

**PROGRAM POLICY STATEMENT**

**Master of Science in Nutrition and Dietetics/Dietetics Internship (MS/DI) Program**

**Department of Behavioral Health and Nutrition**

**TABLE OF CONTENTS**

[1.0 Executive Summary 4](#_Toc493061031)

[1.1 Overview 4](#_Toc493061032)

[1.2 Mission 4](#_Toc493061033)

[1.3 The Need 4](#_Toc493061034)

[1.4 Resources 4](#_Toc493061035)

[2.0 Program History 5](#_Toc493061036)

[2.1 Context, Purpose, Planning Process, and Expectations 5](#_Toc493061037)

[*2.2* *Degree Offered* 6](#_Toc493061038)

[2.3 Admission Requirements 6](#_Toc493061039)

[2.4 Prior Degree Requirement 6](#_Toc493061040)

[2.5 Application Deadlines 6](#_Toc493061041)

[2.6 Criteria for Admission and Documents Required 7](#_Toc493061042)

[2.7 Admission Categories 7](#_Toc493061043)

[2.8 BHAN Statement of Diversity and Inclusion 7](#_Toc493061044)

[BHAN Statement of Diversity and Inclusion 7](#_Toc493061045)

[2.9 University Statement 8](#_Toc493061046)

[3.0 Academic Degree: Master of Science in Nutrition and Dietetics 9](#_Toc493061047)

[3.1 Degree Requirements 9](#_Toc493061048)

[3.2 Planned Program of Study 9](#_Toc493061049)

[3.3 Comprehensive Examination Requirement 10](#_Toc493061050)

[3.4 Evidence Based Project Requirement (NTDT669) 10](#_Toc493061051)

[3.5 Timetable and Definition of Satisfactory Progress Towards the Degree 10](#_Toc493061052)

[3.6 Submission of Required University Forms 11](#_Toc493061053)

[3.7 Grade Requirements for Satisfactory Progress 11](#_Toc493061054)

[3.8 Transfer from the MS/DI program to the MSHN program 11](#_Toc493061055)

[3.9 Reasons for Dismissal from the Program 12](#_Toc493061056)

[3.10 Procedures for Student Appeals 13](#_Toc493061057)

[4.0 Assessment Plan 14](#_Toc493061058)

[5.0 Financial Aid 14](#_Toc493061059)

[6.0 Program administration 14](#_Toc493061060)

[6.1 Program Faculty 14](#_Toc493061061)

[6.2 MS/DI Program Leader 15](#_Toc493061062)

[6.3 Nutrition Graduate Programs Committee 16](#_Toc493061063)

[7.0 Appendix A: New Course Proposals 17](#_Toc493061064)

# Executive Summary

## Overview

The Department of Behavioral Health and Nutrition (BHAN) is seeking to implement a combined Master of Science in Nutrition and Dietetics with dietetic Internship (MS/DI) program at the University of Delaware (UD). The proposed MS/DI program will leverage resources already in place within BHAN, namely the Master of Science in Human Nutrition (MSHN) program and the Dietetic Internship (DI) program. While the department plans to keep these two successful and long-standing programs as options, the MS/DI program will offer students a third option, where they complete a Master’s degree and dietetic internship in one seamless program.

## Mission

The mission of the MS/DI program is to train dietetic professionals in the methods, implementation and interpretation of nutrition science, and to apply and advance the field of nutrition through research, clinical, management or community areas of practice.

## The Need

The Accreditation Council for Education in Nutrition and Dietetics (ACEND), the accrediting agency for education programs preparing students for careers as registered dietitian nutritionists (RDN) or nutrition and dietetics technicians, registered (NDTR), is implementing new requirements for RDNs. Starting in 2024, RDNs must have a minimum of a graduate degree (Master’s degree or higher) and completion of an accredited Dietetic Internship to be eligible to take the credentialing examination to become an RDN.

## Resources

The MS/DI program will start with a maximum enrollment of nine students. As illustrated in **Table 1** (page 4), the proposed MS/DI program will combine two programs that are already in place within the Department of BHAN: the Master of Science in Human Nutrition (MSHN) and the Dietetic Internship (DI). The faculty who will support the proposed MS/DI program are the same faculty who currently support the MSHN and DI programs. These faculty will have effort devoted to the MS/DI program, and the current MSHN graduate courses have open seats available for MS/DI students.

**Table 1: Requirements the Proposed MS/DI program**

|  |  |  |
| --- | --- | --- |
| **Course**a  | **Credits** | **Required for** |
| NTDT611 Advanced Macronutrient Metabolism | 3 | MS |
| NTDT822 Research Methods in Nutrition Assessment | 3 | MS |
| NTDT608 Nutrition Program Planning and Evaluationb | 3 | MS |
| NTDT elective  | 3 | MS |
| Free elective  | 3 | MS |
| Statistics course  | 3 | MS |
| NTDT810 Nutrition Informaticsb  | 3 | MS |
| NTDT812 Current Topics in Nutritional Sciencesb | 3 | MS |
| NTDT665 Nutrition Seminar | 1 | MS |
| NTDT669 Evidence Based Project | 2 | MS |
| NTDT550 Dietetics Practicum Ic | 4 | DI |
| NTDT551 Dietetics Practicum IIc | 4 | DI |
| NTDT650 Current Perspectives in Dietetics I | 2 | DI |
| NTDT651 Current Perspectives in Dietetics II | 2 | DI |
| **TOTAL GRADUATE CREDITS**b**:**  | **39** |  |
| aAll courses are standard grading course except NTDT550, NTDT551, NTDT665, which are graded P/F bSee Appendix for new course proposalscNTDT550/551 do not count as graduate credit but are required for Dietetic Internship |

# Program History

## Context, Purpose, Planning Process, and Expectations

*Context:* To become a RDN, students must first earn a baccalaureate degree in dietetics and/or nutrition from an ACEND-accredited program, and then must complete an ACEND-accredited Dietetic Internship (DI). The BHAN department has both an ACEND-accredited program in dietetics (BS in Dietetics) and an ACEND-accredited DI. The ACEND requirements for RDNs will change from a minimum of a baccalaureate degree to a minimum of a graduate degree in 2024. Thus, starting in 2018, UD freshman will be advised that a Master’s degree is required for entry-level RDN employment positions.

*Purpose*: The purpose of this proposal is to create a combined Master of Science in Nutrition and Dietetics/Dietetic Internship (MS/DI) program within the Department of Behavioral Health and Nutrition (BHAN) in the College of Health Sciences. This purpose directly aligns with:

1. The forth-coming ACEND requirements
2. The agenda of the University of Delaware and College of Health Sciences to expand the number of graduate students to meet healthcare demands locally and nationally.1 Additionally,

the combined MS/DI program positions the Department of BHAN and University of Delaware at the forefront of academic programs able to offer such a program to potential students.

*Planning Process:* Beginning in September 2016, the Nutrition program, within the Department of Behavioral Health and Nutrition, formed a MS/DI planning committee which met bi-monthly to design the proposed program. This included: evaluating MS/DI programs at institutions across the United States similar in academic tier and size to the University of Delaware, and reviewing ACEND competencies for future RDNs. With this information, the mission and design for the program were conceptualized. The planning committee also consulted with the following individuals: (1) Nutrition faculty (including the Director of the Dietetic Internship, Ms. Anja Leefeldt), (2) the Department of Behavioral Health and Nutrition Chair, Dr. Michael Peterson, (3) the Deputy Dean of the College of Health Sciences, Dr. Susan Hall, and (4) the Director of Graduate and Professional Education, Dr. Mary Martin. The final version of the proposal was approved by BHAN Nutrition faculty, Department Chair, and the BHAN Department Curriculum Committee.

*Expectations:* The MS/DI program will prepare graduates to successfully pass the Registration Examination for Registered Dietitian Nutritionists (RDN). RDNs are recognized by hospitals, medical centers, health care providers and companies, as nutrition experts. RDNs are employed in many settings including academia, non-governmental organizations (business and non-profit), allied health fields, public service at all levels of national government, and international organizations such as the World Health Organization. The curriculum will provide graduate students with the training needed to become proficient clinicians and healthcare leaders. The MS/DI program will enroll students beginning in fall 2018.

1Assanis D, University of Delaware, President’s Address to Faculty. College of Health Sciences, Town Hall Meeting; September 19 2016; STAR Campus, University of Delaware.

## *Degree Offered*

The degree awarded will be a **Master of Science in Nutrition and Dietetics** and a certificate of completion for the Dietetic Internship.

## Admission Requirements

Applicants must submit all materials directly to the University of Delaware Office of Graduate and Professional Education using the online admission process before admission can be considered. Admission applications are available at: <https://grad-admissions.udel.edu/apply/>.

Admission decisions will be made by the Nutrition Graduate Programs Committee. Students will be admitted to the program based on enrollment availability and their ability to meet the following minimum entrance requirements:

1. A Bachelor’s Degree in Dietetics and/or Nutrition **and** a Verification Statement from an ACEND accredited college or university with a GPA > 3.0
2. Verbal GRE (≥50th percentile) within past 5 years
3. Quantitative GRE (≥50th percentile) within past 5 years
4. TOEFL (Test of English as a Foreign Language) score of at least 600, TOEFL IBT score of at least 100

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

## Prior Degree Requirement

A completed bachelor’s degree in dietetics and/or nutrition and a Verification Statement from an ACEND accredited didactic program in dietetics (DPD) or a DPD Intent to Complete form (if currently completing a Bachelor’s degree), is required for admittance into the MS/DI program.

## Application Deadlines

Applications (all materials) for the MS/DI program must be submitted by January 15th for admission to the program the following fall semester. The program will offer fall admission only. Applicants are strongly advised to complete and submit applications as early as possible.

## Criteria for Admission and Documents Required

Each application will be evaluated individually based on:

1. Academic record/achievement
2. Work, research, and/or community experience
3. Personal statement
4. Recommendations

Applicants are expected to submit:

1. An official transcript from an ACEND accredited college or university
2. A DPD verification statement from an ACEND accredited program or a DPD Intent to Complete form (if currently completing a Bachelor’s degree)
3. A written personal statement
4. Current resume
5. Three letters of recommendation; two academic references and one work or volunteer reference are recommended, however, extensive work experience may warrant submission of two work references and one academic reference.

## Admission Categories

Applicants must meet all admissions criteria to be considered for acceptance. The MS/DI program does not provide “conditional” acceptance. The MS/DI is a full-time 2-year program. Graduate Assistantships are not available for this program.

## BHAN Statement of Diversity and Inclusion

BHAN Statement of Diversity and Inclusion

The Department of Behavioral Health and Nutrition (BHAN) is committed to sharing values of diversity 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 for diversity and inclusion is central to achieving our academic potential through research and scholarship, teaching, and service.

The Department of Behavioral Health and Nutrition gives definition to this climate of a diverse and inclusive community by encouraging and valuing:

1. **Equitable Access to our Departments Programs and Practices:** We implement academic programs and scholarly practices that seek to provide equitable access and enable all students to grow academically. Specific strategies that we keenly use include:
* 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 (i.e., minority, low-income, or (soon to be) first generation students).
* The provision of a dynamic and up-to-date BHAN website that utilizes culturally diverse images and engages current and potential students, as well as their families, in learning about our on-going programs.
* We are engaged with the Ronald E. McNair Post Baccalaureate Achievement Program (the McNair’s Scholars Program). The McNair Scholars program is renowned for preparing traditionally underrepresented groups for graduate education.
* We seek to recruit students from Historically Black Colleges (HBCUs) and other Minority Serving Institutions (MSIs) and organizations. Specifically, 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 directly market our academic programs to traditionally underserved groups.
1. **Inclusive Teaching and Learning:** We are rigorous and empathetic teachers who collectively seek to examine and revise our curriculum and teaching practices as necessary to ensure that we are effective in helping all students achieve their academic potential. Specific strategies that we use to promote inclusive teaching and learning include:
* Prior to the start of each academic year, graduate students and faculty can participate in an intensive one-day in-service training on *Cultural and Linguistic Competence Express: Preparing to Become Culturally & Linguistically Competence Health Professionals*. This interactive training focuses on individual cultural competence and specifically works to build participant’s 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.
* 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 university resource listing: <http://grad.udel.edu/students/diversity-inclusion/national-diversity-resources>
* All students in the program will be provided with a tailored advising and mentoring plan that will be designed to maximize academic success. The University of Delaware’s Diversity and Inclusion resources will be consulted in the development of this plan (please see <https://www1.udel.edu/gradoffice/diversity/external.html> for a listing of these resources).

## University Statement

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

# Academic Degree: Master of Science in Nutrition and Dietetics

## Degree Requirements

The MS/DI program requires completion of a minimum of 39 credits, including coursework, evidence based project (field) work, successful completion of a comprehensive examination, and Dietetic Internship rotations. The program is designed to be completed in 2 years. An outline of the 39 required credits are provided below.

| **Courses** | **# Credits** |
| --- | --- |
| NTDT611 Advanced Macro Metabolism | 3 credits |
| NTDT822 Research Methods in Nutrition Assessment | 3 credits |
| NTDT608 Nutrition Program Planning and Evaluation | 3 credits |
| Statistics | 3 credits |
| NTDT elective | 3 credits |
| NTDT812 Current Topics in Nutritional Sciences | 3 credits |
| NTDT810 Nutrition Informatics | 3 credits |
| Non NTDT elective | 3 credits |
| NTDT665 Nutrition Seminar | 1 credit |
| NTDT669 Evidence Based Project | 2 credits |
| NTDT550 Dietetics Practicum I | 4 credits |
| NTDT551 Dietetics Practicum II | 4 credits |
| NTDT650 Current Perspectives in Dietetics I | 2 credits |
| NTDT651 Current Perspectives in Dietetics II | 2 credits |
| TOTAL CREDITS | 39 Credits |

Note: Consistent with University policy, a maximum of 9 transfer credits may be substituted in the program of study if coursework deemed equivalent by the Nutrition Graduate Programs Committee and if the courses were not used towards an earned degree.

## Planned Program of Study

A typical plan for the program of study is shown below.

|  |
| --- |
| **Table 3: Program Plan for MS/DI program** |
|  | **Fall** | **Winter** | **Spring** | **Summer** |
| **Year 1** | * NTDT611 (3)
* NTDT822 (3)
* Statistics (3)
* NTDT812\* (3)
 | * NTDT669 (1)
 | * NTDT elective (3)
* NTDT608\*(3)
* Non NTDT elective (3)
* NTDT665 (1)
* NTDT810\* (3)
 | * ComprehensiveExamination
* NTDT669 (1)
* *ComprehensiveExamination*

 *retake if needed* |
| **Year 2\*\***Dietetic Internship | * NTDT550\*\* (4)
* NTDT650 (2)
 |  | * NTDT551\*\* (4)
* NTDT651 (2)
 |  |
| \* New course proposals can be found in the Appendix.\*\*Students complete a minimum of 1200 supervised practice hours as part of NTDT550 and 551. |

## Comprehensive Examination Requirement

A written comprehensive examination will be administered upon completion of the majority of course requirements after the conclusion of the 2nd semester (Spring semester). The four-hour essay examination will be administered at a common time for all exam takers. It will be developed by three graduate faculty members who will serve as the Examination Committee for that year. The exam will consist of three categories, Metabolism, Current Issues, and Statistics/Research. A general study guide will be provided. A student who fails any question of the comprehensive examination may petition for a re-exam of that question and will receive suggestions for remediation. A Letter of Intent to retake the exam should be submitted to the MS/DI Graduate Program Leader. The re-take examination must occur within two months of the original exam. The exam may not be taken a third time. Failure to pass the Comprehensive Exam will result in removal from the MS/DI program and such students are not eligible to transfer to the MS in Human Nutrition program. Student will be notified in writing of successful completion of exam. The exam is graded as Pass or Fail for each question; successful completion of the comprehensive evaluation is based on a grade of Pass on all questions (where Pass represents a letter grade of C or higher).

## Evidence Based Project Requirement (NTDT669)

The purpose of the Evidence Based Project is to develop critical thinking skills, assimilate research, and/or actively participate in research. The Evidence Based Project will be composed of:

1. An annotated bibliography/critical review of the literature (which will be started as part of NTDT 8xx Current Topics in Nutritional Sciences)
2. Completion of the annotated bibliography and a written publication (e.g., review article, newsletter article) completed for one credit (NTDT669\*) during winter session of year 1.
3. An oral presentation and poster summarizing the findings of the Evidence Based Project, completed for one credit (NTDT669\*) during summer after year 1.

\*NTDT669 is a standard grading (letter grade) course.

Students will select a topic for the Evidence Based Project from the list of topics provided in NTDT8xx (Current Topics in Nutritional Sciences, taught in the first semester of the MS/DI program). In addition to the topic, the student will be assigned an Evidence Based Project advisor based on the topic selected and the faculty available that semester.

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

## Timetable and Definition of Satisfactory Progress Towards the Degree

The time limit for completion of the MS/DI degree requirements begins with the date of matriculation and is specifically detailed in the student’s letter of admission. Students in the MS/DI program must complete the course requirements in the progression outlined in **Table 2**. Students start in the program in the fall, and then take winter, spring, summer, fall, and spring coursework to graduate.

An extension of time limit may be granted for circumstances beyond the student’s control.  Requests for time extensions must be made in writing and approved by the MS/DI Program Leader. The Nutrition Graduate Program Director will forward the request to the Office of Graduate studies. The maximum time allowed to complete the program is normally three years.

## Submission of Required University Forms

To initiate the process for degree conferral, graduate students must submit an “Application for Advanced Degree” to the Office of Graduate Studies. The application deadline is February 15 for Spring graduation candidates. The application must be signed by the candidate’s advisor, the Nutrition Graduate Program Director and the Department Chair. An application fee for MS degree students is required when the application is submitted. Upon completion of the degree audit, the Office of Graduate Studies will notify students in writing when they have met all degree requirements.

## Grade Requirements for Satisfactory Progress

Failure to satisfactorily progress in the program will be based on the University Graduate Policy as noted below. The Office of Graduate Studies 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.

The University’s Academic Probation Policy is expressed in the following chart:

|  |  |  |
| --- | --- | --- |
| **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 |

## Transfer from the MS/DI program to the MSHN program

If a student enrolled in the MS/DI program within the UD Department of Behavioral Health and Nutrition (BHAN) decides they no longer want to complete a Dietetic Internship, they may apply to transfer to the MSHN program at UD if they have completed **all** Year 1 Fall and Winter courses with a grade of A- or better in each course, and are enrolled in Year 1 Spring courses (see **Table 4**). The student must submit a request to transfer letter to the Directors of the MS/DI and MSHN program by March 15th (Year 1) and include in their letter the reason for requesting the transfer. The application will be reviewed by the Nutrition Graduate Programs Committee and the student will be notified of the decision by May 1st of Year 1. Space is limited in the MSHN program, and as such not all students who qualify for transfer may necessarily be permitted to transfer.

|  |
| --- |
| **Table 4: Program Plan for MS/DI students who transfer to the MSHN\*\* program** |
|  | **Fall** | **Winter** | **Spring** | **Summer** |
| **Year 1** | * NTDT611 (3)
* NTDT822 (3)
* Statistics (3)
* NTDT812\* (3)
 | * NTDT669 (1)
 | * NTDT elective (3)
* NTDT608\*(3)
* Non NTDT elective (3)
* NTDT665 (1)
* NTDT810\* (3)
 |  |
| **Year 2** | * NTDT669 (1)
* Research Design (3)
* Non NTDT elective (3)
 | * ComprehensiveExamination

 | * NTDT630 (3)
* NTDT669 (1)
* *ComprehensiveExamination retake if needed*
 |  |
| \* New course proposals can be found in the Appendix.\*\* The degree awarded will be an MS in Human Nutrition (MSHN); student will take ALL of the same courses taken by students in the MSHN Non-Thesis option, and will have an two additional NTDT elective courses. |

## Reasons for Dismissal from the Program

The Office of Graduate Studies notifies students when they are dismissed from graduate programs without completing a degree.

Dismissals during the first year of coursework usually take place at the end of a term. Students may be dismissed for the following reasons:

* Upon the expiration of the three-year time limit for the MS/DI degree.
* Upon the failure to meet the grade point average requirements as stated in the policy on Academic Deficiency and Probation.
* Upon written notice to the Office of Graduate Studies of voluntary withdrawal from the program.
* Upon failure to pass the comprehensive exam (after a failed second attempt).
* Upon the failure to meet the stated minimum in specific course requirements as identified by course progression thesis.
* Upon failure to satisfactorily complete an Evidence Based Project.
* Upon violation of University of Delaware regulations regarding academic honesty. All graduate students are subject to University of Delaware regulations regarding [academic honesty](http://www.udel.edu/stuguide/07-08/code.html#honesty). Violations of these regulations or other forms of gross misconduct may result in immediate dismissal from the Program.

Dismissals during the Dietetic Internship year may take place for the following reasons:

* If progress in supervised practice rotations is deemed unsatisfactory:
* In the event a preceptor deems the student’s progress in a rotation unsatisfactory, he/she will contact the Dietetic Internship (DI) Director. The intern may be asked to leave the supervised practice facility for the remainder of the day and develop a written plan for improvement. The plan will be discussed between the DI Director, intern and preceptor and a Performance Improvement Plan (PIP) will be finalized.
* Failure of the intern to adhere to the agreed-upon PIP may result in termination from the dietetic internship or removal from the supervised practice facility. If the intern is removed from the supervised practice facility, he/she will be responsible for securing another supervised practice site to complete the remaining rotation requirements.
* At the final evaluation in each rotation, it will be determined if the intern has met entry-level performance. If the intern receives unsatisfactory ratings, the intern will be given specific suggestions in writing about what needs to be accomplished to achieve a satisfactory rating, and will be scheduled for additional time in that rotation to attempt to achieve a satisfactory rating. The amount of extra time in that rotation may not exceed the total amount of time originally scheduled in the rotation. Interns who have received an unsatisfactory final evaluation in the final rotation of the internship will be allowed to schedule additional days as needed in that rotation.
* At any time during the program, an intern may be notified of failure to make satisfactory progress toward the completion of the internship in the judgment of the DI Director.
* In the event an intern is unable to achieve a satisfactory final evaluation in a rotation even after spending additional time in that rotation, the intern will be referred to the DI Director for consideration of being allowed to continue in the program. The DI Director may terminate interns who show a failure to perform satisfactorily after receiving sufficient evidence of unsatisfactory performance from the supervising preceptors. The DI Director has the right to terminate an intern who receives a minimum of two unsatisfactory evaluations in any of the rotations.

In addition, a graduate student/intern may be terminated from the MS/DI program for any of the following reasons:

* Any act or behavior which is a violation of local, state or federal law on the property of the University of Delaware or a supervised practice facility.
* Any act or behavior which threatens the physical, emotional, mental or environmental safety of faculty, staff, interns, employees of the University or supervised practice facilities.
* Any act in violation of the affiliation agreement between the University and the supervised practice facility.

In the case of dismissal, the Nutrition Graduate Programs Director and MS/DI Program Leader will send a report to the Office of Graduate Studies that states the faculty vote on the decision causing dismissal and the justification for this action. The Office of Graduate Studies will notify a student in writing when the student is being dismissed for failure to make satisfactory progress in the program.

## 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 to the Graduate Programs in Nutrition Committee within 10 business days of receiving the grade. Upon being notified of a student grievance, the Graduate Programs in Nutrition Committee will meet with the student to discuss the grievance within 10 business days.

If the issue remains unresolved after a meeting between the student and the Graduate 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.

Students who perceive the Department Chair decision as unfair, may follow the Office of Graduate Studies Grievance Procedures ([http://www1.udel.edu/stuguide/17-18/grievance.html - gradegrieve](http://www1.udel.edu/stuguide/17-18/grievance.html#gradegrieve)).

Students wishing to review their program file must submit a written request to the Nutrition Graduate Programs Director at least 24 hours in advance. Students must review the file in the presence of program staff or faculty and are not permitted to remove a file but may photocopy documents from their folder. All access to student records is in accordance with the Family Educational Rights and Privacy Act.

# Assessment Plan

A variety of internal and external mechanisms will be used to evaluate the curriculum and overall effectiveness of the MS/DI program.

Internally, the Nutrition Graduate Programs Director, the MS/DI Program Leader, and Nutrition Graduate Programs Committee will review student progress, coursework grades, comprehensive examination results, and passing rate on Registration Examination for RDNs on an annual basis. This information will be used to evaluate appropriateness of program coursework and competencies gained through completion of the MS/DI program.

Markers of students’ success will be tracked, including:

1. Passing rate on RDN exam
2. Job placement
3. Employer satisfaction with graduates’ preparedness

A variety of mechanisms for tracking students’ perceptions of the program, including:

1. Teaching evaluations
2. Unsolicited student feedback
3. Graduate surveys 1 year post-graduation

Externally, the MS/DI program will be subject to review from the Accreditation Council for Education in Nutrition and Dietetics (ACEND) once every five years.

# Financial Aid

This is a professional graduate program and students in the program cannot be supported with graduate assistantships due to the heavy credit load in Year 1 and the clinical training hours required in Year 2.

# Program administration

## Program Faculty

The MS/DI degree will be supported by current BHAN faculty. The following BHAN faculty (please see **Table 5**, next page) specialize in Nutrition and have the research and teaching expertise required for implementation and administration of the proposed program.

| **Table 5: Summary of BHAN Affiliated Faculty Areas of Interest** |
| --- |
| **Faculty Member** | **Areas of Interest** |
| Sandy Baker, EdD, RDN, LDN | Nutrition education, nutrition counselling, qualitative research |
| Sheau Ching Chai, PhD, RDN | Diet and nutrient intake in prevention/reduction of age- and nutrition-related diseases; phytochemicals. |
| Sharon Collison, MS, RDN | Sports nutrition, eating disorders/disordered eating, weight management, and nutrition and inflammation/disease. |
| Maryann Eastep, MS, RDN | Sports nutrition, weight management, cardiovascularDementia, women’s Health, IBS/FODMAP diets. |
| Richard Fang, PhD, RDN | Dietary fiber and diseases, nutritional assessment. |
| Andrea Grim, MS, RDN | Clinical nutrition, critical care nutrition, functional medicine. |
| Marie Kuczmarski PhD, RDN | Gerontological nutrition, dietary patterns, nutritional assessment methods. |
| Anja Leefeldt, MS, RDN | Clinical and community nutrition  |
| Shannon Lennon PhD, RDN | Cardiovascular disease with an emphasis on nutrient intake and/or interventions. Additional focus on the role of diet/nutrition in hypertension and ischemia-reperfusion insults. |
| Carly Pacanowski PhD, RDN | Obesity and eating disorders in emerging adults; psychological outcomes of interventions to control body weight; eating and health-related behaviors. |
| Shannon Robson, PhD, MPH, RDN  | 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. |
| Beth Schwenk, MS, RDN | Management, quantity foods, food safety, bariatric surgery, weight management. |
| Kelebogile Setiloane, PhD | Infant and child feeding practices, cultural competency, global health/nutrition, immigrant health/nutrition. |
| Jillian Trabulsi, PhD, RDN | Early childhood nutrition, diet, nutrition and energy balance in healthy individuals and in those with chronic disease, obesity. |
| Kristin Wiens, MSc, RDN | Nutrition knowledge; food preparation and cooking skills; nutrition self-efficacy; eating away from home. |

## MS/DI Program Leader

The Dietetic Internship (DI) Director will oversee the MS/DI Program. The MS/DI Director will serve on the Nutrition Graduate Programs Committee, alongside the MSHN program leader and the Director of Nutrition Graduate Programs.

Responsibilities of the MS/DI Program Leader include:

1. Providing leadership and oversight for the program
2. Represent the program at faculty and Nutrition Graduate Programs Committee meetings
3. Communicating as necessary with the University Graduate Office
4. Serving as the first point of contact for issues arising with program students and faculty
5. Approving all changes in faculty advisors
6. Corresponding with prospective students and overseeing program recruitment and admission decisions
7. Program evaluation and assessment
8. Organizing administration of Comprehensive Exam
9. Overseeing all aspects of the Dietetic Internship

## Nutrition Graduate Programs Committee

The Nutrition Graduate Programs Committee will be responsible for the administrative duties across all graduate nutrition programs, including MS/DI. In addition to the Nutrition Graduate Programs Director, the Committee will consist of the MS in Human Nutrition Graduate Program Leader, the MS/Dietetic Internship Director, and two affiliated faculty members, and shall be chaired by the Nutrition Graduate Programs Director. The two affiliated faculty members shall be decided upon by the Nutrition program faculty for staggered, two-year terms.

Responsibilities of the Nutrition Graduate Program Committee shall include:

1. Review of applications and admission of students into the program,
2. Approval of student selection of a new faculty advisor after admission to the program,
3. Selection of a panel for Comprehensive Exam Committee,
4. Review of students with academic issues, including dismissal of students who fail to make satisfactory progress, and
5. Other tasks required for the continued success of the program.

# Appendix A: New Course Proposals

**New Course Proposal Form**

**Please name this completed form following this convention: newNTDT812**

This form parallels the Faculty Senate Online Course Approval form for New Course Proposals

Details can be found at<http://www.udel.edu/registrar/coursemanagement/instructions.html>

Note that FYE and DLE designations and A&S group requirements have additional requirements for review.

In addition to completing this form, submit a syllabus to your departmental curriculum committee for review.

**Course ID:** NTDT812

**Course Title:** Current Topics in Nutritional Sciences

**Credit type:**

 **Fixed number of credits:** 3

 **Variable number of credits:** min: n/a max: n/a

**Can this be taken more than once per term?** no

**Max. repeatable credits:** 3

**Grade type:** standard

**Multicultural Course:** no

**First Year Experience (FYE):** no

**Discovery Learning Experience (DLE):** no

**Arts & Science requirement:**

Use the A&S Educational Affairs Course Nomination Form to propose this course as an Arts & Science group requirement and/or second writing course.

**Replaces (renumbering):** \_\_\_\_\_\_ Enter Course ID of the course being deactivated.

**Instructional format:**

 **Lecture hours** 3

 **Lab hours** \_\_\_\_\_\_

 **Discussion hours** \_\_\_\_\_

 **Independent Study:** (yes/no) no

**Cross Listed Courses:** no

**Course catalogue title (60 characters max**.): Current Topics in Nutritional Sciences

**Long Description (45 words max.):**

Evidence-based exploration of current controversies in Nutritional Sciences. Students will use principles of systematic and critical reviews to synthesize and summarize information from peer-reviewed literature and guidelines reputable scientific bodies, on a given topic.

**Prerequisites:**
NTDT200 or similar undergraduate nutrition course

BISC276 or similar undergraduate human physiology course

STAT200 or similar undergraduate statistics course

**Co-requisites**: none

**Restrictions**: MS in Human Nutrition (MSHN) majors, proposed Master of Science in Nutrition and Dietetics/Dietetic Internship (MS/DI) majors, proposed PhD in Nutrition Science majors, proposed PhD in Health Behavior students, Master of Science in Health Promotion

**Justifications**:

**Justify the need to initiate this course.**

 The graduate programs in nutrition (MS and a proposed PhD program) require that students have a firm foundation of the literature related to nutrition and its role in health and disease. Graduate-prepared Registered Dietitian Nutritionists (RDNs) and nutrition scientists need to develop the skills required to assimilate the research to date on important topics. This course will teach students how to methodically and systematically review the literature and create scientific summaries of the evidence for given topics. This course will be taken by students in the Master of Science in Human Nutrition, the proposed Master of Science in Nutrition and Dietetics/Dietetic Internship program, and the proposed PhD in Nutrition Sciences program. We anticipate an enrollment of approximately 15 graduate students per semester from nutrition graduate programs alone. There are no current topics courses in the nutrition curriculum to date.

**Identify and justify any effect on other courses in your department or in another department. Specifically list other departments' chairpersons and/or faculty consulted and summarize results of discussion.**

This course has been developed with input from all faculty in the Nutrition program within the Department of Behavioral Health and Nutrition (BHAN). This course has been reviewed and approved by the BHAN Department Chair and Curriculum Committee.

**Identify the main emphasis of the course along with major topics covered. Include a list of learning objectives.**

**Main emphasis:**

The course will teach students how to critically evaluate and summarize a body of work on a current nutritional topic. To teach students the process used to conduct a systematic literature review, all students will start with a common topic and work through the process together (common topic will be nutritional genomics). Thereafter, each student will: (1) be responsible for a specific current topic (conduct a systematic literature review that culminates with an oral presentation/slide deck summary), and (2) actively participate/summarize information learned from their classmate’s topics.

**Course Objectives:**

Upon completion of this course, the student will be able to:

1. Utilize search engines (e.g., PubMed, Google Scholar) to identify current literature and guidelines from reputable scientific bodies on a current topic.
2. Identify the main components of, and stages in conduct of, a critical/systematic review.
3. Emphasize the importance of quality assessment of research studies for utilization in critical/systematic review.
4. Create a literature search summary chart to organize the main results of each study/article/guideline.
5. Critically evaluate and summarize the findings on the topic in an oral presentation.
6. Summarize information presented by classmates on other current topics.

**Potential Topics (will change according to current controversies in the field)**

1. Nutritional genomics
2. Gluten free diets- who should consume them?
3. Sodium and salt consumption: AHA vs. IOM recommendations
4. FODMAP diets, low GI diets, Paleo diets for inflammation: What is the evidence?
5. Low fat versus low carbohydrate diets for weight loss
6. Probiotics- what does the science say?
7. Dietary supplements - do they improve nutritional status?
8. Caloric restriction - does it increase life span?
9. Is saturated fat intake related to heart disease?
10. Is sugar intake a driving factor for heart disease?
11. Health at every size – is there such a thing as ‘metabolically healthy’ obesity?
12. Does dietary soy intake increase cancer risk?
13. Effect of skipping meals versus alternate day fasting on total daily energy intake
14. Dietary lectins and phytates - are “anti-nutrients” a concern?
15. Evidence and controversies surrounding vitamin D

**Outline how this course addresses one or more of the 10 goals of undergraduate education.**

n/a

**Outline how this course relates to the overall program goals.**

This course will be offered as a required graduate level NTDT (nutrition) course for masters and doctoral students in the Department of Behavioral Health and Nutrition (BHAN). The course meets the following goals for nutrition graduate programs, which are to produce graduate students who have:

* Advanced knowledge and practice of nutritional science;
* Ability to critically evaluate scientific literature; and
* Skills for research, teaching, and leadership positions.

Related to the MS/DI program in BHAN, the course meets several ACEND (Accreditation Council for Education in Nutrition and Dietetics) competencies:

* ACEND standard 1.1.1: ‘Analyzes the usefulness and limitations of epidemiological, clinical and other study designs and identifies trends in diet and disease’
* ACEND standard 1.1.2: ‘Demonstrates general understanding of nutrition and genetics, as it relates to health conditions’
* ACEND standard 6.3: ‘Applies current research and evidence-informed practice to services”

**Sample Course Calendar and Required Assignments**

| **Week**  | **Tentative Lecture Topics** |
| --- | --- |
| 1 | Overview of course, syllabus, calendarElectronic search engines for identifying nutrition and health related journal articles and authoritative guidelinesSteps for conducting critical/systematic literature review (specifying a study question, writing a protocol for how the review will be conducted, gathering the evidence comprehensively)  |
| 2 | Quality assessment of research studiesCreating research studies summary chart |
| 3 | Evaluating and summarizing the evidence from critical/systematic literature review |
| 4 | Group project: Nutritional genomics: Identifying articles, quality assessment of research studies |
| 5 | Group project: Nutritional genomics: Research studies summary chart |
| 6 | Group project: Nutritional genomics: Evaluating and summarizing evidence from critical/systematic review |
| 7 | Group project: Nutritional genomics, scientific presentations of group projects  |
| 8 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 9 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 10 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 11 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 12 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 13 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 14 | Student presentations (based upon current controversies in the field – see Potential Topics above) |
| 15 | Student presentations (based upon current controversies in the field – see Potential Topics above) |

**Sample Textbook:** Cochrane Handbook for Systematic Reviews of Interventions 1st Edition

Julian P. T. Higgins and Sally Green (Editors). John Wiley & Sons Ltd., 2008. ISBN-13: 978-0470699515.

Due to the focus on current controversies in nutritional sciences, peer reviewed literature will be the primary source of readings for this course.

**Sample Required Assignments:**

 Attendance/class participation 5%

 Group Project: Systematic Review 20%

Independent Project: Systematic Review 30%

Independent Project: Presentation 30%

Minute Papers 15%

 **TOTAL 100%**

**Attendance/Class Participation**

Attendance at lecture is mandatory. Class will be a combination of lecture, group work, and scientific literature presentation/discussions. All students are expected to actively participate either by a question, comment, or more each class period.

**Group Project: Systematic Review**

Students will work in groups of two to three, inside and outside of class time, to conduct a systematic literature on a common topic related to nutritional genomics. The project will culminate with an oral presentation of the findings.

**Independent Project: Systematic Review Summary Table**

Each student will work independently to conduct a systematic literature review on a current nutritional issue/ controversy. Upon approval of the systematic review topic by the course instructor, the student will create a literature review summary table and an executive summary of their findings.

**Independent Project: Presentation**

Each student will create a 20-minute summary presentation of the literature findings. There will be a 5-minute question and answer session immediately after the presentation.

**Minute Papers**

Following each literature review presentation, each student will write a one-paragraph summary (“minute paper”) of the main concepts of the presentation and identify the most important things learned from the presentation.

**New Course Proposal Form**

**Please name this completed form following this convention: newNTDT608**

This form parallels the Faculty Senate Online Course Approval form for New Course Proposals

Details can be found at<http://www.udel.edu/registrar/coursemanagement/instructions.html>

Note that FYE and DLE designations and A&S group requirements have additional requirements for review.

In addition to completing this form, submit a syllabus to your departmental curriculum committee for review.

**Course ID:** NTDT608

**Course Title:** Nutrition Program Planning and Evaluation

**Credit type:**

 **Fixed number of credits:** 3

 **Variable number of credits:** min: n/a max: n/a

**Can this be taken more than once per term?** no

**Max. repeatable credits:** 3

**Grade type:** standard

**Multicultural Course:** no

**First Year Experience (FYE):** no

**Discovery Learning Experience (DLE):** no

**Arts & Science requirement:**

Use the A&S Educational Affairs Course Nomination Form to propose this course as an Arts & Science group requirement and/or second writing course.

**Replaces (renumbering):** Enter Course ID of the course being deactivated.

**Instructional format:**

 **Lecture hours** 3

 **Lab hours** \_\_\_\_\_\_

 **Discussion hours** \_\_\_\_\_

 **Independent Study:** (yes/no) no

**Cross Listed Courses:** no

**Course catalogue title (60 characters max**.): Nutrition Program Planning and Evaluation

**Long Description (45 words max.):**

Overview of health behavior theories and models as applied to nutrition program development, implementation and evaluation. Emphasis on program design, execution, and evaluation strategies and approaches.

**Prerequisites:**

NTDT200 or similar undergraduate nutrition course

STAT200 or similar undergraduate statistics course

**Co-requisites**: none

**Restrictions**: MS in Human Nutrition (MSHN) majors, proposed Master of Science in Nutrition and Dietetics/Dietetic Internship (MS/DI) majors, proposed PhD in Nutrition Science majors

**Justifications**:

**Justify the need to initiate this course.**

A focus of the graduate programs in Nutrition requires students be familiar with nutrition program development and evaluation. Currently, no course exists that meets the needs of students who have a background in science, clinical and community nutrition, but no formal undergraduate training in program planning and evaluation. This course is specifically tailored to meet the needs of students in the graduate programs in nutrition, and specifically satisfies the new standards implemented by ACEND (Accreditation Council for Education in Nutrition and Dietetics), the accrediting body for Registered Dietitian Nutritionists (RDNs).

**Identify and justify any effect on other courses in your department or in another department. Specifically list other departments' chairpersons and/or faculty consulted and summarize results of discussion.**

This course has been developed with input from all faculty in the Nutrition program within the Department of Behavioral Health and Nutrition (BHAN) and the BHAN Department Chair. This course was reviewed and approved by the BHAN Curriculum Committee. This course does not overlap nor compete with any existing course.

**Identify the main emphasis of the course along with major topics covered. Include a list of learning objectives.**

**Main emphasis:**

Provides an overview of health behavior theories, models and frameworks that are used as the foundation for nutrition program development and evaluation. A PRECEDE-PROCEED approach in conjunction with health behavior theory will be used as a framework for nutrition program planning and evaluation.

**Course Objectives:**

Upon completion of this course, the student will be able to:

Describe the main health behavior theories, models and frameworks

Demonstrate the application of health behavior theories in nutrition program development and evaluation

Describe the major steps for implementation of a nutrition program

Demonstrate the application of evaluation techniques and approaches in assessing a nutrition outcomes and behavior change in a program

Develop a plan for dissemination of program evaluation information

**Topical Outline**

Program planning models and approaches: Health Belief Model, Trans-theoretical Model, Social Cognitive Theory; Theory of Reasoned Action and Planned Behavior; Socio-ecological Model; Diffusion of Innovation Model; PRECEDE-PROCEED Model;

Needs Assessment

Social/Epidemiological

Behavioral/Environmental

Educational/Organizational

Operational/Policy Making

Defining Goals and Objectives

Program Implementation Approaches and Strategies

Program Evaluation

Process

Impact

Outcome

Dissemination of outcomes

Program funding and sustainability

**Outline how this course addresses one or more of the 10 goals of undergraduate education.**

n/a

**Outline how this course relates to the overall program goals.**

This course will be an offered as a graduate level NTDT course. It may be taken students in the MS in Human Nutrition program, students in the MS/DI (MS in Dietetics and Nutrition/Dietetic Internship program), and students in the PhD in Nutritional Sciences program. The course is mandatory for students completing the MS/DI program, and this course may be taken as an elective for students completing the MS in Human Nutrition or the PhD in Nutritional Sciences. Related to the MS/DI program, the course meets several ACEND competencies:

* ACEND competency 2.1: ‘Uses a framework to assess, develop, implement and evaluate products, programs and services’
* ACEND competency 4.0: ‘Applies community and population nutrition health theories when providing support to community or population nutrition programs’
* ACEND competency 4.1: ‘Follows program planning steps to develop and implement community and population programs’
* ACEND competency 5.4: ‘Leads quality and performance improvement activities to measure, evaluated, and improve program services and products’.

**SAMPLE Course Calendar and Textbook information**

| **Week**  | **Tentative Lecture Topics** |
| --- | --- |
| 1 | Overview of course, syllabus, calendar; Introduction to Health Behavior Theories |
| 2 | Health Behavior Theories |
| 3 | Health Behavior Theories: Program Development Project Launch |
| 4 | Needs Assessment: Social/Epidemiological; Behavioral/Environmental (PRECEDE) |
| 5 | Needs Assessment: Educational/Organizational; Operational/Policy Making (PRECEDE) |
| 6 | Defining Goals and Objectives: Logic Models |
| 7 | Program Implementation Approaches/Strategies |
| 8 | Program Implementation Approaches/Strategies |
| 9 | Formative Evaluation |
| 10 | Process Evaluation (PROCEED) |
| 11 | Impact Evaluation (PROCEED) |
| 12 | Impact Evaluation/Outcome Evaluation (PROCEED) |
| 13 | Dissemination of Outcomes (PROCEED) |
| 14 | Program Funding and Sustainability |
| 15 | Student Project Presentations |

**SampleTextbook**:

L.Green & M Kreuter (2004) Health Program Planning: An Educational and Ecological Approach. 4th Edition. Mayfield Publishing. ISBN-13: 978-0072556834

**Sample Requirements (sample projects, assignments):**

Students will be required to develop a nutrition program proposal utilizing a health behavior theory. The semester long project will require students to implement the PRECEDE-PROCEED model in the development of their proposal. The project culminates in a final written proposal and class presentation.

**New Course Proposal Form**

**Please name this completed form following this convention: newNTDT810**

This form parallels the Faculty Senate Online Course Approval form for New Course Proposals

Details can be found at<http://www.udel.edu/registrar/coursemanagement/instructions.html>

Note that FYE and DLE designations and A&S group requirements have additional requirements for review.

In addition to completing this form, submit a syllabus to your departmental curriculum committee for review.

**Course ID:** NTDT810

**Course Title:** Nutrition Informatics

 **Credit type:**

 **Fixed number of credits:** 3

 **Variable number of credits:** min: n/a max: n/a

**Can this be taken more than once per term?** no

**Max. repeatable credits:** 3

**Grade type:** standard

**Multicultural Course:** no

**First Year Experience (FYE):** no

**Discovery Learning Experience (DLE):** no

**Arts & Science requirement:**

Use the A&S Educational Affairs Course Nomination Form to propose this course as an Arts & Science group requirement and/or second writing course.

**Replaces (renumbering):** \_\_\_\_\_\_\_\_\_\_ Enter Course ID of the course being deactivated.

**Instructional format:**

 **Lecture hours** 3

 **Lab hours** \_\_\_\_\_\_

 **Discussion hours** \_\_\_\_\_

 **Independent Study:** (yes/no) no

**Cross Listed Courses:** no

**Course catalogue title (60 characters max**.): Nutrition Informatics

**Long Description (45 words max.):**

Provides an in-depth exploration of the evolving field of nutrition informatics with an emphasis on best-practices.

**Prerequisites:**
NTDT200 or similar undergraduate nutrition course

STAT200 or similar undergraduate statistics course

**Co-requisites**: none

**Restrictions**: MS in Human Nutrition (MSHN) majors, proposed Master of Science in Nutrition and Dietetics/Dietetic Internship (MS/DI) majors, proposed PhD in Nutrition Science majors

**Justifications**:

**Justify the need to initiate this course.**

To succeed in today’s highly technical world, those entering the field of dietetics and nutrition require skills in nutrition informatics (defined as “the effective retrieval, organization, storage, and optimum use of information, data, and knowledge for food- and nutrition- related problem solving and decision-making”1).According to the Academy of Nutrition and Dietetics, “core curricula of dietetics education should include computer literacy as well as information literacy skills”. The proposed Nutrition Informatics course will be taken by students in the MS/DI (MS in Dietetics and Nutrition/Dietetic Internship program), and can be taken by students in the MS in Human Nutrition and PhD in Nutritional Sciences program. There are no courses currently offered in nutrition informatics.

1Charney P. Practice Paper of the Academy of Nutrition and Dietetics: Nutrition Informatics. 2012;112(11): 1859.

**Identify and justify any effect on other courses in your department or in another department. Specifically list other departments' chairpersons and/or faculty consulted and summarize results of discussion.**

This course has been developed with input from all faculty in the Nutrition program within the Department of Behavioral Health and Nutrition (BHAN). This course has been reviewed and approved by the BHAN Department Chair and Curriculum Committee.

**Identify the main emphasis of the course along with major topics covered. Include a list of learning objectives.**

**Main emphasis:**

The course provides students with proficiency in nutrition informatics, an emerging area in the field of nutrition and dietetics. The principles covered in this course are relevant to those in clinical nutrition, private practice, food service management or manufacturing, nutrition education and public health/community nutrition.

**Course Objectives:**

Upon completion of this course, the student will be able to:

1. Describe concepts and initiatives which support informatics in dietetic practice.
2. Differentiate between clinical health information systems [e.g., the electronic medical record (EMR), electronic health record (EHR) and personal health record (PHR)]
3. Differentiate between structured and unstructured data and describe the importance of structured data for outcomes reporting
4. Demonstrate principles of computer file organization including information storage, data protection (backing up data), and basic computer skills
5. Develop a database for tracking outcomes (e.g., employee performance or clinical outcomes).
6. Describe Protected Health Information (PHI) and Health Insurance Portability and Accountability Act (HIPAA) for health information privacy and security and understand the importance of ethical healthcare IT practice in dietetics
7. Discuss the role of telehealth in the field of dietetics and available telehealth resources
8. Identify clinically relevant apps of interest to dietetic professionals
9. Discuss the appropriate use of social media in nutrition communication and best practices with social media

**Topical Outline**

1. What is Nutrition Informatics?
2. Clinical Information systems (EMR vs. EMH)
3. Types of data (structured vs. unstructured)
4. Data organization
5. Developing databases and tracking outcomes
6. Privacy and data
7. Telehealth in dietetics
8. Nutrition related apps
9. Social media and nutrition communication

**Outline how this course addresses one or more of the 10 goals of undergraduate education.**

n/a

**Outline how this course relates to the overall program goals.**

This course will be an offered as a graduate level NTDT course. The course is mandatory for students completing the MS/DI program, and this course may be taken as an elective for students completing the MS in Human Nutrition or the PhD in Nutritional Sciences. Related to the MS/DI program, the course meets several ACEND (Accreditation Council for Education in Nutrition and Dietetics) competencies:

1. ACEND competency 1.13: ‘Applies nutrition informatics in decision making process’
2. ACEND competency 2.1: ‘Uses a framework to assess, develop, implement and evaluate products, programs and services’
3. ACEND competency 5.4: ‘Leads quality and performance improvement activities to measure, evaluated, and improve program services and products’
4. ACEND competency 4.1: ‘Follows program planning steps to develop and implement community and population programs’
5. ACEND competency 5.4: ‘Leads quality and performance improvement activities to measure, evaluated, and improve program services and products’.

**Sample Course Calendar**

|  |  |
| --- | --- |
| **Week**  | **Tentative Lecture Topics** |
| 1 | Introductions/What is Healthcare Informatics? What is Nutrition Informatics? |
| 2 | Clinical information systems |
| 3 | Standardized Terminologies and Code Sets |
| 4 | Health Information Exchange, Privacy and Security |
| 5 | Nutrition Data and Data Analytics |
| 6 | Nutrition Data and Data Analytics con’t |
| 7 | Telehealth in dietetics |
| 8 | Nutrition related apps |
| 9 | Group Project Presentations: Evaluating nutrition apps  |
| 10 | Group Project Presentations: Evaluating nutrition apps  |
| 11 | Group Project Presentations: Evaluating nutrition apps  |
| 12 | Social media and nutrition communications  |
| 13 | Group Project Presentations: Social media and nutrition communications  |
| 14 | Group Project Presentations: Social media and nutrition communications  |
| 15 | Group Project Presentations: Social media and nutrition communications  |
| 16 | **FINAL EXAM** |

**Sample Textbook:** Health Informatics: An Interprofessional Approach. 2nd Edition. Ramona Nelson PhD RN-BC ANEF and Nancy Staggers PhD RN FAAN. Elsevier Publishers, St. Louis, Missouri. 2017. ISBN: 978-0323402316.

**Sample Required Assignments:**

Attendance/Class participation 10%

Independent Project: Collecting and Tracking clinical data 40%

Group Project: Evaluating nutrition apps 20%

Group Project: Summarizing nutrition research on social media sites 20%

Final Exam 10%

**TOTAL**  100%

**Attendance/Class Participation**

Attendance at lecture is mandatory. Class will be a combination of lecture, group work, independent projects and presentations/discussions. All students are expected to actively participate either by a question, comment, or more each class period.

**Independent Project: Collecting and tracking clinical data**

Students will design a database to track patients seen by RDs in a hospital or clinic setting using Excel or similar type software. The database must be designed to track the dietitian, patient unit/clinic, the diagnoses, type of visit (initial assessment or follow up assessment), intervention recommended, billing information, etc. Students will work through the mechanics of database development such as variable types (numeric, categorical, open text) for each data field, and learn how to summarize the data using the software package select (Excel or similar). Students will submit a report summarizing their findings. The report will include an executive summary and a detailed summary of the data using tables and graphs in addition to text.

**Group Project: Evaluating nutrition apps**

Students will work in groups of two, both inside and outside of class time, to evaluate contemporary nutrition apps (5 apps per student group). Students will evaluate the apps based on technical criteria (e.g., accuracy of information, functions) and practical criteria (e.g., ease of use, features). The project will culminate with an oral presentation of their findings and class discussion.

**Group Project: Summarizing nutrition research on social media sites**

Students will work in groups of two both inside and outside of class time, to review nutrition research studies on controversial topics. Students will then write evidence based summaries of the study for different social media sites. The project will culminate with an oral presentation of their findings and class discussion.