Department of Health, Nutrition, and Exercise Sciences

MS in Exercise/Nutrition Science Option

Graduate Student Handbook

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Graduate Coordinator: Kyle Hackney, PhD
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Welcome and Introduction

Welcome to the graduate programs offered by the Department of Health, Nutrition, and Exercise Sciences (HNES). The information provided in this document is designed to help you understand the procedures in HNES. Graduate students should also consult with the NDSU Graduate Handbook for further clarification on requirements. In addition, please consult with the NDSU Academic Calendar for specific dates that may be important for completing your degree on time.

Kyle J. Hackney, PhD, CSCS, CCD
Associate Professor and Graduate Coordinator
Department of Health, Nutrition, and Exercise Sciences
Kyle.hackney@ndsu.edu, 701-231-6706

HNES Graduate Programs
The Department of HNES offers a Master of Science (MS) degree in Health, Nutrition, and Exercise Sciences with two options: 1) Exercise/Nutrition Science and 2) Leadership in Physical Education and Sport. Within these two options, students may elect to finish their degree with different culminating experiences. The department also offers an online MS degree in Dietetics through Great Plains Interactive Distance Education Alliance. Additionally, there is one degree path available for those students planning on pursuing athletic training: Master of Athletic Training (MATrg). The department also offers a PhD degree in Exercise Science and Nutrition.

MS Exercise/Nutrition Science Option
The purpose of this handbook is to familiarize you with how to complete the requirements needed for the MS degree within the Exercise/Nutrition Science option. The MS in Exercise/Nutrition Science option prepares the graduate for advanced positions in industry and academia. The department is devoted to researching and understanding the long-term effects of exercise programming, physical activity, and nutrition, and translating this research into effective exercise/nutrition science and wellness programs for children, adolescents, and men and women of all ages, as well as athletes. This option is appropriate for dietetics, nutrition, kinesiology, and exercise science graduates or related fields and contains three degree paths (Plan A, B, C).

1. Plan A- Thesis
2. Plan B- Paper
3. Plan C- Internship/Capstone

Upon admission to the MS Exercise/Nutrition Science program students should consider which path they wish to pursue and consult with their academic advisor. A formal decision should be declared before the end of the first academic semester.

Advisors
Graduate Faculty eligible to mentor students in the MS Exercise/Nutrition Science Option are: Dr. Bryan Christensen, Dr. Marty Douglas, Dr. Julie Garden-Robinson, Dr. Kyle Hackney, Dr. Elizabeth Hilliard, Dr. Ryan McGrath, Dr. Yeong Rhee, Dr. Ashley Roseno, and Dr. Sherri Stastny.

In the letter notifying an applicant of admission, the Graduate School will identify an individual in HNES whom the applicant should contact as an advisor. This person can help you select your academic option, as well as serve as the chair for the culminating experience. Students may change their advisor at any time prior to proposing their thesis/capstone. If students change their assigned advisor, they should inform their former advisor. If a plan of study was previously submitted, the Request to Form or Change Supervisory Committee form needs to be completed and sent to the graduate school.
Plan A- thesis
The traditional thesis typically includes a problem statement, a review of existing literature relevant to that problem, and the execution of a research project to address the problem. Each student assembles a supervisory committee as described in the NDSU Graduate Handbook. Each candidate is required to pass a final oral examination in which the supervisory committee serves as the examining committee. Following a successful defense, the candidate will submit an electronic copy of their thesis to the Graduate School for review and often there is an attempt to publish the work in a prestigious academic journal. Pairing a student with a faculty mentor that has experience in the area of interest is fundamentally important in this path. A list of faculty that mentor in this path is above.

Required:
HNES 790   Seminar Introduction to HNES (1 credit)
HNES 710   Introduction to Research Design and Methods in HNES (3 credits)
STAT 725   Applied Statistics (3 credits)
HNES 713   Graduate Exercise Physiology (3 credits)
HNES 726   Nutrition and Wellness (3 credits)
HNES 727   Physical Activity Epidemiology (3 credits)
HNES ---   Electives (9 credit hours)
HNES 798   Thesis (6 credit hours)

Curriculum: Total 31 credits

Plan B- paper
The Plan B path will proceed through understanding of existing knowledge and the ability to apply/understand that existing knowledge to a problem of interest. Note that under this degree, the new knowledge being created is focused more on a singular review or manuscript type deliverable (rather than a novel research investigation as with Plan A-thesis), and this is the primary difference between the Plan A and Plan B paths. The precise nature of the individual creative component is defined by the faculty mentor, committee, and student. Examples of possible creative components include a comprehensive paper that is prepared for an academic or practitioner based journal or an in depth exploration of applicable technology in the area. Each candidate would assemble a supervisory committee as described in the NDSU Graduate Handbook, propose the intellectual work, and defend the product at a formal defense. This final submission to the Graduate College is to be approved by the student's supervisory committee.

HNES 790   Seminar Introduction to HNES (1 credit)
HNES 710   Introduction to Research Design and Methods in HNES (3 credits)
STAT 725   Applied Statistics (3 credits)
HNES 713   Graduate Exercise Physiology (3 credits)
HNES 726   Nutrition and Wellness (3 credits)
HNES 727   Physical Activity Epidemiology (3 credits)
HNES ---   Electives (12 credits)
HNES 796   Paper (3 credits)

Curriculum: Total 31 credits
Plan C-Internship/Capstone

Plan C is designed for programs in which a well-defined culminating experience is more important than is an individual creative research component. In this path, a capstone experience or some other approach to measure the candidate's understanding of the relevant material in the area (certification, internship experience/project) is proposed. Additional course work is included in this path to given a formal document and defense is not required to be submitted to the Graduate College.

**Required:**
- HNES 790  Graduate Seminar: Introduction to HNES
- HNES 713  Graduate Exercise Physiology
- HNES 726  Nutrition and Wellness
- HNES  ---  Electives
- HNES 793/4/5 Independent study/ Internship/ Field Experience (6 credits*)
  *All experiences are subject to approval by your advisor and/or graduate coordinator.

**Electives for all Plan A, B, and C paths:**
- HNES 660  Leadership and Communication in Dietetics
- HNES 642  Nutrition Education
- HNES 703  Graduate Biomechanics of Sport and Exercise
- HNES 704  Psychological Foundations of Sport and Physical Activity
- HNES 724  Nutrition Education in the Community
- HNES 727  Physical Activity Epidemiology
- HNES 735  Nutrition for Human Performance
- HNES 743  Obesity Across the Lifespan
- HNES 754  Assessment in Physical Activity and Nutrition
- HNES 760  Skeletal Muscle Physiology
- HNES 761  Physiological and Fitness Assessment in Exercise and Nutrition
- HNES 762  Exercise Endocrinology
- HNES 770  Evidence Based Research and Practice
- HNES 777  Scholarly Writing and Presenting in HNES
- HNES 791  Temporary/Trial Topics
- HNES 792  Graduate Teaching Experience

Other HNES course electives or other graduate courses offered by the University may be substituted with approval from the faculty teaching the course as well as the supervisory committee.

**Curriculum: Total 34 credits**
Additional Course Information

Students should consistently progress through the credits needed to graduate and know all prerequisites for their individual graduate studies. Tentative course schedules are provided to help students schedule their courses as they progress toward completion of the degree. Most HNES graduate courses are offered on a two-year rotation. You may view the course rotation schedule in a PDF at the bottom of the page at the link. https://www.ndsu.edu/hnes/graduate_programs/exercisenutrition_science/. Please also consult with the Graduate School Bulletin for the most up to date changes.

Courses numbered: 600/700/800 may be taken for graduate credit in the student's field of study. Courses not listed in the Bulletin of the Graduate School may not be taken for credit toward the Master of Science degree. All prerequisites must be met before a student can take a 600/700/800 level graduate class or instructor permission must be granted.

Transfer of Credits: It is possible to transfer up to 10 semester credits of graduate work provided the work is from an accredited graduate program, is of "B" grade or better, is the same subject matter required in a selected program, and is approved by the Department Head and the Graduate School. These courses are listed on the plan of study form when it is submitted.

Out-of-Date Course Work: Course requirements must be completed within a period of seven (7) years from the date of application for the MS degree. Out-dated courses may be renewed in accordance with the Graduate school regulations found in the bulletin.

Academic Requirements: "To be in good standing and to receive a graduate degree, a student must maintain a cumulative grade point average of 3.0 or B." (Graduate Bulletin, General regulations)

Credit Load: Nine credits are considered a full-time graduate load (even with a 10 hour graduate assistantship). Graduate teaching assistants in half-time status (20 hours per week) are considered full-time if registered for five or more graduate credits.

Tri-College: Graduate students may take courses offered at Minnesota State University Moorhead or Concordia College for credit toward a degree. The courses, however, must be listed as graduate courses and approved by the supervisory committee and the Department Head, as well as being listed on the plan of study when it is submitted.

Continuous enrollment/leave of absence:
Graduate credit for any course that is more than seven (7) calendar years old at the time of the final examination cannot be used to satisfy a master's degree program. Following the final examination, the candidate has one (1) year to provide The Graduate School a disquisition for which the Graduate Dean will sign final approval of all requirements for the degree. Should the disquisition not be deposited as specified or any other degree requirements not be completed within this time limit, the student must repeat the final examination and may have to retake courses in their plan of study.
Final Culminating Experience

All graduate students must complete a culminating experience as part of their program of study (thesis/paper/capstone). Specific procedures have been developed for the culminating experience. It is each student's responsibility to be familiar with and to follow the procedures. Students should plan to hold their proposal and defense dates during the academic school year as faculty are typically not available during the summer months.

Plan A- Thesis/Plan B-Paper:

HNES 798 Master's Thesis – A thesis is defined as original research under the supervision of a major advisor and a supervisory committee. A proposal meeting with the supervisory committee is required before one may commence with a thesis. Six credits of HNES 798 can be taken.

HNES 796 Masters Paper- The paper will proceed thorough understanding of existing knowledge and the ability to apply/understand that existing knowledge to a problem of interest. Often this is a detailed academic manuscript submission of an overarching topic. Six credits of HNES 796 can be taken.

Proposal Guidelines:

Preparation of a research proposal is an important writing experience. The purpose of a research proposal is to provide your supervisory committee with sufficient information to decide if the proposed research is needed and is likely to be fruitful. In order to accomplish that goal, the proposal should: 1) present the logical need for conducting the proposed piece of research, 2) provide an analysis of the most important past research as a context for the proposed study, 3) specify the objectives and/or the hypotheses or research questions, and 4) outline the basic procedures to be followed. The proposal provides a statement of agreement between you and your committee as to the minimum expected for the thesis research. Enough detail should be provided, so the committee can be certain that the student is aware of the relevant prior research, detect any of the student's misconceptions, and identify potential errors in the proposed study. You will, of course, in consultation with your advisor, fill in details, often expanding on the anticipated procedures, as you conduct the research.

The following sequence of suggested sections for a thesis proposal reflects a basic logic of investigation, from intellectual uncertainty to plan of action. The sections are those essential to an adequate proposal, although some advisors may prefer a different order. The general structure may need to be modified depending upon the particular type of research problem being addressed by the student.

For all research proposals, there should be an Introduction that includes a Statement of the Problem, Review of Literature, and a Methods and Procedures section appropriate to the type of research to be conducted. Without these, it is difficult for the committee to anticipate what you plan to do, to help guard against potential errors of inappropriate approaches, and to judge when you have completed the agreed-upon project. There are different formats that can be used – check with your advisor to determine which one you should use. You should be familiar with the current documents providing information for this formatting. The proposal must be written in present or future tense and the table of contents/organization should look something like that in Table 1.
Table 1. Table of Contents/Organization for Thesis Proposal

Chapter 1 Introduction
  Statement of the Problem
    Purpose of the Study
    Focus
    Objectives, Hypothesis, or Research Questions
  Significance of the Study (optional)
  Limitations of the Study
  Organization of Remaining Chapters (optional)
  Definition of Terms

Chapter 2 Review of Literature
  Purpose of the Study
  Introduction (by rephrasing the statement of the problem in Chapter 1 to fit focus)
  Body (by subdivision/topics following sequence set by statement of the problem)
  Summary (of literature findings in order set by statement of the problem)

Chapter 3 Methodology
  Purpose of the Study
  Introduction (by rephrasing the statement of the problem in Chapter 1 to fit focus)
  Population Sample and Sampling Procedures
  Data Collection (instrument, description, reliability, validity and how determined)
  Procedures
  Research Design
  Statistical Analysis

References

Chapter 1 Introduction

This section provides a short introduction to the research being proposed and provides the parameters under which the study will be completed. The identification of a problem provides the logical foundation upon which the rest of the proposal is built. This section should include a one- or two- sentence statement of the general purpose of the research, followed by a list of specific objectives to be accomplished by the research. These outcomes should be stated as outcomes, not as procedures.

Following the objectives, the hypotheses or research questions that guide the study are listed, sometimes in a separate section. Research questions may be used rather than hypotheses. Next, a section of definition of terms used in the research is provided. A listing of the limitations of the research will be added at the conclusion of the study. Finally, it is often helpful to include toward the end of the problem section a one- or two-sentence synopsis of the research problem.
Chapter 2 Review of Literature

This involves conducting an exhaustive search for research and theoretical publications that relate to the problem discussed in the introduction. After relevant sources are located, the student reads and makes notes on each source and then prepares a report that defines the problem and indicates how the review of the literature helps to address the problem. The review should be critical in nature, and based, preferably, on a systematic model for recording and analyzing information from professional research journals, books, reports and the like. It should result in conclusions or provide direction with respect to the identified problem.

In the review of literature, the study is placed in context through a critical analysis of selected studies that should: 1) pull together findings to provide a "state-of-knowledge" summary in regard to the research problem and provide additional evidence in regard to the nature and/or the importance of the problem underlying the study; 2) make clear how further research should extend, differ from, or replicate past studies, including the identification of the critical variables in the problem area and important hypotheses to be tested; 3) indicate shortcomings in the design of prior research that should be avoided and/or strengths to be repeated in conducting another study; and 4) where there are methodological alternatives, especially controversial ones, critique the literature that is relevant to making a choice. This section is not intended to be a complete presentation of the comprehensive review of related literature that has been done prior to writing the proposal. Only those studies that are directly pertinent to structuring the proposed research should be discussed briefly, in order to assure the student's committee that major studies and/or issues have not been overlooked.

Chapter 3 Methods and Procedures

The methods and procedures section of the proposal is an explanation of the specific steps to be followed in meeting the objectives and in testing the hypotheses or answering the questions posed in the prior sections. An introduction describing the purpose of the research is included. The procedures to be followed in the present research should take into account the major criticisms of or comments on prior research in the review of literature section. A chronological listing of major procedural steps is often useful. The following subsections will usually be included in the procedures section: population sample, data collection and instrumentation, procedures, research design, and statistical analysis.

Final thesis guidelines

After your proposal has been approved by your supervisory committee and IRB, you will conduct your research. After gathering your data, you will prepare your final product. This final product may take different forms depending upon if you are using the traditional thesis format or an article form. In either case, however, the first three chapters of your thesis will be the same. Those chapters simply come from your proposal. All material in the first three chapters must be changed to past tense in the final thesis. Using the traditional format you will add chapters 4 (results) and 5 (discussion) to your proposal document. The table of contents/organization should look similar to the information in Table 2.

Chapter 4 Results

The results of a study are presented in relation to the research questions posed in chapter 1, usually with the assistance of tables. You must be careful to avoid discussing the findings in this chapter or connecting the findings to previous studies.

Chapter 5 Discussion

In this chapter, the findings are discussed as you attempt to explain what was learned, why it might have
happened, and how the findings support or refute previous research. You will draw conclusions in this chapter
and provide an overall summary.

You may opt to use an article format in the preparation of your final thesis. With the article format you will
add a chapter 4 (manuscript) to your defense document. The table of contents for a thesis prepared using the
article should look something like that is Table 3. Note that tables and figures that are repeated in the thesis
should be numbered consecutively. For example, a table in the methods section of Chapter 3 that is numbered
Table 2 should not also be numbered Table 2 in the methods section of the manuscript (Chapter 4).

Table 3. Table of Contents/Organization for Manuscript Format

<table>
<thead>
<tr>
<th>Chapter 1 Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of the Problem</td>
</tr>
<tr>
<td>Purpose of the Study</td>
</tr>
<tr>
<td>Focus</td>
</tr>
<tr>
<td>Objectives, Hypothesis, or Research Questions</td>
</tr>
<tr>
<td>Significance of the Study (optional)</td>
</tr>
<tr>
<td>Limitations of the Study</td>
</tr>
<tr>
<td>Organization of Remaining Chapters (optional)</td>
</tr>
<tr>
<td>Definition of Terms</td>
</tr>
</tbody>
</table>

Chapter 2 Review of Literature
Purpose of the Study
Introduction (by rephrasing the statement of the problem in Chapter 1 to fit focus)
Body (by subdivision/topics following sequence set by statement of the problem)
Summary (of literature findings in order set by statement of the problem)

Chapter 3 Methodology
Purpose of the Study
Introduction (by rephrasing the statement of the problem in Chapter 1 to fit focus)
Population Sample and Sampling Procedures
Data Collection (instrument, description, reliability, validity and how determined)
Procedures
Research Design
Statistical Analysis

Chapter 4 Manuscript
Introduction (summary of Chapters 1 and 2)
Methods (summary of Chapter 3)
Results
Discussion
References (references used in the manuscript)

Chapter 5 Summary and Conclusions (optional)
References (all references used in the thesis)
Appendices

Chapter 4 Manuscript

This chapter is written as a manuscript that may be submitted to a professional journal. The chapter will
contain an introduction, methods, results, discussion, and reference list.
Chapter 5 Summary and Conclusions (optional)

This chapter consists of an overall summary of the project and conclusions regarding the research. Suggestions for additional research are usually put in this chapter.

Final Defense

The candidate shall pass a final examination before being awarded the master's degree. Enrollment in at least one credit is required during the term in which the final examination is taken and in subsequent semesters until the thesis is approved by the graduate school.

The examination (defense) format is as follows (times listed are suggestions only):

- Student will be excused from the room while committee has preliminary discussion - up to 5 minutes.
- Duration of the student presentation - up to 20 minutes.
- Questions from the defense committee - up to 30 minutes.
- Committee deliberation - up to 20 minutes. The student is excused from the committee's deliberations.
- Student advised of outcome by the defense committee chair.

Your presentation should be conducted as an oral research presentation. The times noted are suggested to help you discuss what you need to in the 20 minutes that you are to present. You will begin with an introduction that cites a few important studies (3 minutes) followed by the statement of the problem (1 minute). Next, discuss your research methods and procedures (up to 4 minutes) and your results (up to 4 minutes). Finally, finish your oral presentation with a discussion of your findings (up to 8 minutes). Your 20-minute oral presentation is followed by questions from your committee.

Questions and concepts a student should be prepared to answer during the oral examination include:

- Questions about the paper.
- Questions about the student's plan of study and coursework.
- Questions regarding the statistical terms and the statistical analysis used in the study.
- Questions regarding the type of research methods used in the study.

Basis for Evaluation for pass or fail.

- Demonstrates scholarly writing using Graduate School guidelines for disquisitions;
- Integrates existing research and theory with own project or study and makes appropriate conclusions;
- Indicates an understanding of the scientific process;
- Clear articulation of the study and contribution to the field;
- Ability to defend one's work during the oral examination.

The copy of your thesis submitted to your supervisory committee is considered a draft, which is subject to changes the supervisory committee and the HNES Department Head require. Such changes could involve rewriting major sections. After the final defense, you will incorporate into the thesis corrections suggested at the final oral defense and the HNES Department Head.
You have one year from the date of the final examination to send the thesis to The Graduate School and complete all other degree requirements. Should the disquisition not be deposited as specified or any other degree requirements not be completed, the student must retake the final examination. If a period of two years or greater has lapses before the final copies are submitted, the student must reapply to The Graduate School and must register for a minimum of two credits. Degree date is based on the date when final copies are submitted to The Graduate School.

Plan C- Internship/Capstone:

Requirements for internships/field experiences/independent study.

Students may elect to complete up to three credits of independent study and/or field experience/practicum. Both of the options require advisor/department approval and are graded with a letter grade. As a guide an individual must complete ~40 hours per credit for independent studies but can vary based on the project and is set by the mentor. Internship hours and field experiences are set by Registration and Records Office at 40 hours per credit. You must complete the appropriate contract, with the help of your advisor, prior to registration. The contracts are located on the HNES Graduate Program Blackboard page. Students may elect to take up to 6 credits of internship (~40 hours per credit) with the appropriate documentation and permission from the host site. Allow additional time for approval and agreements with this option as it can take several months for an affiliation agreement to be approved by NDSU and the host site.

HNES 794 Practicum/Internship: Mentored experience in research or industry that may be on or off campus.

HNES 793 Independent Study: Directed study allowing an individual student under faculty supervision to undertake selected, independent work in topics of special interest or a limited experience in research. Examples include research study, directed readings, or a review of literature.

HNES 795 Field Experience: Field-oriented, supervised learning activities conducted outside the traditional classroom/laboratory.
Timelines and Forms

1. Once you have been accepted to the graduate school and the Department of Health, Nutrition and Exercise Sciences, visit with your assigned major advisor and review the program path (A, B, C) that you are interested in pursuing for the MS Exercise/Nutrition Science Option. Timelines vary per student but it is generally expected that the degree can be complete in 2 years.

   For plan A and B paths following steps 2-16. For plan C paths jump to step 17

2. In consultation with your advisor, select additional members to serve on your thesis/paper/capstone committee. You need three members on your committee for a MS degree. However, please explore the committee requirements provided by NDSU Graduate Handbook to assure the appropriate committee is created. Guidelines are below:

   Plan A and B committees:
   1) MS advisor who serves as the committee chair.
   2) A second member, who must be a full or affiliate member of the graduate faculty.
   3) A third member, who could be either a faculty member from outside the student's program or a qualified off-campus expert in the field. If this committee member is not a full or affiliate member of the graduate faculty, the approval of the Dean of the Graduate College is required. Approval by the dean requires a memo from the program/department chair explaining the qualifications of the person to be on the committee and the person's curriculum vitae. A list of graduate faculty affiliation status is here. https://bulletin.ndsu.edu/graduate/faculty/

3. Develop a preliminary plan of study in consultation with your major advisor. This should estimate what classes you will take to complete your degree. An example Plan of Study is shown in Appendix A. Class rotation list is shown in Appendix B.

4. Submit the formal plan of study to the Dean of the Graduate School for approval no later than the term immediately after the supervisory committee is formed. An example Plan of Study is shown in Appendix A but the official submission must be made Master's Plan of Study Page.

5. Complete the courses listed on the plan of study with B or better grade. Maintain continuous enrollment through completion of the degree or obtain a leave of absence from the Graduate School. Leave of absence forms

6. Register for HNES 798 Master's Thesis/HNES 796 Paper. Complete the appropriate contract located at the NDSU graduate program blackboard page with the help of your advisor, prior to registration.

7. In consultation with your advisor, prepare a draft of your thesis or paper using templates provided by the graduate school.

8. Upon approval of your advisor, schedule a proposal meeting with your committee. All committee members should receive a copy of your proposal at least 7 days prior to the meeting. No additional documentation is required to be submitted to the graduate school for the proposal.

9. Upon approval by your committee submit paperwork to NDSU's Institutional Review Board (IRB) or other compliance requirements, if necessary. You will need to complete the online CITI training for Human Subjects Protection –This must be completed before you can begin your research and before you receive IRB approval. You may begin your research after you receive approval from IRB.
10. Once you complete your research and in consultation with your advisor complete the Intent to Graduate form by the posted deadline required by the graduate school. These are generally within the first month of the start of the semester so explore the NDSU graduate school page to make sure you complete the form prior to the deadline.

11. At the completion of your research and upon approval of your advisor, you may schedule the final oral examination (defense). A Notification of Scheduled Exam form must be submitted to the Graduate School two weeks prior to the examination.

12. All committee members must receive a copy of your completed thesis or paper at least 7 days prior to the meeting. The HNES Department Head must read your updated thesis and approve before it is sent to the Graduate School. It is helpful to send the Department Head a copy of the thesis/paper when you send it to your committee.

13. Defend your thesis work. At this meeting you will orally explain and defend your research. The examining committee will immediately report, in writing, the results of the examination to the Dean of the Graduate School via the Report of Final Examination Form.

14. Upon approval by the advisor and Department Head, submit one draft of the thesis or paper to the Graduate School for approval via the NDSU graduate school online submission system.

15. If corrects are required, edit, and resubmit to the graduate school. Submit the final disquisition to the Graduate School office no later than one year after the oral defense. Failure to do so, results in another oral defense. If you want to graduate the semester you finish, there are additional timelines that must be met.

16. If you are unsuccessful at your defense, please consult with our advisor and the NDSU Graduate Handbook. With permission of a majority of the supervisory committee members, a candidate is allowed to take each examination twice. The supervisory committee will set a date at least one month after the failed examination. Should both attempts to pass an examination result in failure, the candidate may request to take the examination a third time. A request for a third examination requires the support of the supervisory committee and program administrator, and the approval of the Dean of the Graduate College after consultation with the Graduate Council.

For Plan C Path

17. In consultation with your advisor, mutually agree on your culminating experience. The experience must reflect high quality work and effort to be approved. You must complete the appropriate contract prior to registering for your credits. The contracts are located on the HNES Graduate Program Blackboard page. The contract is the official record of the requirement needed to graduate and must be signed by both parties. A copy can be sent to the graduate coordinator if needed.

18. Register for HNES 793/794/795 Independent study/ Internship/and/or Field experience or upon approval of your advisor. Some internships or field experience may require special permissions, affiliation agreements, or requirements. The internship/field experience cannot begin until these forms have been completed/processed, so be sure to discuss with your program site on requirements. Note these experiences can be completed at anytime in the program.

19. If completing an internship, complete any requirements assigned by the site. Note affiliation agreements may take several months to get approved and an internship cannot being prior to approval.
20. If completing a capstone and associated deliverable (certification, research document, etc.) that was agreed upon by you and your advisor, make sure that is in final form and/or completed.

21. Formal plans of study are not required for Plan C students. Instead they will be tracked on campus connection in the “academic requirements” section. With the assistance of the advisors, students can update their plan of study by performing the following. The Change to Plan of Study for document (with electronic signatures through docusign of student, advisor, and graduate coordinator) triggers the graduate school to accept courses that are not in HNES or on the current campus connection academic requirements page to count toward the 34 credit total for degree completion. When completing the form place the course number, title, and credit number in the “add section”. Also, in the “Substitutions” simply write “Electives”. An example is below.

![Change to Plan of Study Form](image-url)
22. Submit the Intent to Graduate form by the posted deadline in the semester in which they plan to graduate. This form will not require the adviser’s approval. These are generally within the first month of the start of the semester so explore the NDSU graduate school page to make sure you complete the form prior to the deadline.

23. Submit the Application for Graduate Degree by the last day of the semester in which they plan to graduate. This form will be a DocuSign form to be signed by the student, adviser and program coordinator.

24. Await confirmation from the NDSU graduate school that you have completed all requirements for the degree via Plan C.

Frequently Asked Questions

How do I decide what path to pursue?
Students should consider what career they are interested in obtaining in the immediate future as well as long term career aspirations and evaluate how the MS degree can help them obtain these positions. Consulting with their advisor is helpful in answering this question but it is up to the student to ultimately decide which path is best for their career.

Why are more credits required for the Plan C option (34 vs. 31)? Given plan C path students do not need to complete a formal defense for their final culminating experience (steps 2-16 above) additional course work is required to make the effort in the paths equivalent.

How many hours per credits is required for an internship? The Registration and Records Office at NDSU states the 40 hours of work is needed per credit for internships.

How many hours per credits is expect for an independent study? The expected hours requirement for an independent study should reflect a similar amount of effort as an internship (40 hours per credit).

I am a plan C path student. How do I update my plan of study on campus connection? Please see step 21 above.
Appendix A – Plan of Study and Supervisory Committee
Example of Masters Plan of Study. Actual form is completed electronically (see step 4)

Master’s Degree Plan of Study and Supervisory Committee

<table>
<thead>
<tr>
<th>First Name:</th>
<th>Last Name:</th>
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Degree: ______
Program: ______________________ Option: ______________________

- [ ] Plan A - Thesis
- [ ] Plan B - Comprehensive Study Paper
- [ ] Plan C - Portfolio/Field Experience/Coursework Only

Expected Graduation Term: ______

NDSU Graduate Courses: Enter courses in the order in which you have taken (or plan to take) them. List the total number of research credits as one line item.*

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<tr>
<th>Dpt./Course</th>
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* PLEASE NOTE: If a proposed graduate research project involves human or animal subjects, or biohazards, it must be submitted for review and approval by the Institutional Review Board (IRB), the Institutional Animal Care and Use Committee (IACUC), and/or the Institutional Biosafety Committee (IBC). The student should initiate this process after his or her supervisory committee has approved the final research design because IRB, IACUC, and IBC approval must be obtained before the research project commences.
Transfer Credits
Official transcripts with grades posted from the transfer institutions must be on file in the Graduate School PRIOR to approval of the Plan of Study.
Do not include courses previously taken at NDSU. All NDSU courses should appear on the first page.

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<tr>
<th>Institution</th>
<th>Dept</th>
<th>Course #</th>
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Total Transfer Credits (in semester credit hours): __

Supervisory Committee Approval
The supervisory committee must be at least three members, one of which must be from outside of the student’s department/program.

If a committee member is not a full or affiliate member of the graduate faculty, the approval of the Dean of the Graduate School is required. Please attach a recommendation from the program administrator accompanied by rationale and curriculum vitae.

_The supervisory committee approves the following courses and research to satisfy the master’s degree requirements._

**Typed Names** | **Signature (Recommends approval)** | **Dept**
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**Approval**
Graduate School Dean

**Graduate Program Coordinator Signature**
Appendix B. HNES Course Rotations

A general list of the HNES course rotation schedule is shown in the pages to follow in landscape format below. This is for planning purposes only. HNES may make changes to the scheduled rotations. The updated plan will be available each semester as soon as it is known.
## HNES Graduate Course Rotations (Fall 2020- Summer 2025)

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<th>Course #</th>
<th>Course Title</th>
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<th>Sp21</th>
<th>Su21</th>
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F= indicates fall semester; Sp= Spring semester; Su=indicates summer semester.