

# **Nutrition & Health Sciences**

## **STUDENT HANDBOOK**

### **2023-2024**



**Emory University**  
**Laney Graduate School**

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## NHS Program Administration

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### NHS Program Faculty

A listing of NHS program faculty can be found at: <http://nutrition.emory.edu/about-us/faculty.html>)

### NHS Student Leadership

- President: Moses Ekwueme
- President-elect: Aishat Gambari
- Treasurer: Sarah Qabazard
- Secretary: Sarah Qabazard
- Volunteer Committee Chair: Su Yeon Oh
- Newsletter Committee Chair: Lan Tran, Aishat Gambari
- Peer Mentoring & Professional Development Committee Chair: Erica Kocher
- Journal Club Committee Chairs: Su Yeon Oh
- NHS Student Representative: Katelyn Chiang, Erica Kocher

## Program Overview

Nutritional Sciences has entered a renaissance with the increased recognition of the role of nutrition in disease prevention and health maintenance. The goal of Emory's Doctoral Program in Nutrition and Health Sciences (NHS) is to provide students with the necessary skills to investigate the relationship between nutrition and human health, especially with respect to the prevention and control of nutritional problems and related diseases. This includes, at a basic level, knowledge of how nutrients participate in biochemical processes and affect molecular events such as control of gene expression. At a population level, goals include a better understanding of the causes and consequences of variations in nutritional intakes and status to improve dietary practices and to enhance health on a regional, national, and international level. The program integrates the fields of nutrition and public health sciences because many of the important questions of human health involve the interface between these disciplines.

The program encompasses two major facets of modern nutrition: molecular/cellular approaches and population/epidemiologic approaches. By combining the expertise of scientists at Emory, the U.S. Centers for Disease Control and Prevention, the American Cancer Society, CARE USA, local universities and other organizations in the metro-Atlanta community, training is obtained with an integrative perspective. Faculty and students are generally identified with one or two areas of emphasis; however, collaboration among members is facilitated by shared seminars, joint teaching, and research. Completion of the Ph.D. program normally requires at least four years.

The Doctoral Program in Nutrition and Health Sciences is an interdepartmental program within the Laney Graduate School. It is affiliated with and supported by the Public Health Sciences cluster of doctoral programs in the Rollins School of Public Health. In addition to the NHS program-specific information provided below, students should familiarize themselves with the Laney Graduate School Handbook, available here: ([Laney Graduate Student Handbook.pdf \(emory.edu\)](#)).

### PhD in Nutrition and Health Sciences Competencies

Upon completion of the PhD degree, graduates will be able to:

- Apply the fundamentals of nutrition science including methods of nutrition assessment.
- Evaluate scholarly work, programs and interventions including work completed by peers in nutrition health sciences.
- Develop study proposals and conduct independent research using appropriate research design and methods in the field of nutrition.
- Communicate current knowledge about key concepts in human nutrition science to students and peers.
- Develop the skills needed to teach students about nutritional science and health.

### Coursework

While students may enter the Program with interest in a specific area of emphasis, the nature of the first year's curriculum is designed to encourage students to explore different areas of nutrition and health sciences. During the first year, students take formal course work and participate in seminars, discussion groups, and lectures by faculty members and/or visiting scientists. They will be exposed to the basic principles of statistical analysis and epidemiological

research. They may also begin research by working with different faculty members as part of the Research Rotation requirements. By the end of the second year, the student should be ready to identify an area of research. The student should also be in a position to identify a faculty member to serve as the thesis advisor for the PhD research.

Required meetings with the Directors of Graduate Studies are scheduled in the summer at the end of each program year to discuss the progress of the graduate studies and to review the recommendations for electives. The DGSs will serve as mentors and resources for all NHS students throughout their time in the program but they are the primary mentor and resource for those students who have not yet identified a dissertation advisor.

## Core Curriculum

The NHS core curriculum is designed to provide broad expertise in several aspects of nutrition, including:

- Basic understanding of the molecular mechanisms underlying normal and abnormal cell physiology and how nutrition may affect these pathways.
- Understanding of commonly used methods and approaches to the development of new indices for assessing nutritional status and/or exposure to diet-related environmental toxins, etc.
- Epidemiological studies and intervention trials to understand how nutrients, singly and in combination, relate to disease and to inform the development of intervention strategies.
- Clinical studies to identify the role and mechanism of actions of nutrients in disease prevention, treatment, and rehabilitation.
- An understanding of these factors in the context of national and international issues of public health.
- Methods for evaluating the quality of diet and nutrition related research.

Entering NHS students take required coursework during the first year. Students also participate in the weekly NHS Seminar. Most students will begin to do research rotations in the summer of year 1, though some may begin earlier. All rotations must be completed before entering candidacy. In consultation with the DGS, entering NHS students may petition to waive or substitute Core Courses, except Macronutrient (NHS 580) or Micronutrient Nutrition (NHS 581), for electives on a case-by-case basis. If needed, the NHS program administrator will facilitate registration. Required core courses include:

NHS Program required core courses (these courses must be taken for a grade)

- NHS580: Macronutrient Nutrition - (Year 1 - Fall, 4-credits)
- NHS581: Micronutrient Nutrition - (Year 1 - Spring, 3-credits)
- EPI530: Epidemiology 1 (with lab) – (Year 1 Fall, 4-credits)
- BIOS500: Biostatistics 1 (with lab) – (Year 1 Fall, 4-credits)
- GH545: Nutritional Assessment and Lab- - (Year 1 - Spring, 3-credits)
- GH 546: Maternal and Child Nutrition- (Year 1- Spring, 3-credits)
- NHS570R: Introductory Graduate Seminar (1 year, Fall & Spring, 1 credit per semester)
- NHS790R: Advanced Graduate Seminar (Years 2 &3, Fall & Spring, 1 credit per semester)

- NHS597R: Rotations (Primarily Years 1, 2)
- NHS 702: Nutritional Metabolomics (offered every other year; 2-credits)
- NHS 703: Advanced Research Topics for Nutrition Scientists (offered every other year for 2<sup>nd</sup> and 3<sup>rd</sup> years students; 1-credit)
- Grant writing- Students are strongly encouraged take a grant writing seminar or course from among those offered by RSPH or GDBBS (0-2 credits)

#### Laney Graduate School required courses

- JPE 600+Program-based instruction: Jones Program in Ethics.
  - ◊ JPE 600. JPE Core Class (In August beginning of Year 1, 0 credits)
  - JPE 610: Minimum of 4 LGS sponsored workshops (0 credits; can be completed after candidacy)
- TATT 600: Teaching Workshop (In August beginning of Year 1, 1 credit)
- TATT605: Teaching Assistantship (Semester coinciding with teaching assistantship; 2 credits)

#### Rollins School of Public Health required courses

- PUBH 700\* - Public Health Foundations (Year 1 Fall, 0-credits)
- PUBH701: Public Health Science/Translational and Interdisciplinary Public Health (Year 1 Fall, 1-credit)

*\*PUBH700 is hybrid course that is required for students without an MPH. As the time required for this course is substantial, those with an MPH or the equivalent from a Council on Education for Public Health (CEPH) accredited school are advised to seek an exemption waiver.*

### Electives

Students are required to take at least 4 graduate-level elective courses totaling at least 12 credit hours. These courses may be taken S/U, but they cannot be audited. **A full-time course load, considered 9 credit hours or more per semester (including the summer semester), is required for all NHS students.** Courses in addition to those required by the program (core and elective) can be audited.

All students will have a customized set of electives, agreed upon by the student, dissertation advisor, and Director of Graduate Studies that will provide the appropriate background for their independent dissertation work. Elective courses may be taken in any relevant field, such as chemistry, genetics, immunology, biostatistics, and epidemiology and can be selected from the Laney Graduate School, Rollins School of Public Health, or Departments from other colleges within Emory University. Students are encouraged to consult course catalogues to plan elective courses well in advance, as some are only provided in alternating semesters or years. Students may also cross-register for courses at neighboring institutions through the Atlanta Regional Council for Higher Education (ARCHE) program. More details about the ARCHE program may be found at the Emory ARCHE website (<http://registrar.emory.edu/regISTRATION/cross-registration/index.html>). Course syllabi are also available on the websites of each school. A listing of courses (nutrition related and other) commonly taken by students can be found in Appendix A.

Students who have not registered for 9 or more credits in the form of coursework or rotations,



must register for graduate research credits. Those who do not yet have a dissertation advisor should, with permission of the DGS, register for 599R. Students who have an advisor but are not yet in candidacy should register for 699R, and students in candidacy should register for 799R. All of these courses are graded S/U. Grades for 599R will be assigned by the DGS. Dissertation advisors will be asked to provide grades for 699R and 799R.

## Grading Criteria

The grading scale in the Graduate School ranges from A (4.0) to C (2.0) and F (0); there is no D grade. Courses other than core courses may be taken on a Satisfactory / Unsatisfactory (S/U) basis with instructor approval. Students in the graduate program are expected to maintain an overall average of B (3.0) or better. A grade less than B- in the core courses (including NHS 580, NHS 581, BIOS 500, EPI 530, GH 545, GH 546, NHS 570R, NHS790R, NHS 702, NHS 703 as applicable) may be cause for placement on academic probation.

A grade of “Incomplete” must be corrected within a 12-month period or the Registrar will automatically change the grade to an “F”. It is the responsibility of the student to make the necessary arrangements to complete the course and have the grade changed. A full course load (a minimum of 9 credit hours) is required independent of the number of credit hours to be repeated for the removal of an “I” grade.

A student who has a grade point average below 3.0 at the end of a semester or who receives a “C” or “F” in any course will be placed on academic probation for that semester. Financial support may be withdrawn until the grade point average is raised to 3.0 or better.

Students with academic probation for two consecutive semesters may be subject to dismissal upon review by the NHS Executive Committee. Also, a student who receives a “C” or “F” in two or more courses in a given semester may be subject to immediate dismissal from the program. See Appendix B for an Example Course schedule.

## Research Rotations

### Overview

Research rotations are an integral part of the NHS program. One purpose of the research rotation is to expose students to current research in several different nutrition and related disciplines, thus allowing them to make a more informed decision about which area of emphasis in the Program they wish to pursue. A second purpose is to assist the student in deciding on a mentor by providing an opportunity to sample the research environment, assess the available research projects, and determine if the mentor will be suitable as a Ph.D. advisor.

### Requirements

Each student is required to complete 3 research rotations (Course: NHS597). While there is flexibility in the number of credits, they are typically 3 credits each. Ideally, these should be completed **by the end of the summer of the second year** in the program. An additional (4<sup>th</sup>) rotation may be completed if needed. While a wide variety of activities can meet the requirements of a rotation, at least one of the rotations must be “hands-on lab work or primary-data collection related”. At least one other must involve data analysis. The third rotation can be

either of these two types or involve other skill development such as study design/proposal development and/or instrument development. To ensure that the activities to be done as part of a rotation will provide the type of learning opportunity required by the program, all rotations must first be approved by the DGS.

Each rotation is coordinated with an individual faculty member selected by the student. If the student is interested in pursuing a rotation activity under the supervision of an investigator who is not NHS faculty, an NHS faculty member should serve as a co-advisor. This is required if the activity is to be conducted with an investigator not affiliated with Emory University.

A rotation usually involves a time commitment of approximately 10-15 hours per week for a semester or 3-4 months, though over the summer the timeframe can be compressed. The objectives of the rotations are to 1) get to know a potential thesis advisor, 2) learn a new skill, and/or 3) develop some ideas to feed into a dissertation. A typical research rotation should be equivalent to a course of 3 credit hours. Students planning to work more than 15 hours a week may be advised to register for more credit. Credits in excess of 3 per rotation should not be in lieu of core course or required elective credits but can be used to meet the minimum of 9 credits per semester. Note: Rotations do not need to formally start at the beginning of a semester, but students can only earn credits once per research rotation (e.g., a rotation from November to March must be registered for credits in either the Fall or Spring semester). It is advised to register for the rotation in the semester during which the majority of the rotation will be completed.

**Coordinating research rotations may be a lengthy process and requires planning ahead.**

Research rotation opportunities are periodically circulated through the NHS listserv; however, students are encouraged to connect with researchers with similar research interests to identify rotation opportunities. It can take several months to set up a rotation so planning should begin well before the intended start date. While rotations can be started in the fall semester of the first year, many students will not do their first rotation until the summer of their first year. Students who wish to do a research rotation in the fall semester of the first year are encouraged to consult with the DGS and plan to contact faculty members or other potential investigators the summer prior to beginning at Emory. Students on F1 visas who are contemplating an off-campus rotation experience should consult the International Student and Scholar Services office ([International Student and Scholar Services \(ISSS\) \(emory.edu\)](http://InternationalStudentandScholarServices(ISSS)(emory.edu))) to ensure that their proposed rotation complies with current immigration requirements.

It is expected that the rotations will be with 3 different mentors to expand the student's exposure to mentors and types of research. At the most, no more than 2 rotations should be completed with the same mentor. If 2 rotations are planned with the same mentor, the rotation aims must be distinct.

### **Research Rotation Proposal**

The research rotation should be structured as an investigation of a scientific problem in which a specific hypothesis is addressed. The ideal research rotation combines technical training, the acquisition of skills (e.g., laboratory methods, data science, and/or proposal development), exposure to a research area and the process of answering a scientific question. **The scientific goals of the research rotation should be defined by the student in a 1-2-page proposal of the project to be submitted within 2 weeks of the start date of the rotation.** The proposal should

follow the format below and state the expected product of the rotation. The product is expected to be either an abstract, article, part of an article, grant, or technical document. Some exceptions are made on a case-by-case basis to this requirement. Note that the rotation proposal must be approved by the DGS, who will provide feedback including clarifying the type of rotation and suitability of the expected final product. (See Appendix C for a draft outline for a rotation proposal)

### **Research Rotation Final Report**

A report summarizing the work accomplished should be submitted to the DGS within one month of the end of the rotation. An email with the grade of the rotation should be sent by the supervising faculty mentor to the DGS. The report should include at least:

- A ~one page, single spaced, abstract appropriate for the field of research
- A paragraph describing the activities completed, skills practice and knowledge gained
- A timeline of any future products expected from the work (papers, grants, abstracts) and the role of the student in that work

If the student prepares a first author paper/technical report by the end of the rotation, this may be submitted instead of the expanded abstract. Generally, the expanded abstract should include at least the following sections: Background, Methods, Results, and Discussion. A second page should include detailed results (1-2 figures and/or tables) and references if necessary. Clarity and comprehensiveness are encouraged to meet abstract length requirements.

Note: work related to the research rotation (e.g., preparation of a manuscript or poster abstract) may continue after completion of the rotation experience. If there are other anticipated rotation products, the timeline for completion of ongoing projects should be described in the final report.

A final grade for the research rotation may not be recorded if the rotation report is incomplete. A grade of “In Progress” will be automatically assigned for the Research Rotation for that term if the report is not submitted before the end of the semester. It will be the responsibility of the student to have the correct grade changed before the Registrar automatically changes it to an “F” after one year.

### **Professional Development Funding**

The graduate school provides each student \$2,500 to help cover the cost of research, travel, and/or other professional development activities over the lifetime of their enrollment in the NHS program. For more information about the funds and how to access them, go to:

<https://www.gs.emory.edu/professional-development/pds/apply.html>

### **Teaching Requirements**

#### **Overview & Requirements**

The TATTO (Teaching Assistant Training and Teaching Opportunity) Program is administered by the Laney Graduate School to provide teacher training and experience for doctoral students in the Graduate Program in Nutrition and Health Sciences (NHS). The Nutrition and Health

Sciences TATTO program falls under the jurisdiction of the Graduate Studies Committee, with the DGS being the primary administrator of the program. Additional faculty members participate in the various aspects of the program as requested by the Director of Graduate Studies. Record of the student's progress will be kept in OPUS.

The three stages of the TATTO program (outlined below) provide students with credible training and optimal teaching experience, while ensuring that they are not overtaxed with teaching responsibilities. With few exceptions, no student may serve more than a total of four semesters in any combination of teaching assistant and associate positions during his or her first four years at Emory. TATTO requirements must be completed before applying for candidacy.

- 1. Required:** The first stage of TATTO is a short teaching workshop offered in late summer. It should be taken immediately prior to a student's first teaching experience, generally following the first year of graduate study at Emory. Faculty for this course are drawn from among the best teachers across the university. The syllabus covers general topics of importance to all students, including syllabus writing and grading, lecturing and leading discussions, the use of writing as a pedagogical tool, the conduct of lab sessions, and the use of new technologies in the classroom. Because the summer course is offered between semesters, it is credited to a student's transcript the following fall when students register for TATT 600. TATT 600 must be taken prior to the assistantship and associateship.

The terms Teaching Assistant and Teaching Associate designate a student's progress through the TATTO program.

- 2. Required:** The Teaching Assistantship, the second stage of the TATTO program, varies from program to program. The defining characteristic of the teaching assistantship is a controlled, carefully monitored initial teaching opportunity. A faculty member who provides continuing guidance and evaluation closely supervises the teaching assistant. The student registers for TATT 605 during the semester of the teaching assistantship. More information about Teaching Assistantships can be found in: Appendix D: Teaching Assistantship
- 3. Optional:** The Teaching Associate position, the third stage of the TATTO program, advances the student to a teaching opportunity with greater responsibilities. The Laney Graduate School favors a co-teaching model for this stage, one in which the student and a faculty member collaborate in all aspects of a course, from syllabus design to final grading. In many programs, graduate teaching associates are largely responsible for teaching a course of their own design. In all cases, teaching associates can expect attentive mentoring and evaluation. Students register for TATT 610 during the semester of the Teaching Associate position. All students considering a career that includes teaching are encouraged to do a teaching associateship. (**Note:** Not all students in science programs participate in the third stage of TATTO.) see Appendix E: Teaching Associateship

Teaching Assistant and Associate opportunities are provided to NHS students with priority given to the needs of the nutrition core courses (Human Nutrition I and II and Nutrition Assessment, currently coordinated by Dr. Ramakrishnan) followed by other electives taught by program

faculty at the graduate and undergraduate level. Students who successfully complete the three required stages of the TATTO program and who are interested in additional experience may request additional teaching opportunities as Teaching Associates or Assistant Instructors (see Appendix F) but will not register for academic credit for these activities.

Students who demonstrate exceptional teaching ability may be eligible to apply for appointment as Dean's Teaching Fellows. To be eligible for consideration, a student must have completed all Laney Graduate School and program requirements except the dissertation and must have been admitted to PhD candidacy. Dean's Teaching Fellows have complete responsibility for the course or courses they teach. The Laney Graduate School offers a number of these fellowships to students, usually in their fifth or sixth year, on a competitive basis. Applications for the Dean's Teaching Fellows are due the December before the fellowship begins (the next academic year). More information about the Dean's Teaching Fellowship is available at [http://gs.emory.edu/financial\\_support/advanced.html](http://gs.emory.edu/financial_support/advanced.html).

In compliance with recommendations of the Southern Association of Colleges and Schools, students may not serve as the teacher of record for a course before they have completed at least 18 semester hours of graduate credit in their teaching field. Teaching assistants and associates may not take on additional instructional responsibility without the approval of the Dean. Students should not serve more than a total of four semesters in any combination of teaching assistant and associate position during their first four years at Emory without the approval of the Dean.

Additional information on teaching requirements from Laney Graduate School (including dates of the training) may be found at: <http://gs.emory.edu/professional-development/teaching/>

### **TATTO Credit**

The Registrar notes TATTO credit on transcripts, which documents fulfillment of the degree requirement.

- TATT605 and TATT610 do not count toward the total number of credit hours required for the PhD but do count towards the minimum of 9 required in the semester in which the student is registered.
- The credit hours for TATT600 are counted toward the total required for the PhD, but not toward the minimum 9 hours of course work in the semester in which it is taken.

Under rare circumstances, students with significant prior college teaching experience may request exemption from some TATTO requirements. In such cases, the student's DGS should submit a written request for exemption to the Laney Graduate School, outlining the extent of the student's prior teaching experience. If the experience closely matches a given TATTO requirement, that requirement may be waived. However, the first stage, the Laney Graduate School TATTO summer course, is required of all doctoral students, without exception.

### **Nutrition and Health Sciences Seminar**

**All students in the Program are required to participate in six semesters of NHS Seminar.** The purpose of the NHS Seminar is to provide students with experience in preparing presentations, conveying scientific principles to an audience, and learning to provide and receive constructive feedback. Participation in Seminar involves the preparation and presentation of material directly related to nutrition. All NHS students are expected to attend seminar on a weekly basis and present a total of 5 lectures throughout the duration of their career at Emory.

Other program-specific events are occasionally scheduled as part of the seminar series and should be attended by all students.

First year students register for 2 semesters of Introductory Graduate Seminar (NHS 570) and may present a recent paper, or a research topic approved by the DGS or Dissertation Advisor. Second- and third-year students register for Advanced Graduate Seminar (NHS 790) and are required to present a seminar related to their area of research and/or interests as a stand-alone lecture in both the fall and spring semesters. After the first 3 years, participation is encouraged but not required. Note, seminar lectures given should be included on the annual progress report. (See Attachment H).

## **NHS Student Milestones**

### **Qualifying Exam (Summer Year 1)**

The Qualifying Exam is administered at the end of the first year in the NHS Program (during the summer following the Spring semester). The exam is completed in the form of a Scoping Review on a topic selected by the student and approved by the Exam Committee. Students are given 6 weeks to complete the review.

The grading rubric for the exam follows the PRISMA-SR checklist (Tricco et al. *Ann Intern Med* 2018;169:467-473). Elements will be differentially weighted based on the relative importance of the sections. Key elements in determining the point allocation within each element will include whether, in the opinion of the reviewing faculty, sufficient information is provided to permit replication; and whether there is coherence between methods, results, discussion, and conclusions. There must be a full disclosure of any and all resources (library staff, tutors, AI, etc.,) used in the development of the review.

The submitted work will be reviewed by at least three NHS faculty. Pass is 80% of available points; if the assigned mean grade is below 80% the student will have the opportunity to revise and resubmit the review. This will reinstate a point-by-point rebuttal of the reviewer comments and will be due within 4 weeks of the grade being released. The resubmission will be re-graded by the original reviewers. Only one resubmission will be allowed.

If the candidate receives a final grade of less than 80% the NHS Program Executive Committee may terminate the student at the master's level. The student must then complete a research project in a Program faculty's laboratory and prepare and defend a master's thesis in order to receive a terminal M.S. degree.

Under special circumstances, a student who has successfully completed the Qualifying Exam may petition to leave the program with a M.S. degree. While this path is discouraged, it is available with the approval of the Director of Graduate Studies. In order to petition for early departure from the Program with a M.S., the student must have satisfactorily passed the Qualifying Exam and have completed a sufficient component of the research to develop into a manuscript suitable for publication. Guidelines for the preparation of the written M.S. thesis are the same as for the Ph.D. thesis and may be obtained from the Laney Graduate School website. The thesis defense will be of the same format as for the doctoral thesis defense and will typically



include a 1-hour presentation of the research, which is open to the public and a closed session defense with members of the Thesis Advisory Committee.

All students must pass the Qualifying Exam before taking the General Doctoral Exam. A Master's degree will not be granted without a thesis.

**Independent of admission status, ALL STUDENTS in the NHS PROGRAM are required to take and pass the Qualifying Exam.**

### Choosing a Dissertation Advisor

After the successful completion of the Qualifying Exam and the first year and a half of course work, typically during the spring semester of the second year, a student must choose a dissertation advisor. The role of the advisor is:

1. To assist with the design and implementation of a thesis project
2. To fund the student's stipend beginning September 1 of their 3rd year, at the latest.
3. To assist the student in selecting suitable electives that would be most beneficial to his/her career goal
4. To help the student form a Dissertation Advisory Committee.

Any NHS faculty member is eligible to be chosen as a dissertation advisor. If a student chooses a non-NHS or adjunct NHS faculty member as his/her dissertation advisor, a co-advisor, who is a full-time Emory University faculty member, must also be named.

The dissertation advisor is responsible for the full financial support of the student starting no later than the start of the third year (September 1), and earlier if possible. The advisor is responsible for full stipend and related student support costs, during the remainder of the student's tenure in the Graduate Program. The sources of stipend funding should be submitted by the advisor to the program assistant **by Aug 1**. The stipend rate and related costs are set by the Laney Graduate School (See: [https://www.gs.emory.edu/\\_includes/documents/2022-2023-phd-stipends.pdf](https://www.gs.emory.edu/_includes/documents/2022-2023-phd-stipends.pdf); <https://studenthealth.emory.edu/insurance/euship.html>). Therefore, when selecting a dissertation advisor, the student should make sure that they are likely to have enough funding to support a student during this time or would be willing to work with them to obtain funding. The student and the prospective advisor are encouraged to discuss the responsibilities and options with the DGS as soon as possible. Identification of the primary mentor by **early spring of the second year** promotes a smooth transition into the dissertation-focused third year. Once a Dissertation Advisor is selected, the student and the advisor complete and submit the

Mentor Assignment form to the DGSs

<http://nutrition.emory.edu/documents/NHS%20Dissertation%20Advisor%20Assignment%20Agreement%20Form.pdf>

### Forming a Dissertation Advisory Committee

After establishing the advisor relationship, the student must, with the help of the Dissertation Advisor, select a Dissertation Advisory Committee (Dissertation Committee). This Committee is expected to help define the future course of the student's training (design and evaluation of the thesis project, recommend additional coursework, etc.) as well as to evaluate the General Doctoral Exam and Proposal Defense and the Dissertation. Information regarding LGS policies

for Dissertation Committees is at this link: <http://gs.emory.edu/handbook/academic-affairs/phd/dissertation-committee.html>

A Dissertation Committee is made up of 5 (or more) members, to include (these roles may overlap):

- Dissertation Advisor
- A current or recent NHS Program Director or DGS (Aryeh Stein, Jean Welsh, Usha Ramakrishnan, Miriam Vos)
- At least three NHS faculty members (including adjunct)
- At least 3 members must be Graduate School faculty

Once the Dissertation Committee is formalized, a Dissertation Committee form must be turned in to the NHS DGS and submitted online to Laney Graduate School. The form and submission link can be found here:

<http://www.graduateschool.emory.edu/academics/policies-progress/dissertation.html>

The scheduling of regular meetings of the Committee is required *at least twice a year* to keep the committee members abreast with the progress of the research. Submit an NHS Dissertation Committee Meeting Report to the DGS and the program coordinator after each meeting:

<http://nutrition.emory.edu/documents/NHS%20Thesis%20Committee%20Meeting%20Summary.pdf>. The dates of the committee meetings should be recorded in the student's annual progress report.

### **General Doctoral Exam/Proposal Defense (Spring Year 3)**

The purpose of the General Doctoral Exam is to assess a student's ability to conceptualize, articulate and justify an original research question. In preparing for the General Doctoral Exam, the student should demonstrate original thinking and a thorough understanding of the planning and experimental techniques necessary to investigate a scientific research problem. The student's knowledge of the research topic, and any other related aspects of the research, should be sufficient to demonstrate the ability to conduct independent research.

The examination consists of a **written original research proposal** and **an oral defense** before the student's Dissertation Advisory Committee. The research proposal must be in the format of a formal grant application. Students should consult their primary mentor on the structure of the proposal including the type of grant to use as a model. The oral component of the doctoral exam is in the format of 40- to 45-minute oral presentation describing the research question and specific aims suitable to address the question, followed by an examination by the Committee. The examination may address broader areas of nutrition as background information, which are related to but not directly involved in the research proposal.

For more details on the structure of the research proposal and oral defense, as well as other frequently asked questions, see Appendix G: Proposal Defense-Policy and Guidelines for Implementation. After the oral defense, the committee must complete the General Doctoral Oral Examination form: [General Oral Doctoral Exam - Proposal Defense Form](#). The student must submit this to the DGS and to the Program Administrator.

This General Doctoral Exam is a prerequisite to Advancement to Candidacy and is generally



taken early in the third year. Students should aim to complete their research proposal defense exam by no later **than March 15<sup>th</sup> of their third year**. Students who fail to successfully pass their research proposal defense by the summer following their third year may be considered as making unsatisfactory progress and may be put on academic probation at the decision of the Executive Committee. Assuming other requirements are met, students advance to candidacy after successfully defending the dissertation proposal, completing any required edits to the written proposal, and submitting the Application for Advancement to Candidacy to the Graduate School (<http://www.graduateschool.emory.edu/academics/policies-progress/candidacy.html>). See the Laney Graduate School Handbook for more information (<http://gs.emory.edu/handbook//academic-affairs/phd/candidacy.html>)

Please note: The research proposal used for the General Doctoral Exam will ideally be based on work that the student intends to conduct for his/her thesis; however, this is not always the case and is not required. In cases where the student's actual thesis is based on ideas proposed in a funded project by the mentor, the research proposal should address an idea independent from the dissertation advisor's work.

### **Advancement to Candidacy**

Candidacy status is an indication that an NHS doctoral student has developed sufficient mastery of a discipline to produce an original research contribution in his or her field.

#### **Eligibility**

To be eligible for candidacy, a student must meet the following requirements:

1. Complete all NHS requirements for candidacy: including required coursework and rotations
2. Successfully completing the Qualifying Exam and the General Doctoral Exam
3. Complete TATTO 600, TATTO 605, and JPE 600
4. Resolve any Incomplete (I) or In Progress (IP) grades
5. Be in good standing with a minimum cumulative 2.70 GPA
6. Have earned at least 54 credit hours (excluding audited credits) at the 500 level or above

JPE 610 may be completed after entering candidacy.

#### **Timing**

Students should enter candidacy as soon as all requirements have been completed. Students **must reach candidacy by September 15 of their fourth year** (see Laney Graduate School Handbook).

Students who do not meet this deadline will be placed on academic probation, will not be eligible for PDS funds, and may forfeit financial support. These sanctions will be lifted when the student enters candidacy.

#### **Procedure**

Students enter candidacy by submitting the application to enter candidacy, available on the LGS website ([https://www.gs.emory.edu/\\_includes/documents/sections/academics/policies-progress/candidacy-signature-form.pdf](https://www.gs.emory.edu/_includes/documents/sections/academics/policies-progress/candidacy-signature-form.pdf) ). The application requires programs to affirm that

all program requirements have been met (1-3 above), and LGS affirms that remaining requirements have been met (4-7).

### **Masters of Science on the Basis of Candidacy**

While it is not required, NHS students interested in obtaining a Master of Science degree may apply once they advance to candidacy. To be awarded, students must meet all LGS and program requirements for the Masters degree (except for the thesis), and must submit a master's degree clearance form to LGS. Interested students who plan to apply for a master's degree should be in candidacy prior to applying for the degree. LGS will not award a master's degree on the basis of candidacy retroactively after a student has completed the PhD; therefore, students must apply for the master's degree immediately upon reaching eligibility. (For more information, see the LGS handbook)

### **Ph.D. Dissertation**

After the dissertation research has progressed to a point satisfactory to the Dissertation Advisor and the Dissertation Committee, a student may start to prepare the written thesis and set a date for the Dissertation Defense. The Dissertation Defense will typically include a 1-hour presentation of the research that is open to the public and a closed session defense with members of the Thesis Advisory Committee.

Please consult the Laney Graduate School's Degree Completion requirements for guidelines on formatting of the thesis and required paperwork. The program office should be notified of the defense and the thesis should be distributed to the Thesis Committee at least 2 weeks prior to the defense date.

The NHS program requires the following sections in each dissertation:

- Front matter
- Introduction
- Background / Literature review
- Expanded Methods
- One chapter for each aim (typically three manuscripts)
- Discussion and Next Steps
- Conclusions
- References

### **Dissertation Defense (Year 4 or 5)**

The possible outcomes from a dissertation defense are:

- Approval and determination that the student has met the objectives in full.
- Approval with minor revisions needed. This is in the case that the student has substantially met the objectives, and that only minor edits (grammar, spelling, a few fact-checks, small additions, or subtractions) are required.
- Approval with major revisions needed. These might include additional analysis, discussion, etc., beyond minor editorial comments.
- Rejection of the dissertation in current form

When revisions are required, the committee members will provide lists of required corrections to the student. These must be completed within two weeks. The Mentor would then certify that these have been completed. If a dissertation is rejected, the Dissertation Advisor and the Candidate will meet with the DGSs to discuss the next steps.

### **Degree Completion**

Students approaching the end of their degree program should review the timeline on the LGS website at the link below. <http://gs.emory.edu/handbook//academic-affairs/standards/degree-completion.html>

There are also several forms to be completed and submitted to the Graduate School (copied to the NHS program administrator) for degrees to be provided.

<http://www.gs.emory.edu/academics/completion/index.html>  
[Instructions, Forms and Surveys](#)

The timing of defense must be considered carefully and should be discussed with the mentor and the DGS. The stipend and health insurance end dates may affect decisions on timing.

### **Commencement**

Commencement takes place each year at the end of spring semester. All students who received a degree, master's or doctoral, during the previous summer, fall or spring semester are eligible to participate. Information about, and instructions for, the ceremonies are in the documents on the Laney Graduate School website: <http://gs.emory.edu/academics/commencement.html>

## **Documenting NHS Student Progress-**

### **The Annual Progress Report**

An Annual Progress Report must be prepared by the student and submitted to the Program each academic year, according to deadlines set by the DGS. This Annual Progress Report should contain a summary of all coursework and rotations completed and planned. It should highlight major milestones completed and expected timeline for completing others, status of dissertation committee, and any publications or other achievements (Note that it is the policy of the Laney Graduate School that the Graduate Program be acknowledged in all publications co-authored by the student during his/her tenure in the Program. Suggested wording: Nutrition and Health Sciences, Laney Graduate School, Emory University). Progress reports should be submitted to the DGS along with a CV and a summary of your Individual Development Plan (see below). A template to guide the preparation of the annual progress report can be found in Appendix H.

### **Individual Development Plan (IDP)**

An Individual Development Plan (IDP) is to be completed by all students beginning year 2 and higher and updated annually. A one-page summary of the IDP is due with the annual progress report and CV. IDPs are a useful tool to help graduate students and postdocs identify their career goals and what they need to accomplish to achieve those goals. The IDP concept is commonly used in industry to help employees focus and obtain their career goals. The IDP process is intended to facilitate communication between faculty mentors and their trainees. The NHS

program is recommending the website sponsored by The American Societies for Experimental Biology (FASEB). <http://myidp.sciencecareers.org/> is a web-based career planning tool tailored to meet the needs of PhD candidates and postdocs in the sciences. The web program facilitates completion of the IDP and provides opportunities to learn about careers in science. The suggested use of the web program is:

1. The student completes the planning tool on the website
2. The student shares the one-page summary with their dissertation advisor or a career mentor and meets to discuss.
3. Include the IDP summary with the annual progress report.

### **Request for Extension and/or Additional Funding**

LGS Funding has streamlined the *Request for Additional Funding* process. Such requests should now be submitted by the program's Director of Graduate Studies (DGS) using the [LGS Extension Request Form](#).

## **International Students**

International students should work with the International Student and Scholar Services office (link to website: [International Student and Scholar Services \(ISSS\) \(emory.edu\)](#)) to review specific requirements and ensure compliance with current U.S. immigration regulations and policies.

## **Student Travel and Outside of Program Work Policies**

### **Student Travel**

When you travel, please be sure to follow the Travel policies, etc. as outlined in the Laney Graduate School Handbook. The Travel Clinic at Emory Student Health provides full travel consults to prepare students for upcoming travel. They can provide all travel vaccines, including Yellow Fever, typhoid, Japanese Encephalitis, polio, Hep A and rabies. Prescriptions for malaria, traveler's diarrhea and altitude illness are also available.

Most other insurances will not cover travel consults, travel vaccines and most recommended medications. These visits can get quite expensive, especially for students. Travel consults, vaccines, and prescribed medications *are covered* under the Emory University Student Health Insurance (EUSHIP) plan. If students are covered by EUSHIP - they are best served at Emory Student Health for travel consults.

Travel Appointments can be scheduled through the Student Health Portal.

## Work Outside of the Program

Students are allowed to work up to 10 hours per week on teaching-related activities or research projects not directly related to their dissertation. Any funds earned are in addition to the stipend. Permission of their advisor and DGS is required. For any hours beyond those 10 per week, permission by the Associate Dean for Research is required. Students without U.S. work authorization such as F1 visa holders may have specific limitations.

## Withdrawal, Leave of Absence, Parental Accommodation

### Withdrawal

- Consult the LGS Handbook, Academic Affairs, section 1.3.3.
- If you withdraw from all your courses, you must complete a Request for a Leave of Absence.
- If you withdraw during the semester, you must obtain the signatures of all instructors.

### Leave of Absence

The official Request for a Leave of Absence does not ask you about the reason you are requesting a leave. We encourage you to discuss those reasons as well as your plan for returning with your advisor and/or Director of Graduate Studies. You and your program may wish to create a written record of those discussions, to be kept by your program. Leave of Absence Form: [https://gs.emory.edu/\\_includes/documents/sections/academics/policies-progress/lgs-loa-signature-form.pdf](https://gs.emory.edu/_includes/documents/sections/academics/policies-progress/lgs-loa-signature-form.pdf)

- Consult the LGS Handbook for the most current policy: [Academic Affairs](#), section 6.3.
- You are limited to two one-year leaves of absence.
- Obtaining a leave of absence will affect your health insurance coverage as well as stipend payments (if applicable). The rules are a little complex and how you will be affected depends on when your leave takes effect. Ask your program administrator and graduate school staff and be sure you know exactly how these important areas will be affected.
- To return from a leave of absence, you will need to apply for readmission. The form required for applying for readmission is available at: <https://gs.emory.edu/academics/policies-progress/readmission.html>
- You can return only at the start of a semester.

### Parental Accommodation

A graduate student caregiver designated as having substantial parental responsibility may be relieved of full-time graduate duties and responsibilities for up to 8 weeks after the birth or adoption of a child.

- Consult the LGS Handbook, Academic Affairs, section 1.3.4.
- Any matriculated doctoral student in good academic standing is eligible.
- Eligible students who are receiving stipend support would continue to receive this support throughout the accommodation period.
- PhD students benefitting from accommodation will remain as full-time students.
- Accommodation is not a leave of absence.

## **Honor, Conduct and Grievance Policies**

All honor, conduct and ethical policies in the Laney Graduate School Handbook are applicable.

If a student has a disagreement related to NHS-specific requirements and policies, this concern should be initially discussed with the DGS and Program Director. If the student is not satisfied

with this or has a matter that they believe cannot be presented to the DGS or Program Director, the matter should be presented to the LGS grievance committee, following the policies in the LGS handbook.

## **Other Resources**

Information on other resources related to graduate school requirements, student resources, and possible sources of funding can be found in Appendix I.

## Appendix A: Some Recommended Elective Courses

- Teaching
  - TATT610 Teaching Associateship (strongly encouraged for those interested in teaching)
- Grant Writing
  - Grant Writing
- Nutrition-related:
  - GH551: Diet and Chronic Disease
  - GH523: Frontiers in Obesity Research and Prevention
  - GH552: Global Elimination of Micronutrient Malnutrition
  - GH567: Food policy
  - GH568: Community Engaged Food Security
  - EPI591L: Methods in Nutritional Epidemiology
- Epidemiology/biostatistics:
  - EPI540: Epidemiology 2 (with lab)
  - BIOS501: Biostatistics 2 (with lab)
  - EPI550: Epidemiologic Methods III (with lab)
  - EPI560 or BIOS502: Epidemiologic Methods IV (with lab)
  - EPI537: Epidemiology of Chronic Disease
  - BSHE732: Structural Equation Modeling
- Ethics
  - Doctoral Certificate in Bioethics (summer course) <https://ethics.emory.edu/what-we-teach/graduate-professional/bioethics-certificate.html>
- Directed Studies
  - 797R Directed Study

## Appendix B: Example Course Schedule

<b>Year 1- Fall</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
(August): JPE 600	Jones Program in Ethics.	0
(August): TATT 600	Teaching Workshop	1
NHS 580	Macronutrient Nutrition	4
NHS 570R	Intro Graduate Seminar	1
EPI 530	Epidemiology 1 + Lab	4
BIOS 500	Biostatistics 1 + Lab	4
<b>Year 1- Spring</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
NHS 581	Micronutrient Nutrition	3
GH 549	Maternal and Child Nutrition	3
NHS 570R	Intro Graduate Seminar	1
GH 545	Nutritional Assessment	3
EPI 534	Statistical Programming	2
BIOS 501	Biostatistics 2 + Lab	4
NHS 597R	Research Rotations	Credits vary*
<b>Year 1- Summer</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
NHS 597R	Research Rotation(s)	Credits vary*
NHS 599R	Graduate Research	Credits vary*#
<i>The Qualifying Exam is taken in Year 1, following the spring semester. It is generally taken in June</i>		
<b>Year 2- Fall</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
NHS 790R	Advanced Graduate Seminar	1
NHS 597R	Research Rotation(s)	Credits vary*
NHS TATT605	TATTO Teaching Assignment**	Credits vary*
Various options	Grant writing	Credits vary
--	Elective Courses	Credits vary*
<b>Year 2-Spring</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
NHS 790R	Advanced Graduate Seminar	1
NHS 597R	Research Rotation(s)	Credits vary*
NHS702 or NHS703	Nutritional Metabolomics OR Advanced Nutrition Research Topics	2 credits 1 credit
NHS TATT605	TATTO Teaching Assignment**	Credits vary*
NHS699R	(If appropriate) Advanced Graduate Research***	Credits vary*
<b>Year 2-Summer</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
NHS799R	Graduate Research	Credits vary*
NHS597R	Research Rotations	Credits vary*
<b>Years 3 and beyond (Fall &amp; Spring)</b>		
NHS 90R	Advanced Graduate Seminar	1
NHS702 or NHS703	Nutritional Metabolomics OR Advanced Nutrition Research Topics	2 credits 1 credit
NHS799R	Advanced Graduate/ Dissertation Research	Credits vary*
--	Elective Courses	Credits vary*



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\*Credits vary for research rotations, teaching assignments and electives. Each semester, students must maintain full-time status of 9 credits

\*\*Teaching Assignment may be in the first or second semester

\*\*\*Credit for Advanced Graduate Research may be taken as needed for pre-candidacy work towards the dissertation. Credits vary 1-9. The Mentor should confirm the correct number of hours the students should carry.

## Appendix C: Rotation Proposal Template

The 1- to 2-page research rotation proposal should follow this format:

- 1. Rotation Advisor and, if relevant, Co-Advisor**
- 2. Type of rotation**
  - Primary data collection/sample analysis related
  - Epidemiology-related – i.e., involving study design or data analysis.
- 3. Type of research** (Bench lab work, clinical research, systematic literature review, Epi/statistical data analysis, primary data collection, policy analysis, program evaluation or grant proposal)
- 4. Background**
  - Significance of the subject area (3-5 sentences)
  - Objective of the work
- 5. Specific Aims** (1 or 2 detailed statements of the questions to be answered and scientific hypothesis being tested if applicable)
- 6. Contemplated Approach**
  - Methods
  - Source of samples/ subjects (if applicable)
- 7. Expected Final Product** (grant, portion of paper or paper, technical document)
- 8. Timeline**

## Appendix D: Teaching Assistantship

All students in the NHS program are required to serve as a Teaching Assistant for one semester during the academic year immediately following participation in the TATTO summer workshop. The NHS core courses (Human Nutrition 1, Human Nutrition 2, and Nutrition Assessment) will receive priority for teaching assignments. All other courses need to be approved by the Program Director. Teaching Assistant duties usually involve preparing and presenting several lectures, serving as laboratory instructor/assistant, supervising lab sessions, organization of course materials, grading, and/or a discussion section leader under the supervision of a faculty member. Teaching Assistants also assist students with problems during scheduled office hours, help with the preparation of hand-outs and/or laboratory materials, help administer and grade exams, etc. Students assigned to laboratory courses assist in setting up the laboratory exercises and help students with the theoretical and practical aspects of the exercise as it progresses. If duties exceed the above, discuss with the supervising faculty member and/or DGS if the experience is better suited for a Teaching Associateship.

The supervising faculty member should supervise the lectures and provide feedback to the student. The “teacher evaluation form” can be used (<https://www.sampleforms.com/student-evaluation-form.html>), or the supervising faculty member may provide feedback on TA performance in the format of their choice. At the end of the semester, the faculty member will submit a written evaluation of the performance of each Teaching Assistant to the DGS.

## Appendix E: Teaching Associateship

Students may serve as a Teaching Associate (TA) for at least one semester if there is opportunity and interest. Teaching Associate duties consist of co-teaching a course with a faculty member. The purpose of this stage is to provide graduate students with an apprenticeship teaching experience midway between leading discussion groups and having full course responsibilities. After co-teaching for one or two semesters, the student should be prepared to assume full responsibility for teaching a course.

Students normally serve as Teaching Associate in their third or fourth years of graduate study. To be eligible the student must have: 1) participated in the summer teacher training workshop, 2) served as a Teaching Assistant for at least one semester, and 3) be considered by the student's Dissertation Advisory Committee and the Director of Graduate Studies to be sufficiently knowledgeable in the area of the course. The Director of Graduate Studies (DGS), in consultation with the student's advisor, will match each participating student with the appropriate course. The co-taught course ideally will be one in the student's developing area of expertise and might reasonably expect to teach after leaving Emory University. The faculty member and student should be teamed well in advance of the co-teaching semester so that they may collaborate on the course planning (i.e., selection of the texts). The co-teaching experience will vary depending upon the nature (large enrollment lecture, small enrollment lecture, or seminar), the level (introductory, advanced, or graduate) and the subject matter of the course. However, unless there are significant reasons to the contrary, the following expectations should be met:

1. The TA will attend all class sessions.
2. The TA will work with the faculty member on all aspects of the course. In general, the TA should take primary responsibility for about twenty percent of the teaching tasks. This means that the TA should develop about one-fifth of the examinations, etc. The faculty member will monitor all activities of the TA during his/her tenure at this position.
3. The TA will usually deliver 3-5 lectures in a course. The scheduling of the TA's lectures should be determined at the beginning of the course and should be distributed throughout the semester. The faculty member must attend each of the TA's lectures in order to provide evaluation and guidance for future lectures.
4. If appropriate for the course, the TA will have office hours, either regularly scheduled or prior to each examination or project due date to help students with their course problems.
5. The assignment of final course grades is the responsibility of the faculty member. The final determination of grades, however, should occur during a meeting with the faculty member and the TA in which they discuss each student's performance and the appropriate grading distribution for the course. The faculty member should explain to the TA why s/he is assigning each grade.

Because of the limited opportunities for co-teaching in the NHS Program, this phase of a student's teacher training can also be accomplished through a number of other teaching opportunities in their curriculum. These are:

1. Many of the higher-level graduate courses in NHS involve students presenting lectures on special topics. These will be credited toward partial completion of the TATTO requirement when

the student works with the course coordinator and this teaching experience is analogous to that of a TA. Because an individual student usually only gives 1-2 lectures in each such course, it will be necessary for the student to combine the participation in several courses (each with the appropriate planning and evaluation) to satisfy the TATTO requirement.

2. In Graduate Seminar classes, students are required to pick lecture topics, conduct extensive literature searches about the topic, and then present it in lecture/seminar format to other students and faculty. This experience is identical to that of preparing a lecture for an advanced, special-topics course. The students are evaluated on their presentations by both faculty and students and coached on ways to be more effective in conveying new information to a wide audience.

3. As part of the NHS curriculum, students are required to formulate proposals for research projects, and to present them to faculty and students. They are evaluated on their ability to communicate the background of each proposal, its importance to the advancement of science, and the feasibility of the methods they have chosen to study the problem. The students are encouraged to seek advice and guidance in the formulation of their proposals and in the most effective way to present them to others.

4. Students can also make presentations on the progress of their thesis research. In some instances, these are largely technical and would not qualify as a “teaching” experience. However, there are frequent occasions where these presentations involve describing an experimental model, technique, or system to a new audience. This requires skills identical to the ones that the student will later use in teaching students, post-docs, and technicians under their supervision. Therefore, when this experience is conducted as a TATTO activity, the student would benefit from having his/her presentation undergo an evaluation (with suggestions for improvement from a “teaching” perspective). In addition, students regularly participate in national conferences and symposia to present their research results. Preparation for these meetings often involves multiple practice sessions with other students and faculty with a critique of the oral presentation (content and delivery), the effective use of AV materials, and handling of questions and unexpected situations.

5. A vital part of the teaching experience of Ph.D. level scientists is the supervision of students’ research projects in the laboratory. This involves formulation of a hypothesis, design of the experiment, collection of data, data analysis, and reporting of the findings. (Often, more senior graduate students help newer graduate students in this capacity and, unfortunately, this usually occurs without any formal planning or evaluation.) As part of TATTO, some of the NHS graduate students will perform this function in the capacity of Teaching Associates. In these cases, the activity will be planned out beforehand with the faculty member and appropriate supervision and follow-up evaluation (of both the senior and more junior graduate students’ experiences) will be conducted.

6. There are also occasional teaching opportunities for NHS students outside of the usual undergraduate/graduate courses, and participation in these can be applied toward TATTO if they achieve the goals of the Teaching Associateship. For example, some students may be involved in teaching nutrition to patients who need special nutrition counseling (e.g., as part of the follow-up to cardiovascular surgery). The Director of Graduate Studies will consider each of these opportunities for approval and evaluation on a case-by-case basis.

## Appendix F: Assistant Instructorship

Students who demonstrate exceptional ability and dedication in the required phases of TATTO may be eligible for appointment as Assistant Instructor. Assistant Instructors will be responsible for developing and teaching a full course. This course might be on the topic of their dissertations, serve as a companion to another course at Emory, or teach some aspect(s) of nutrition and health sciences to members of the broader Emory community.

To be eligible for such an appointment, the student must also have completed all other Graduate School and NHS Program requirements, except the dissertation, and must have been admitted officially to Ph.D. candidacy. Students will usually be considered for appointment as Assistant Instructors in the fifth year of residence.

Students who are selected to be Assistant Instructors are eligible and can apply for a Dean's Teaching Fellowship from the Graduate School in recognition of their accomplishment. ([http://www.gs.emory.edu/financial\\_support/advanced.html](http://www.gs.emory.edu/financial_support/advanced.html)) The application is due the year before the AI and is generally due in mid-December. The number of Assistant Instructorships and the level of financial support for them will depend on Graduate School funds and cannot be considered guaranteed to any student. The Graduate School will determine selection procedures usually by the student submitting a justification and outline for the proposed course, accompanied by supporting letters from the Director of Graduate Studies and other faculty and students.

## Appendix G: Proposal Defense- Policy and Guidelines for Implementation

All NHS students are required to develop and defend an original research proposal as part of their General Doctoral Exam. Success in this examination is recognized by admission to candidacy.

### Implementation: Common Questions & Answers

*What are the objectives of the Proposal Defense?*

- The pedagogical objective of the Proposal Defense is to ascertain if the student can:
  - Formulate and describe an appropriate method to answer the question
  - Synthesize the thought that goes into items 1 and 2 into a Research Proposal that follows a defined format.

*When must the proposal defense take place?*

- The Proposal defense should take place on **or before December 15, in the Fall semester of the student's 3rd year and is required to be before March 15<sup>th</sup>** of the third year. It is a natural consequence of activities that take place in the second year and early in the third year, namely the identification of a dissertation advisor, and development of a research topic.

*How does the proposal defense relate to the thesis research or to submissions for funding?*

- The Proposal needs to be the student's own work, as it is the student who is being evaluated, not the mentor. The proposal to be defended must be free of substantial inputs from the mentor. However, the mentor and the committee will contribute to the initial development of the ideas including approval of the objectives, hypotheses, aims and the specific aims page prior to development of the full proposal by the student.
- The proposal may be for work that the student intends to conduct for their dissertation, but this is not required.
- There may be specific cases where the proposal and the thesis research should be distinct.
  - Preparation of a proposal for submission for external funding usually requires substantial inputs from the mentor and iterative interactions between the mentor and the student, rendering it difficult to identify the student's work. Scheduling of the proposal defense should take the schedule for submission for funding into account. If the student's contribution cannot be independently evaluated, then the defense must be based on an independent idea.
  - The proposal must represent a new study question. In cases where the student's actual thesis is to be based on ideas proposed in a funded project of the mentor or other faculty member, the defense must be based on an independent idea.

*Who serves on the proposal defense committee?*

- The Proposal will generally be examined by the student's Dissertation Committee, which consists of a Committee Chair and at least four other members, as detailed in the NHS Program Handbook. If additional expertise is needed beyond that embodied in the Committee, additional individuals may be invited on an ad hoc basis.

*What role do the mentor and the committee have in the development and evaluation of the proposal?*

- The mentor will have inputs into the overall scope of the Proposal. The mentor will have regular meetings at which questions of material relevance to the proposal may be discussed. It is not appropriate for the Dissertation mentor, or any member of faculty, to have extensive inputs into the detailed content of the proposal. It is the responsibility of the mentor to ensure that these distinctions are maintained. **The committee will not provide feedback to the student from receipt of the proposal until the oral defense.**

*What is the sequence of events that takes place?*

1. The mentor and the student meet to discuss the scope of the thesis itself and that of the proposal to be defended.
2. The student and dissertation mentor develop a list of potential committee members. The student (with mentor assistance if necessary) contacts these individuals and solicits their interest and participation.
3. It is helpful to have an initial committee meeting to receive feedback on the developing objectives, hypothesis, and aims of the project (specific aims page).
4. The student writes the full grant proposal independently.
5. The student schedules the proposal defense date and reconfirms (via email) committee member availability at least three weeks in advance.
6. The committee must receive a copy of the written proposal at least two weeks prior to the date of the defense.

*How should a proposal be structured?*

- In general, the proposal should follow current PHS-398 guidelines (revised 2009), with a *suggested* 6-page limit for the Research Strategy Section, (3). If the student is developing the proposal for later submission for external funding, the format guidelines of the potential agency may be followed. **However, the proposal must continue to provide adequate detail to permit complete evaluation, even if the potential agency requires only minimal description.**
- Preliminary data can be minimal. Greater emphasis is to be placed on the Specific Aims, and Research Strategy Sections (2 and 3).
- As appropriate, NIH sections 6, Protection of Human Subjects, and/or 10, Vertebrate Animals, must be completed.
- The proposal should have project summary that fits in the box on the NIH Form Page 2.
- A budget is not required.

*What scope should a proposal have?*

- There should be 2-3 aims.
- The scope of the research should be such that it could be accomplished in 2-3 years.
- The work should result in 2-3 distinct publishable manuscripts. It is appropriate to suggest working titles of these in the text.

*What is the structure of the defense?*

- The proposal defense consists of a public oral presentation to the Dissertation Committee followed by an oral examination.
- A typical oral presentation will last 40-45 minutes and consist of 10 minutes devoted to background, development of question and significance of the question; 10 minutes devoted to



methodology; 10 minutes devoted to Aim 1; 10 minutes devoted to Aim 2; and 5 minutes devoted to a summary

- There may be a period of public questions to the presenter. The committee members should not ask questions or comment at this time.
- The oral examination is an opportunity for the committee to question the candidate about the content of the proposal and is conducted in private.
- Following the oral examination, the committee will reflect and reach a consensus. This will be done in private, without the candidate being present, and the candidate will be informed of the Committee's decision immediately.

*What are possible outcomes of a proposal defense?*

- The possible outcomes from a proposal defense are:
  1. Determination that the student has met the objectives in full.
    - a. The student has met the oral defense requirement for admittance into candidacy as of the date of the proposal defense.
  2. Determination that the student has substantially met the objectives, and that only minor edits (grammar, spelling, a few fact checks) are required.
    - a. The committee members will provide lists of required corrections to the student. These must be completed within two weeks.
    - b. The Mentor would then certify that these have been completed.
    - c. The student has met the oral defense requirement for admittance into candidacy as of the date that the revised version is submitted
  3. Determination that the overall theme of the research is sound, but that the proposal needs substantial revision
    - a. The committee members would be expected to make explicit recommendations, and would be expected to review a revised, written proposal within 6 weeks.
    - b. The student has met the oral defense requirement for admittance into candidacy after all committee members approve the revisions
  4. Determination that the student has not built a case for the originality or significance of the research question, or has proposed a research design that is fundamentally flawed in major aspects, and that is therefore not feasible as proposed, or if conducted as proposed will not answer the question posed
    - a. The committee may instruct the student to reformulate her/his research project, and the committee would need to reconvene to consider a revision. This must be done within 8 weeks.
    - b. The committee may also recommend that the student not be permitted to continue in the program. In such circumstances, the student will be encouraged to develop a terminal master's thesis project under the guidance of the mentor, and will be given a limited time window (typically one semester) in which to accomplish this

*Can the student appeal the decision of the committee?*

- The student may appeal the decision of the Committee to the DGS.
- If one of DGSs is the student's mentor and the other a committee member, then the student may appeal to the Laney Graduate School Dean.

## Appendix H: Annual Progress Report

An Annual Progress Report must be prepared by the student, reviewed and approved by the DGS and submitted to the Program by September 1<sup>st</sup> of each academic year. This Annual Progress Report should contain the following:

### 1. Course work.

- ◆ Itemize all courses taken during the most current academic year and all previous years (Semester, Course Number, Title, credit hours, grade achieved). You may attach a computer grade printout if you prefer.
- ◆ List the number and name of all required courses that you have not yet taken (write 'none' if applicable), and the semester in which you intend to take them.
- ◆ List the number and name of any other courses you plan to take in the coming academic year.

### 2. Rotations

- ◆ List the rotations (Supervisor, semester, and topic) you have already taken, and provide a timetable for completion of any additional required or elective rotations.

### 3. Major milestones

- ◆ List the date of successful completion of the Master's Equivalency exam and the Doctoral Qualifying examination. If these have not been completed, please indicate when you intend to take them.
- ◆ Date or expected date of advancement to candidacy

### 4. Doctoral thesis / committee

- ◆ List the names of the chair and the other members of your doctoral committee. If these have not been identified, please give a time frame for their selection.
- ◆ If you have identified a likely title for your dissertation, please provide it. Has your committee approved your thesis proposal?
- ◆ List the dates of your completed committee meetings (required to meet 2 x year).
- ◆ What do you see as a likely date for defense of your thesis?

### 5. Presentations and publications

- ◆ List the complete author list, title, and Journal for any articles submitted, accepted, or published since you began the Ph.D. program. Please attach a copy of the abstract.
- ◆ List the complete author list, title, and conference name, date and place, for any conference presentation (oral or poster) since you began the Ph.D. program. Please attach a copy of the abstract.
- ◆ List NHS seminar lecture titles and dates.

### 6. Other achievements

- ◆ Identify any other achievements related to your progress in the NHS program.

### 7. C.V.

- ◆ Attach a current academic C.V.

### 8. Discussion

- ◆ Provide a self-evaluation of your progress to date.

### 9. Goals

- ◆ Provide one or more goals for the upcoming year.

### 10. Individual Development Plan (IDP) one page summary

## Appendix I: Useful Program, Graduate School, University and Other Resources

### I. Emergencies

In case of emergency, dial 911 and/or the Emory Police Department at 404-727-6111

### II. NIH Program and Graduate School

- NIH Forms and Applications: <https://grants.nih.gov/grants/forms/all-forms-and-formats.htm>
- Laney Graduate School Handbook: <http://gs.emory.edu/handbook/>

### III. University Resources for Students

- **Writing center**

The Emory Writing Center. [The Emory Writing Center](#) offers 45-minute individual conferences. Their discussion- and workshop-based tutoring approach enables writers of all levels to see their writing with fresh eyes and to practice a variety of strategies for writing, revising, and editing. Students are encouraged to schedule appointments in advance, as walk-ins are accepted only on a limited basis. The Writing Center uses an online appointment system called [WOnline](#).

- **Counseling and Psychological Services (CAPS)**

- **Address:** 1462 Clifton Road, Suite 235, Atlanta, GA 30322
- **Phone:** (404) 727-7450
- **Fax:** (404) 727-2906
- **Crisis Consultation:** Call (404) 727-7450, 8:30-3:30, Monday-Friday
- **Hours of Operation:** 8:30-5:00, Monday-Friday

- **Student Health Clinic**

Emory University Student Health Services (EUSHS) is open 8:30 - 5 pm Monday - Friday. Web-booking is available for nurse immunization appointments and wellness physicals. All other appointments are scheduled by calling **404- 727-7551 (press 1)** during office hours.

- [Student Health Services](#)

### IV. Nutrition-Focused Professional Societies

#### American Society for Nutritional Sciences

*founded in 1928 as the American Institute of Nutrition*

<https://nutrition.org/>



## V. Fellowship and Grant Information

Summer is a great time to explore outside fellowship funding, including **NSF, Hughes, and NIH NRSA**. Students will receive a \$2,000/year stipend supplement for the term of the outside award provided that the fellowship amount covers more than 75% of their stipend.

Below is a list of some potential fellowship award sources.

American Association of University Women  
<http://www.aauw.org/>

American Indian Graduate Center  
<https://www.aigcs.org/>

American Society for Microbiology  
<http://www.asm.org/>

Association for Women in Science  
<http://www.awis.org/>

Howard Hughes Medical Institute  
<http://www.hhmi.org/>

Leakey Foundation  
<http://www.leakeyfoundation.org/>

National Defense Science and Engineering Graduate Fellowships  
<https://ndseg.sysplus.com/>

National Institutes of Health  
[www.nih.gov](http://www.nih.gov)

NIH: National Institutes of Mental Health  
[www.nimh.nih.gov](http://www.nimh.nih.gov)

National Science Foundation  
[www.nsf.gov](http://www.nsf.gov)

Oakridge Associated Universities  
<http://www.orau.org/>

UNCF-Merck Science Initiative  
<https://www.accessandequity.org/uncf-merck-science-initiative/>

### Other Useful Search Sites

**Office of Sponsored Programs (OSP):** OSP maintains web links with federal funding agencies and with select private sources. OSP's NIH Essentials and NSF Essential pages are especially helpful. The Research and Funding Guide, a bi-monthly compilation of funding opportunities for

faculty research, is available at the OSP website.

<http://www.osp.emory.edu/>

**Community of Science (COS):** Like IRIS, COS is a searchable database with links to programs in the sciences, social sciences and humanities. Access COS directly or through Emory's Office of Sponsored Programs webpage.

<https://sharedresources.fredhutch.org/libresources/cos-funding-opportunities-database-deprecated>

**GrantsNet:** GrantsNet is sponsored by the American Association for the Advancement of Science and the Howard Hughes Medical Institute. Researchers can register for electronic notification of funding opportunities

<http://www.grantsnet.org/>

**Illinois Researcher Information Service (IRIS):** Use IRIS to conduct individual searches for funding opportunities. IRIS provides up-to-date information about grants in all academic disciplines and has links to web pages where researchers will find additional information about specific programs and electronic forms when available. Sign up for the IRIS Alert Service to receive automatic notice of funding opportunities in your areas of interest.

<https://www.library.illinois.edu/iris/>

**University Fund for Internationalization:** The Graduate School of Arts and Sciences also awards dissertation research grants on a competitive basis to support research outside of the United States through the **University Fund for Internationalization (pdf format)**.

<http://www.emory.edu/GSOAS/PDF/Invest.pdf>

Upcoming deadlines for funding opportunities of interest to students in the Graduate School are listed in the **Investigator**, which is distributed to all students at the beginning of fall, spring, and summer semesters. This information was gleaned from the Grants and Fellowship site of the Graduate School as a reminder of funding opportunities.