expiration of the seven-year time limit for doctoral students who were admitted without a master's degree.
- 2. Upon the failure to meet the grade point average requirements as stated in the policy on Academic Deficiency and Probation.
- 3. Upon written notice to the Graduate College of voluntary withdrawal from the program.
- 4. Upon failure to pass the comprehensive exam or a thesis proposal defense and/or a thesis final defense.
- 5. Upon the failure to achieve a cumulative grade point average of 3.0 upon the completion of the stated number of required credits for a degree.
- 6. Upon the failure to meet the stated minima in specific course requirements as identified by individual programs when a department has a policy that such failure leads to dismissal from the program.
- 7. Upon failure to satisfactorily conduct research required for the degree.
- 8. Upon the determination by the faculty of the student's department that the student has failed to meet or has failed to make satisfactory progress toward meeting academic standards required of the student's program other than the failure to achieve a cumulative grade point average of 3.0 upon the completion of the stated number of required credits for a degree.
- 9. Upon failure of a graduate, research or teaching assistant to perform assigned duties adequately. A student's stipend may not be terminated without the dean's approval and the approval of the assistant provost for graduate and professional education. The Graduate College must be informed of a student's stipend termination prior to the initiation of an HR Employee Termination Form.

In the case of dismissal, the MSHN Program Director is required to send a report to the Graduate College that states the Nutrition Graduate Programs Committee vote on the decision causing dismissal and the justification for this action. The Graduate College will notify a student in writing when the student is being dismissed for failure to make satisfactory progress in the program.

C.5. Procedures for Student Appeals

Students who receive what they perceive as an unfair evaluation by a faculty member or faculty committee may file a written grievance in accordance with the University of Delaware policies.

Specifically, if the issue remains unresolved after a meeting between the student and the Nutrition Graduate Programs Committee, the student may submit a written appeal to the Department Chair within 10 business days of the meeting. The Department Chair will issue a written decision on the appeal, and a description of the proposed resolution within 10 business days of appeal receipt.

In the case of academic dismissal, the student may appeal the termination by writing to the Graduate College. This appeal must be made within 10 class days from the date on which the student has been notified of academic dismissal. If the Vice Provost for Academic Affairs grants reinstatement, the student must meet the conditions of the reinstatement. Failure to meet these conditions will result in dismissal from the program. A graduate student may be reinstated only

once to a given program. The student's academic transcript will reflect the reinstatement with academic probation status.

All access to student records is in accordance with the Family Educational Rights and Privacy Act.

IV: Assessment Plan and Program Educational Outcomes

A variety of internal and external mechanisms will be used to evaluate the curriculum and overall effectiveness of the MSHN Program. Established program educational outcomes will be evaluated on an annual basis.

After successfully completing the MSHN thesis option the student will be able to:

- 1. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of macronutrients to human health.
- 2. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of micronutrients to human health.
- 3. Determine appropriate study designs and the role that each contributes to the overall body of knowledge.
- 4. Use and interpret statistical methods to evaluate data and literature.
- 5. Demonstrate oral and written proficiency in sharing research knowledge.
- 6. Hypothesize and evaluate a research question on a nutrition-related topic.

After successfully completing the MSHN non-thesis, no concentration, option, the student will be able to:

- 1. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of macronutrients to human health.
- 2. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of micronutrients to human health.
- 3. Determine appropriate study designs and the role that each contributes to the overall body of knowledge.
- 4. Use and interpret statistical methods to evaluate data and literature.
- 5. Demonstrate oral and written proficiency in sharing research knowledge.
- 6. Execute a synthesis of a body of literature on a nutrition-related topic.

After successfully completing the MSHN non-thesis, dietetics concentration option, the student will be able to:

- 1. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of macronutrients to human health.
- 2. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of micronutrients to human health.
- 3. Determine appropriate study designs and the role that each contributes to the overall body of knowledge.
- 4. Use and interpret statistical methods to evaluate data and literature.
- 5. Demonstrate oral and written proficiency in sharing research knowledge.
- 6. Execute a synthesis of a body of literature on a nutrition-related topic.
- 7. Compare and contrast strengths and limitations of different nutrition assessment tools, and choose appropriate ones for different settings.

After successfully completing the MSHN non-thesis, public health concentration option, the student will be able to:

- 1. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of macronutrients to human health.
- 2. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of micronutrients to human health.
- 3. Determine appropriate study designs and the role that each contributes to the overall body of knowledge.
- 4. Use and interpret statistical methods to evaluate data and literature.
- 5. Demonstrate oral and written proficiency in sharing research knowledge.
- 6. Execute a synthesis of a body of literature on a nutrition-related topic.
- 7. Define and describe the key steps of program planning and evaluation.

After successfully completing the MSHN non-thesis, health coaching option, the student will be able to:

- 1. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of macronutrients to human health.
- 2. Apply the advanced knowledge of biochemical, physiological, and molecular aspects of micronutrients to human health.
- 3. Determine appropriate study designs and the role that each contributes to the overall body of knowledge.
- 4. Use and interpret statistical methods to evaluate data and literature.
- 5. Demonstrate oral and written proficiency in sharing research knowledge.
- 6. Exhibit proficiency of health coaching techniques.
- 7. Formulate a plan and course of action to assist individuals in making health behavior changes

Internally, the MSHN Program Director and the Nutrition Graduate Programs Committee will review student progress, grades, pass/fail rate on coursework, comprehensive examination or thesis defense results, enrollments, and curricular program of study on an annual basis. This information will be used to evaluate the extent to which students are developing critical competencies in the program and to assess and adjust student flow through the MSHN Program.

In addition, the following metrics will be tracked to assess the effectiveness of the MSHN Program for advancing students:

- 1. Program attrition (dropouts, dismissals)
- 2. Time to complete the MSHN degree

Finally, the following mechanisms will be used for tracking students' perceptions of the program:

- 1. Anonymous student surveys to assess different aspects of the program including: classes, mentoring, funding, and research opportunities
- 2. Unsolicited student feedback

V: Financial Aid

Funding for MSHN Program students will come from a variety of sources including, but not limited to department graduate assistantships (*Department-funded*) and faculty advisor grant support (*Faculty-funded*).

Department-funded and/or Faculty-funded assistantships may be awarded to full-time students (registered in at least 6 graduate credits each semester) based on admission ranking, needs of the program, experience and expertise of the graduate student and funding availability. Students appointed to assistantships, who are on contract, are provided experiences that can only be gained by performing instructional or research activities that are compensated based on the University's Graduate College guidelines and policies. Students may pursue additional employment beyond their contract however it must be within the Graduate Contract Additional Employment Policy.

Continuation of Department-funded assistantships is contingent upon the evaluation of the MSHN Program Director, the Nutrition Graduate Programs Committee and the Department Chair. The student must remain in good academic standing to be eligible for the continuation of the award.

Faculty-funded assistantships will be dedicated to the execution of the grant-funded activities as directed by the faculty advisor. Continuation of a Faculty-funded assistantship is primarily contingent upon the evaluation of the faculty advisor (study Principal Investigator) and secondarily with the MSHN Program Director and the Nutrition Graduate Programs Committee. The student must remain in good academic standing and meet the demands of the grant proposal and research activities directed by the faculty advisor to be eligible for the continuation of the award.

Students can also apply for internal funding through the University of Delaware and the Graduate College. Students can also apply for financial support from professional organizations such as American Society for Nutrition or Academy of Nutrition and Dietetics.

VI: Program Administration and Organization

A. Program Faculty

The following BHAN Nutrition Program faculty (Table 5) specialize in Nutrition and have research and teaching expertise that will be central to the implementation and administration of the proposed program. Responsibilities of program faculty include oversight of program policies and curriculum.

Faculty Member	Research Expertise
Sheau Ching Chai, PhD, RD	Diet and nutrient intake in prevention and reduction of age- and nutrition-related diseases; phytochemicals.
Carrie Earthman, PhD, RD	Body composition, energy metabolism and nutrition assessment in chronic and acute illness; clinical nutrition assessment; diagnosis and management of disease-associated malnutrition.

Table 5: Summary of BHAN Faculty with Nutrition Expertise

Cheng-Shun (Richard) Fang, PhD, RD	Dietary fiber and diseases, nutritional assessment.
Melissa Melough, PhD, RD	Nutritional and chronic disease epidemiology; maternal and child nutrition; endocrine disruptors and other environmental chemicals.
Carly Pacanowski, PhD, RD	Weight and eating disorders in emerging adults; psychological outcomes of interventions to control body weight; health behaviors that prevent eating- and weight-related issues.
Shannon Robson PhD, MPH, RD	Behavioral weight management interventions in pediatric and adult populations; basic feeding studies manipulating diet.
Alisha Rovner, PhD	Public health nutrition, vitamin D, bone mineral metabolism.
Kelebogile Setiloane, PhD	Infant and child feeding practices, Cultural competency, Global health/Nutrition, Immigrant Health/Nutrition.
Jillian Trabulsi, PhD, RD	Early childhood nutrition; diet, nutrition and energy balance in healthy individuals and in those with chronic disease, obesity.

Additionally, the Department of Health Behavior and Nutrition Sciences faculty include those with expertise in Health Behavior Science; these faculty frequently collaborate with NS faculty, serve on Thesis Committees, and teach graduate elective courses that MSHN Program students may take as an elective course.

B. MSHN Program Director

The MSHN Program Director will be a member affiliated with the Nutrition program. The term of service for the MSHN Program Director is three years, with a limit of two consecutive terms unless decided differently by the Nutrition Graduate Programs Faculty through an official vote. The MSHN Program Director is the central program representative and point person.

The responsibilities of the MSHN Program Director include:

- 1. Recruit new students;
- 2. Communicate needed course offerings to Nutrition Graduate Programs Director;
- 3. Organize and facilitate applicant review for Nutrition Graduate Committee;
- 4. Review and update MSHN student manual yearly; send to faculty for review and finalize
- 5. Review and update MSHN marketing materials, web campaigns for MSHN program;
- Organize meeting for 1st year MSHN students to hear from graduate faculty who have potential projects for them to work on;
- 7. Develop MSHN comprehensive exams for scholarly project students, proctor the exam and oversee grading;

- 8. Coordinate graduation paperwork between students and department chair. Review offer letters, program letters, and assignment letters prior to being sent to students;
- 9. Liaise with Graduate Services Coordinator on student policy and progress issues;
- 10. Manage applications and Graduate Committee Decisions in application management system (SLATE);
- 11. Serve as a MSHN policy resource for other faculty;
- 12. Serve as resource for and help problem solve student issues;
- 13. Review/edit all offer letters, program letters, and assignment letters for each student; and
- 14. Orient new and returning students to program requirement and policies at summer Orientation week.

C. Nutrition Graduate Programs Committee

The Nutrition Graduate Programs Committee will be responsible for the administrative duties needed to run the MSHN Program in the Department of BHAN. The Nutrition Graduate Programs Committee will consist of nutrition graduate faculty members and shall be chaired by the NS PhD Program Director. Responsibilities of the Nutrition Graduate Programs Committee shall include (but not limited to):

- 1. Admission of students into the program;
- 2. Writing and grading written comprehensive examination questions;
- 3. Oversight of student progress in the program, including dismissal of students who fail to make satisfactory progress; and
- 4. Other tasks required for the continued success of the program.