

Department of
Human Development
and Family Science

2025 Developmental Science Ph.D. Student Manual

College of Health and Human Sciences
North Dakota State University

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www.ndsu.edu/hdfs/ds

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Welcome!

Welcome to Developmental Science at North Dakota State University! By coming to NDSU you've made a decision to study with active scholars with cutting edge research programs and state of the art research equipment and labs. You'll find yourself in a highly supportive environment designed to help you develop your own interests and skills in research and teaching, with faculty who genuinely care about your welfare and who are dedicated to helping you be the best professional you can be. And, you'll be living in a vibrant college town environment regularly included in national rankings of "Best Places To Live."

The Substantive Area of Study

Developmental Science is an exciting, rapidly emerging, interdisciplinary field. Here at NDSU, you'll find faculty who study both socioemotional and cognitive development across a variety of ages. Our focus is on how individuals grow and develop over time, and particularly how this growth and development relates to a variety of contexts: family, social, and cultural.

Areas of study include young children's mastery motivation and persistence; children's socialization in diverse family contexts; preventive interventions to promote child and adolescent optimal development and resilience; peer relations throughout childhood and adolescence; effective parenting and childhood outcomes; developmental processes and protective factors of adolescence and emerging adults; diverse contexts of child, adolescent, and adult development; policy issues for children, adolescents, and older adults; intergenerational relationships; interpersonal connections and psychological well-being in old age; cognitive development in middle and late adulthood; and promoting aging well across contexts. Students can choose to emphasize study in a particular age range, in a particular developmental domain, or in some combination of the two.

In addition, you'll find a strong emphasis on quantitative methodologies and their application to the study of development, including longitudinal research across diverse timescales. To be able to address research questions in Developmental Science, a high degree of knowledge in advanced quantitative techniques is required, and our program will provide you with those skills. Further, students have the opportunity to employ qualitative research designs to explore unique developmental phenomena in greater depth. This program will equip you with an understanding of a variety of methodological tools and the ability to apply them to your unique research interests.

Other Substantive Areas in the HDFs Department

In addition to Developmental Science, the department also provides Masters level training in Gerontology, Family Financial Planning, and Youth Development. These are fully online programs, and are a collaboration between NDSU and a number of other institutions across the Great Plains. For further information on other areas represented in the department, please see www.ndsu.edu/hdfs.

Your Admission into Developmental Science

You were chosen for admission into our program for a variety of reasons. First and foremost, your past academic record and your application materials indicate a superior level of academic achievement and high potential for the pursuit of an advanced degree. Second, your materials indicate the personal maturity and the level of commitment necessary for success in this endeavor. Finally, the professional goals and interests indicated in your application show a high degree of overlap with both the overall goals of the department as well as the individual research interests of the faculty.

Important Offices and Phone Numbers

Human Development and Family Science Department

Department Head: Joel Hektner.....	231-8269
DS Coordinator: Heather Fuller.....	231-5621
HDFS Administrative Support: Nancy Moberg.....	231-7474
College Business Manager: Nonnie Tangen.....	231-7819

University-wide

Customer Account Services (Business Office)	231-7320
Financial Aid Office.....	231-7533
Graduate School.....	231-7033
Registrar	231-7981

Graduate Student Work and Meeting Spaces

EML 260 – for individual and group work (with reservation)
EML 269 – for group work (with reservation)

Faculty Labs

Dr. Fuller's Lab	EML 277 & EML 283i
Dr. Brotherson's Lab	EML 277
Dr. Kho's Lab	EML 306 & FLC 418
Dr. McWood's Lab	EML 300 & FLC 417
Dr. Wang's Lab	EML 283j

Research and Instructional Facilities

Center for Child Development. The Center for Child Development provides an early childhood program that is accredited by the National Academy of Early Childhood Programs, a division of the National Association for the Education of Young Children. Through a laboratory program, the Center provides research opportunities for NDSU students and faculty interested in young children. The Center has a capacity of 38 children ranging in age from 6 months to 5 years, and each room of the center is observable from an observation booth equipped with one-way glass and an audio system.

<https://www.ndsu.edu/childcenter>

Center for Writers. The Center for Writers serves the NDSU community by providing free writing assistance to students, faculty, and staff in all departments at all levels in the following ways: by providing a supportive environment where writers and readers work efficiently one- on-one or in small groups; by helping students improve their strategies for writing proficiently and independently; by training writing tutors to become effective readers of and responders to texts from various disciplines; by helping faculty develop and refine writing assignments and assess student writing effectively and efficiently; by helping faculty and staff with questions about their own writing. <https://www.ndsu.edu/cfwriters>

Data Visualization Lab. The Data Visualization Lab is a student and researcher focused space that provides resources and support for finding, analyzing, visualizing, and managing research data. The lab has workstations and software for GIS, data visualization, and statistical analysis, and is available remotely for access outside of lab hours. <https://library.ndsu.edu/locations/main-library/data-visualization-lab>

Grad Hub. NDSU's Grad Hub serves as a central gathering space where graduate students can find guidance, connection and enrichment throughout their programs. <https://www.ndsu.edu/graduate-school/gradhub>

Information Technology Services (ITS). ITS provides instructional, research, and administrative computing resources and communications infrastructure support for the University. ITS provides clusters of computers, printers, and software in half a dozen locations around campus (including in FLC and EML Halls). ITS staff offer non-credit seminars on topics such as end-user computing, text and statistical processing, and microcomputers. Statistical consultants are also available to assist in analyzing research data. <https://www.ndsu.edu/it>

Instructional Design Center (IDC). The IDC helps instructors with course design and enhancing student engagement. Professional development opportunities are available for instructors include workshops, webinars, panel and book club discussions, and faculty certificate courses. The IDC offers a comprehensive suite of tools and resources designed to support innovative pedagogy and effective course delivery at NDSU. In addition to teaching support, the IDC offers services including thesis formatting assistance to ensure documents meet institutional guidelines, one-on-one support for academic and instructional projects, and access to digital media software for creating and editing multimedia content as well as training on NDSU software and applications, helping users build confidence in using digital tools. <https://www.ndsu.edu/it/help/idc>

Libraries. The Interlibrary Loan Service and Document Delivery Service provide access to books, articles, and other materials not available at the NDSU libraries. The online catalog interfaces with other online catalogs in North Dakota, Minnesota, the remainder of the United States, and Canada. The NDSU libraries also possess multiple databases accessible online. The Libraries offer a variety of library instruction services including: tours and orientation; course-related instruction in specific subject areas; and demonstrations of special services and information formats. Library subject specialists, including a Social Sciences librarian, are also available by appointment to provide in-depth assistance in

locating and using various print and electronic information resources.

<https://library.ndsu.edu/>

Office of Teaching and Learning (OTL). The Office of Teaching and Learning offers a group of educational experts and resources to support teaching practices that foster student success. Workshops are provided at various points throughout the year and instructor resources are provided on demand. <https://www.ndsu.edu/otl>

Online survey hosting service. The university has a license to use Qualtrics survey software, which provides a secure platform for online research questionnaires.

<https://www.ndsu.edu/gdc/qualtrics/>

NDSU Student Research Listserv. NDSU has a voluntary student research listserv for study recruitment purposes. If you wish to recruit NDSU students for your study, you can send your recruitment notice to: ndsu-res-part@listserv.nodak.edu

Graduate Student Responsibilities

Graduate school differs from your undergraduate experience. You will need to take on more responsibility and initiative than you did in college in order to successfully complete the Ph.D. program. You will need to plan your program, attend classes, complete independent projects, and leave sufficient time for reading, writing, and thinking. In addition, you may NOT be enrolled in another graduate program outside of DS without advisor/committee approval, with the exception of a dual degree in Gerontology or a certificate program.

More specifically, it is your responsibility to know what classes you need, take these classes when offered, meet with your major professor, know when deadlines are, and know what forms need to be completed and when to hand them in. Everyone in the department supports you and wants you to succeed; however, it is your responsibility to be prepared for classes and examinations. Time and motivation are needed to fulfill the demands of your classes, assistantship, and dissertation. In order to be successful in your graduate work, you will need to outline your goals and work towards them.

In this manual you will find an outline of major steps and a suggested timeline. Remember, it is your responsibility to notify the appropriate offices and faculty members that all these steps have been completed. Therefore, it will be your task to find out what you need to do (and by when) to complete the steps.

When you have questions or concerns, there are a number of people you can talk to. Your first contact should be your advisor. You may also wish to speak to the Developmental Science Coordinator (Heather Fuller) or the department head (Joel Hektner). In some cases, you may also be referred to a staff member at the Graduate School.

Program Requirements

Basic Structure of the Program

Although students seek the Ph.D. for many different reasons, the doctoral program in Developmental Science is based on three components:

1. instruction in the fundamental research findings and theories of developmental science,
2. training in the creation and conduct of research, and
3. teaching experience in academic settings.

Students may enter the Developmental Science Doctoral program with either a Bachelor's degree or a Master's degree. If a student enters with a Bachelor's degree (or graduate degree in a field unrelated to developmental science) the student will enter the 5-year track that consists of 90 credits. If a student enters having completed a Master's degree and empirical thesis in HDFS, Developmental Science/Psychology, or another related field, upon faculty approval, the student may enter the 3-year track consisting of 60 credits for completion of the doctoral degree.

The doctoral program is, roughly speaking, divided into two phases: pre-candidacy and candidacy. Pre-candidacy comprises the period of study up to the comprehensive/preliminary examination. During this period, students become familiar with major theories and research and acquire the depth of knowledge considered necessary for high-level, independent developmental research. After reaching candidacy, students focus primarily on their dissertation, although they are encouraged to work on other projects within their areas of interest. A student formally has reached candidacy when he or she has taken the required courses, passed the comprehensive exam, and has turned in a satisfactory thesis project (if applicable). Usually students reach candidacy during their third year if on the 5-year track or in the second year if on the 3-year track.

Curriculum for students entering with a Bachelor's degree (90 credits total)

- Students earn a Master's degree after completing 30 credits, including the master's thesis and master's oral examination.
- All courses 3 credits unless otherwise noted.
- Courses numbered 801-879, and 893 are graded on A-F scale; courses numbered 798, 890, 892, 894, and 899 are graded Satisfactory/Unsatisfactory (S/U).

Development Core (12 credits)

- HDFS 811 Concepts and Theories of Developmental Science
- HDFS 813 Social and Emotional Development across the Lifespan
- HDFS 815 Cognitive and Physical Development across the Lifespan
- HDFS 817 Prevention Science

Teaching Core (6 credits)

- HDFS 802 Teaching and Learning in Human Sciences^a
- HDFS 892 Graduate Teaching Experience

Methodology and Statistics Core (12 credits)

- HDFS 705 Quantitative Methods in Developmental Science
- HDFS 805 Research Methods and Scholar Development in Human Sciences
- HDFS 854 Advanced Quantitative Methods in Developmental Science^a
- HDFS 856 Longitudinal Research Methods and Analysis^a

Electives (15 credits)

- Must include 9 credits in didactic 700- or 800-level courses (in HDFS or other departments) (HDFS 824 or 825 recommended)
- Can include, distributed in varying credit amounts across multiple semesters:
 - HDFS 893 Individual Study (research): maximum of 6 additional credits (beyond the 17 required)
 - HDFS 894 Practicum, focus on teaching or non-academic role

Non-didactic Courses (7 credits)

- HDFS 890 Seminar: Orientation / Comp Exam / Career Dev (7 credits total)
 - Orientation - 1 credit during first semester
 - Comprehensive Examination - 4 credits for preparation and completion of comprehensive exam
 - Career Development - 2 credits during final year

Independent Research (38 credits)

- HDFS 893 Individual Study (research) (17 credits)
- HDFS 798 Master's Thesis (6 credits)
- HDFS 899 Dissertation (15 credits)

^a. Course may be substituted with another course approved by program coordinator or advisor and committee.

Master's Degree Plan of Study for those entering with a Bachelor's degree

The Plan of Study for the Master's Degree in this program requires exactly 30 credits (no more or less), although students may be taking more than 30 credits in their first two years in the program. The additional credits will be counted on the Doctoral Plan of Study. The following courses should be listed on the Master's Degree Plan of Study:

- HDFS 890 Graduate Orientation, 1 credit
- HDFS 805 Research Methods and Scholar Development in Human Sciences
- HDFS 811 Concepts and Theories of Developmental Science
- HDFS 813 Social and Emotional Development across the Lifespan
- HDFS 815 Cognitive and Physical Development across the Lifespan
- HDFS 817 Prevention Science
- HDFS 705 Quantitative Methods in Developmental Science
- HDFS 893 Individual Study (Research), 5 credits
- HDFS 798 Master's Thesis (6 credits)

Doctoral Degree Plan of Study for those entering with a Bachelor's degree

The Plan of Study for the Doctoral Degree in this program requires at least 60 credits. The following courses should be listed on the Doctoral Degree Plan of Study. This list totals 60 credits.

- HDFS 802 Teaching and Learning in Human Sciences
- HDFS 892 Graduate Teaching Experience
- HDFS 854 Advanced Quantitative Methods in Developmental Science
- HDFS 856 Longitudinal Research Methods and Analysis
- XXXX xxx Elective (other didactic)
- XXXX xxx Elective (other didactic)
- XXXX xxx Elective (other didactic)
- HDFS xxx Elective (6 credits other)
 - *at least 9 elective credits must be didactic courses at the 700-800 level
- HDFS 890 Seminar Comp Exam/Career Dev (6 credits)
- HDFS 893 Individual Study (12 credits)
- HDFS 899 Dissertation (15 credits)

Suggested Course Schedule for Students Entering with Bachelor's Degree**Entering Odd Fall****FIRST YEAR**

<u>Odd Fall</u>	<u>Even Spring</u>
705 Quantitative (3)	813 Soc/Emot (3)
890 Orientation (1)	Elective (3)
815 Cog/Phys (3)	893 Research (2)
893 Research (2)	798 Thesis (1)
9 total credits	9 total credits
<i>-Select committee/ Plan of Study</i>	

SECOND YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
817 Prevention (3)	805 Methods (3)
854 Adv Quant (3)	811 Theory (3)
893 Research (1)	890 Comp Exam Prep (2)
798 Thesis (3)	798 Thesis (2)
10 total credits	10 total credits
<i>-Propose thesis</i>	<i>-Defend thesis</i>
	<i>-Ph.D. Plan of Study</i>

THIRD YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
856 Longitudinal (3)	802 Teaching (3)
Elective (3)	Elective (3)
890 Comp Exam (1)	890 Comp Exam (1)
893 Research (3)	893 Research (3)
10 total credits	10 total credits
	<i>-Complete Comp Exam</i>

FOURTH YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
893 Research (5)	893 Research (4)
899 Dissertation (2)	899 Dissertation (3)
*Elective or 892 (3)	*Elective or 892 (3)
10 total credits	10 total credits
<i>-Propose dissertation</i>	

FIFTH YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
890 Career Dev (1)	890 Career Dev (1)
899 Dissertation (5)	899 Dissertation (5)
6 total credits	6 total credits
	<i>-Defend dissertation</i>

*complete teaching experience (892) fall or spring of 4th year

Entering Even Fall**FIRST YEAR**

<u>Even Fall</u>	<u>Odd Spring</u>
705 Quantitative (3)	805 Methods (3)
890 Orientation (1)	811 Theory (3)
817 Prevention (3)	893 Research (2)
893 Research (2)	798 Thesis (1)
9 total credits	9 total credits
<i>-Select committee/Plan of Study</i>	

SECOND YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
815 Cog/Phys (3)	802 Teaching (3)
856 Longitudinal (3)	813 Soc/Emot (3)
893 Research (1)	890 Comp Exam Prep (2)
798 Thesis (3)	798 Thesis (2)
10 total credits	10 total credits
<i>-Propose thesis</i>	<i>-Defend thesis</i>
	<i>-Ph.D. Plan of Study</i>

THIRD YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
854 Adv Quant (3)	Elective (3)
Elective (3)	Elective (3)
890 Comp Exam (1)	890 Comp Exam (1)
893 Research (3)	893 Research (3)
10 total credits	10 total credits
	<i>-Complete Comp Exam</i>

FOURTH YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
893 Research (5)	893 Research (4)
899 Dissertation (2)	899 Dissertation (3)
*Elective or 892 (3)	*Elective or 892 (3)
10 total credits	10 total credits
<i>-Propose dissertation</i>	

FIFTH YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
890 Career Dev (1)	890 Career Dev (1)
899 Dissertation (5)	899 Dissertation (5)
6 total credits	6 total credits
	<i>-Defend dissertation</i>

*complete teaching experience (892) fall or spring of 4th year

Curriculum for students entering with a Master's degree (60 credits total)

- Students may follow this track only if their Master's degree and thesis was approved by the Developmental Science Committee upon admission.
- Additional coursework may be necessary to compensate for courses not taken.
- All courses 3 credits unless otherwise noted.
- Courses numbered 801-879, and 893 are graded on A-F scale; courses numbered 798, 890, 892, 894, and 899 are graded Satisfactory/Unsatisfactory (S/U).

Development Core (12 credits; could substitute other electives with committee approval)

- HDFS 811 Concepts and Theories of Developmental Science
- HDFS 813 Social and Emotional Development across the Lifespan
- HDFS 815 Cognitive and Physical Development across the Lifespan
- HDFS 817 Prevention Science

Teaching Core (6 credits)

- HDFS 802 Teaching and Learning in Human Sciences^a
- HDFS 892 Graduate Teaching Experience

Methodology and Statistics Core (9 credits)

- HDFS 805 Research Methods and Scholar Development in Human Sciences
- HDFS 854 Advanced Quantitative Methods in Developmental Science^a
- HDFS 856 Longitudinal Research Methods and Analysis^a

-Elective (3 credits): could include HDFS 824, 825, 893, 894, or 700- or 800-level course in HDFS or other department.

-Non-didactic Courses (7 credits)

- HDFS 890 Seminar: Orientation / Comp Exam / Career Dev (7 credits total)
 - Orientation - 1 credit during first semester
 - Comprehensive Examination - 4 credits for preparation and completion of comprehensive exam
 - Career Development - 2 credits during final year

-Research Credits (23 credits total)

- HDFS 893 Individual Study (research) (8 credits)
- HDFS 899 Dissertation (15 credits)

^a. Course may be substituted with another course approved by program coordinator or advisor and committee.

Doctoral Degree Plan of Study for those entering with a Master's degree

The Plan of Study for the Doctoral Degree requires at least 60 hours.

Suggested Course Schedule for Students Entering with a Master's Degree

(Note: Schedule may vary depending on prior educational background)

Entering Odd Fall

FIRST YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
890 Orientation (1)	802 Teaching (3)
815 Cog/Phys (3)	813 Soc/Emot (3)
856 Longitudinal (3)	890 Comp Exam (2)
893 Research (2)	893 Research (2)
9 total credits	10 total credits
<i>-Select committee/ Plan of Study</i>	
<i>-Plan of Study meeting: Approve QE timeline</i>	

SECOND YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
817 Prevention (3)	811 Theories (3)
854 Adv Quant (3)	805 Methods (3)
Elective (3)	890 Comp Exam (1)
890 Comp Exam (1)	893 Research (1)
893 Research (1)	899 Dissertation (3)
11 total credits	11 total credits
<i>-Complete Comp Exam</i>	

THIRD YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
*892 Teaching (3)	890 Career Dev (1)
890 Career Dev (1)	893 Research (2)
899 Dissertation (6)	899 Dissertation (6)
10 total credits	9 total credits
<i>-Propose dissertation</i>	<i>-Defend dissertation</i>

*complete teaching experience (892) during 3rd year

Entering Even Fall

FIRST YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
890 Orientation (1)	805 Methods (3)
817 Prevention (3)	811 Theories (3)
854 Adv Quant (3)	890 Comp Exam (2)
893 Research (2)	893 Research (2)
9 total credits	10 total credits
<i>-Select committee/ Plan of Study</i>	
<i>-Plan of Study Meeting: Approve QE timeline</i>	

SECOND YEAR

<u>Odd Fall</u>	<u>Even Spring</u>
815 Cog/Phys (3)	813 Soc/Emot (3)
856 Longitudinal (3)	802 Teaching (3)
Elective (3)	890 Comp Exam (1)
890 Comp Exam (1)	893 Research (1)
893 Research (1)	899 Dissertation (3)
11 total credits	11 total credits
<i>-Complete Comp Exam</i>	

THIRD YEAR

<u>Even Fall</u>	<u>Odd Spring</u>
*892 Teaching (3)	890 Career Dev (1)
890 Career Dev (1)	893 Research (2)
899 Dissertation (6)	899 Dissertation (6)
10 total credits	9 total credits
<i>-Propose dissertation</i>	<i>-Defend dissertation</i>

*complete teaching experience (892) during 3rd year

Some students may need to take more than 3 years to complete all requirements. Students in the Gerontology PhD program will take a minimum of 3.5 years and may receive funding for that time.

Additional Program Requirements

1. Teaching Requirements

All students are required to teach one undergraduate course, with supervision, for course credit in HDFS 892 (3 credits; graded S/U). Before teaching, students must have first taken HDFS 802 (or an approved substitute) and earned a minimum grade of a B, as well as taken two courses out of HDFS 811, 813, 815, and 817. In addition, students must have prior experience assisting an instructor with a course before teaching their own course. The initial course that all students will teach will be a face-to-face version of either HDFS 230 Lifespan Development or HDFS 250 Research Methods. Students will be assigned to teach either one of these courses. Students are encouraged to shadow (can be for credit) the course they will teach the semester before teaching and are allowed to register for credits to prepare materials the semester before teaching if approved by their supervisory committee.

For students who plan careers as college professors, multiple teaching experiences are recommended. After the completion of the required teaching practicum of either HDFS 230 or HDFS 250, students may be considered for additional teaching opportunities. Additional experiences may be worked out for credit or as part of an assistantship.

2. Research Requirements Beyond the Thesis and Dissertation

Research competence is central to the attainment of the Ph.D. degree. The emphasis on research is reflected in the fact that the completion of an original piece of research, the dissertation, constitutes one of the major requirements for awarding the Ph.D. In collaboration with their major advisor, students are to develop a program of research. Students should be consistently engaged in research during the entire course of their program. In addition to the Master's thesis and doctoral dissertation, students are expected to show competency in research activity, presentation, and publication.

A. Presentation of Developmental Research

- Submit at least 4 proposal/abstracts for presentations (symposium, paper, poster, etc.) at national conferences (check with advisor first for approval and to make sure the conference is considered national). This research should be developmental in nature. The student must be first/leading author for at least 2 of these. (If entering with a Master's, submit at least 2, with first/leading authorship on at least 1).
- Present in the role of lead or presenting author (in person or virtually) at least twice at national conferences (once if enter with MS), unless a waiver is granted by the DS faculty committee.

B. Publication of Developmental Research

- Submit at least 2 peer-reviewed articles for publication, at least one of which must be as first/lead author. These manuscripts must be developmental in nature and completed as part of your developmental science student

training. Your DS faculty supervisor must approve in writing prior to submission.

Although these presentation and publication requirements do not carry course credit per se, they are projects that should be worked on as part of HDFS 893 (graded A-F) and/or HDFS 798 or 899 (graded S/U).

3. Completing Annual Activity Reports for Evaluation of Progress

Every year, you are required to submit an Annual Activity Report for Evaluation of Progress along with a cumulative CV. A form for this report will be provided by the DS coordinator. If you will be graduating in May or August of the current year, you do not need to submit an annual report. The report and vita are due electronically on April 15. Please note that you **MUST** receive approval from your advisor before submitting, thus your full report must be shared with your advisor at least a week in advance of this deadline.

A. Basis for Evaluation. The nature of graduate education is different than that experienced in typical undergraduate programs. As such, the evaluation of a graduate student's academic performance may include, but is not necessarily limited to, assessing the student's knowledge of the academic discipline, the student's ability to apply that knowledge to discipline-specific problem-solving situations, and evaluation of the quality of a student's judgment in problem solving.

In addition, faculty will also assess the student's ethical behavior consistent with the professional ethical standards of the discipline. Because of the need to work well with others, faculty will also assess a student's interpersonal interactions in carrying out the work necessary to complete a course of graduate education and to ensure the orderly functioning of the academic department. In short, character and conduct are critical to students' academic evaluation and possibly the attainment of their graduate degrees.

B. Progress in Program Requirements. Students will be evaluated based on their performance in coursework and achievement of standard benchmarks towards the completion of program requirements including the thesis, portfolio, and dissertation. The following benchmarks will be considered for evaluation of progress:

Annual Evaluation Benchmarks - Post-Bachelors (5-year program)

Year	Minimum benchmarks to be completed by end of academic year
1	Success in coursework; <u>Research</u> : Involvement in research; <u>Service</u> : Active in 1 dept. committee
2	Success in coursework; <u>Research</u> : 1 st presentation, 1 st manuscript in progress, thesis proposed; <u>Teaching</u> : Experience guest lecturing / TAing; <u>Service</u> : Active in 1-2 dept. and college/university/profession committees

Year	Minimum benchmarks to be completed by end of academic year
3	Comprehensive exam passed; <u>Research</u> : 2 nd presentation, 1 st manuscript submitted, thesis defended; <u>Teaching</u> : Guest lectures / TAing; <u>Service</u> : Active in dept. and college/university/profession + outreach
4	<u>Research</u> : 3 rd presentation, 2 nd manuscript in progress, dissertation proposed; <u>Teaching</u> : Independent teaching; <u>Service</u> : Active in dept and college/university/profession + outreach
5	<u>Research</u> : 4 th presentation, 2 nd manuscript submitted, dissertation defense scheduled; <u>Teaching</u> : Independent teaching / teaching professional development; <u>Service</u> : Active in dept and college/university/profession + outreach

Annual Evaluation Benchmarks - Post-Masters (3-year program)

Year	Minimum benchmarks to be completed by end of academic year
1	Success in coursework; <u>Research</u> : 1 st presentation, 1 st manuscript in progress; <u>Teaching</u> : Experience guest lecturing / TAing; <u>Service</u> : Active in 1 dept. committee
2	Success in coursework; Comprehensive exam passed; <u>Research</u> : 2 nd presentation, 1 st manuscript submitted, dissertation proposal scheduled <u>Teaching</u> : Guest lectures / TAing; <u>Service</u> : Active in 1-2 dept. and college/university/profession committees
3	<u>Research</u> : 2 nd manuscript submitted, dissertation defense scheduled; <u>Teaching</u> : Independent teaching / teaching professional development; <u>Service</u> : Active in dept. and college/university/profession + outreach

C. Professional Standards for Developmental Science Doctoral Students.

Professionalism is an important component of success in a graduate program and career. Students will be evaluated yearly on the following elements of professional behavior as part of the annual evaluation:

1. Initiative and motivation
2. Flexibility
3. Professionalism in Relationships
4. Professional decorum
5. Attention to ethical and legal considerations
6. Quality and excellence in performance

Initiative and Motivation

- Demonstrates *initiative* in seeking out opportunities.
- Shows *creativity* in professional activities.
- Demonstrates *motivation* through going above minimum standards
- *Reliable* in meeting deadlines.

Flexibility

- *Openness to new ideas.* Is not dogmatic about own perspective, but instead is open to multiple perspectives. Forms ideas based on best available scientific evidence. Recognizes changing professional demands and changes behaviors accordingly.
- *Adaptable to changing events.* Demonstrates flexibility when changes are needed in established schedule or duties (e.g., additional assistantship responsibilities).
- *Willingness to accept and use feedback.* Students are expected to view feedback as a growth opportunity that is intrinsic to the learning processes and therefore the student role. Students should invite constructive feedback without defensiveness, seek to fully understand feedback, and integrate (or incorporate) the feedback into future behavior.

Professionalism in Relationships

- *Ability to get along well with others.* Demonstrates willingness to compromise with others to meet group and individual goals. Willing to consider others' point of view. Pleasant in interactions.
- *Deals well with conflict.* Recognizes the impact of own words and actions on others. Examines own role in conflict, and keeps disagreements on a professional level.
- *Communicates effectively.* Articulates positions in a clear manner.
- *Respects others' time.* Arrives on time, does not cancel meetings without advanced notice, is organized and prepared for meetings and class

Maintains Professional Decorum

- *Recognizes role as a representative of the program* including using language, dress, relationship boundaries, and behavior appropriate to context.
- *Professional appearance* (including clothing and grooming) is appropriate to the setting and context.
- Uses professional *language and behaviors* in professional settings.
- Maintains professional *boundaries* in relationships with faculty, staff, and fellow students.
- *Avoids dual relationships* with undergraduates with whom is in a supervisory relationship (e.g., TA/instructor, lab supervisor, etc.).

Attention to Ethical and Legal Considerations

- Seeks to educate oneself about *professional ethics*, including in the context of research and teaching (e.g., IRB training, FERPA training). Adheres to relevant ethical and legal guidelines.

Quality and Excellence in Performance

- Demonstrates a *high level of excellence and ability* in performance of program responsibilities. *Puts forth best effort* rather than being content with meeting a minimum standard.

D. Letters of Evaluation and Categories of Standing. Each year, you will be provided with a written letter of evaluation of progress. In this letter, the developmental science faculty members will evaluate your progress with respect to coursework, research, teaching, thesis/dissertation, departmental involvement, service, and professional behavior during the current year and over time. The committee will provide recommendations on areas that need additional attention in order to successfully complete the program. You will fall under one of the following evaluation categories:

“Excellent Standing” = a student who is exceeding expectations in regards to coursework, research, teaching, and thesis/dissertation (e.g., overall GPA and course grades, participation in scholarly work, etc.) and meeting expectations in regards to service and professional behavior (e.g., involvement in two or more service opportunities, meeting deadlines, etc.)

“Good Standing” = a student who is meeting expectations in regards to coursework, research, teaching, thesis/dissertation, service, and professional behavior

“Needs Improvement” = a student who is struggling but showing signs of potential in regards to coursework, research, teaching, thesis/dissertation, service, and professional behavior

“Marginal Standing” = a student who needs substantial improvement in one of the following areas: coursework, research, teaching, thesis/dissertation, service, or professional behavior

“Inadequate Progress” = a student who needs substantial improvement in two or more of the following areas: coursework, research, teaching, thesis/dissertation, service, or professional behavior

E. Improvement Plan. Students who are evaluated as either “Marginal Standing” or “Inadequate Progress” must provide a written response to the evaluation letter within 30 days and give this response to the program coordinator. The response should include a detailed plan agreed upon by the student and her/his advisor that specifies how the student can regain good standing. The plan must include specific strategies and deadlines for addressing the problematic areas identified by faculty members. The student will be required to submit another annual report in the fall semester, by December 1st, to the program coordinator. The student will then be re-evaluated by the developmental science faculty members, and evidence of satisfactory improvement must be demonstrated at that time.

F. Funding and Program Termination. Students who are evaluated as in “Marginal Standing” or “Inadequate Progress” may have funding removed for part or all of an upcoming semester. If no improvement is seen by the next annual report, the student will not be eligible for an assistantship the following year. Students who routinely do not complete their required assistantship hours for a semester may also lose part or all of their funding. Students who do not complete the annual report will automatically lose their funding.

After the second year in the program, the developmental science faculty will determine whether students will be allowed to continue in the program. Some possible reasons for dismissal from the program at the second year review may include, but are not limited to: multiple grades of C or lower, repeated program standing of “Needs Improvement” or below, and/or lack of professional behavior.

4. Filing Plan(s) of Study with the Graduate School

All graduate students in degree programs must file a Plan of Study with the Graduate School. The plan specifies the courses you have taken and plan to take, as well as your major advisor and committee members. Students need to file one plan for the Master’s degree and a separate plan for the doctoral degree.

- The Master’s Degree Plan of Study should be filed by the end of your second semester.
- The Doctoral Degree Plan of Study should be filed by the end of the second semester for students entering with a Master’s degree. For students entering with a Bachelor’s degree, it should be filed by the end of the sixth semester.

5. Completion of the Master’s Thesis and Oral Examination

The Master’s thesis takes the form of original empirical research designed, conducted, analyzed and written by the student. To complete the Master’s thesis proposal, thesis, and oral examination, students entering with a Bachelor’s degree will follow the following procedures.

A. Thesis Course Credits. Students who plan to make significant use of faculty time or university resources to work on a thesis must enroll in HDFS 798, commonly called “thesis credits.” Students enrolling in thesis credits must complete a thesis contract and submit it to the department secretary in order to receive permission to enroll. This contract must be signed by the student and the student’s major professor, who must agree on and document the number of credits and the goals that will be achieved during the semester to earn those credits. Careful consideration of these goals is important, as they form the basis for grading the thesis credits. The possible grades that could be received for thesis credits are S (Satisfactory) or U (Unsatisfactory). In order to achieve an ‘S’ the student must complete all the goals set forth in the thesis contract.

Each semester that a student plans to work on the thesis, a new thesis contract must be completed. Students planning to make use of faculty time in the summer must also complete a contract and enroll in thesis credits for the summer term. Students not working on a thesis but needing to maintain continuous enrollment (and not taking a leave of absence) must also complete a contract and enroll in at least 1 thesis credit each fall and spring term.

B. Thesis Forms and Format. Guidance for Graduate School requirements regarding theses can be found on the Graduate School website. The website includes information about formatting the thesis and links to forms for scheduling the final examination (the defense), as well as for participating in commencement. The student should become familiar with these forms and deadlines well in advance of completing the thesis proposal and final document.

C. Thesis Content. Thesis topics and methods are agreed upon by the student and the thesis committee in the proposal phase. Secondary data analysis, survey research, experimental laboratory research, naturalistic observations, etc., are all appropriate. Thesis data can be collected by the student individually, or as part of a larger research team, or involve analyses of already collected data from the PI or some appropriate large-scale database. In all cases, however, the questions, analyses, and write up must reflect the student's original thinking and efforts. The format should approximate in focus and structure an article in one of the major journals in the field (e.g., *Child Development*, *Developmental Psychology*, *Journal of Research on Adolescence*, *Journals of Gerontology*, etc.). See the thesis library on Blackboard for example DS theses

D. Supervisory Committee for Thesis. When starting thesis work, the student assembles a thesis committee under the guidance of their advisor. While the advisor guides students through the thesis process, the committee can provide additional guidance and support, reviews their progress and eventually accepts the completed thesis after the final examination (the defense). A student's Master's thesis committee is comprised of at least three faculty members, including the student's advisor. Two members must be core Developmental Science faculty, and the third member must serve as the Graduate School representative and cannot be HDFS faculty. Members of a student's Master's thesis committee do not need to be the same as the members of their dissertation committee.

E. Thesis Proposal. The written thesis proposal describes the student's intended thesis research. The proposal document should be comprised of the literature review, method, and proposed analysis strategy. The proposal ensures acceptance of the study design by the committee before beginning the thesis research.

This meeting is scheduled with the student's supervisory committee members only after the major advisor approves the proposal as ready. To account for busy schedules, expect to need at least a month in advance for scheduling. At least two weeks before the oral exam, the student provides each committee member with the proposal. Then, they have two weeks to prepare for the proposal meeting. At the proposal meeting, the student must present their project orally and via a 15-20 minute PowerPoint presentation. The

proposal is then discussed by the committee and modifications are suggested or required. The proposal process ends when the student and their supervisory committee agree upon a promising and acceptable thesis project. If the committee is not satisfied with the proposal, they may require the student to revise the proposal document and schedule a new proposal meeting. The student cannot proceed with their thesis project until the committee has agreed that the proposal is acceptable.

F. Thesis and Final Oral Examination (the "Thesis Defense")

The final examination (thesis defense) should not take place in the same semester as the thesis proposal. Thus, students need to plan well in advance to ensure they propose the thesis at least one semester prior to the semester they plan to defend.

Scheduling the Defense. The oral examination must be scheduled in advance with the Graduate School and must take place, at minimum, a specified number of days before the end of the semester for the Master's degree to be conferred (typically a month or more; see the Graduate School website for details). To account for busy schedules, reach out to your committee at least a month in advance to schedule the defense meeting. At least one week before the oral exam, the student submits the Notification of Scheduled Examination form to the Graduate school. When the major advisor has approved the thesis document, it must be given to the supervisory committee members at least two full weeks in advance of the final examination (defense meeting). Then, the student focuses on preparing for their defense meeting.

Oral Examination (the defense meeting). The student begins with a 15-20 minute PowerPoint presentation of the research questions and results of the thesis. After the presentation, the student is expected to "defend" their scientific work academically, i.e., weighing arguments carefully and reacting to constructive criticism appropriately. Final acceptance of the thesis is often made contingent on revisions before the final copy of the thesis is submitted to the graduate school. The committee needs to approve the thesis text. In the event the student fails the final oral exam, the student will be allowed one more chance to take the exam in a subsequent semester. Students should not bring food to the defense meeting.

6. Portfolio

In addition to the required coursework, thesis, and dissertation, a portfolio demonstrating the holistic achievements as a developmental scientist during the program is required. To graduate from the Developmental Science Doctoral Program, students will complete a portfolio documenting their achievements of competencies across research, teaching, and service/professional identity domains.

A. Highlights of Required Evidence by Domain for Portfolio

1 - Research	2 - Teaching	3 – Service & Prof Identity
<input type="checkbox"/> Research Statement <input type="checkbox"/> Presentations (4 for 5-year plan; 2 for 3-year plan) <input type="checkbox"/> 2 submitted DS publications <input type="checkbox"/> At least 2 items for specialization of: <ul style="list-style-type: none"> - Significant research training - External funding submission - Manuscript review - Research internship - Technical report - Award or Honors - Additional manuscript submission 	<input type="checkbox"/> Teaching Statement <input type="checkbox"/> Independent teaching experience <input type="checkbox"/> At least 2 guest lectures <input type="checkbox"/> Mentoring Statement <input type="checkbox"/> At least 2 items for specialization of: <ul style="list-style-type: none"> - 1 additional guest lecture - Lead a community presentation - Significant teaching training - Professional development seminar presentation - Development of outreach curriculum - Extension bulletin or product - Award or Honor - Teach additional independent course 	<input type="checkbox"/> Prof Identity Statement <input type="checkbox"/> Summary of professional development activities <input type="checkbox"/> Evidence of active service involvement <input type="checkbox"/> At least 2 items for specialization of: <ul style="list-style-type: none"> - Chairing a committee - Community board member - Service internship - Written statement of outreach and engagement - Award or Honor - Essay or infographic about the future of the field

Note: All evidence must have a relevant, developmental science focus.

Full guidelines with specific details for the Portfolio requirements are found in the Portfolio and Comprehensive Exam Guidelines document on Blackboard.

This portfolio will be completed in stages and is required to be successfully fulfilled in its entirety in order to receive the doctoral degree. Students will regularly update their portfolio as they gain new proficiencies, creating a cumulative portfolio of their achievements across their time in the program. Each Spring, students fill out an annual report which aligns with the portfolio. As part of the annual report, students will be expected to achieve yearly benchmarks (p15-16) identified and reviewed by the DS faculty.

B. Timing for Portfolio Completion. The recommended timeline for portfolio completion is outlined in the next two tables.

Recommended Portfolio Timeline - Post-Bachelors (5-year program)

Semester	Portfolio Tasks to Stay on Track
1 – Fall Year 1	- Discuss portfolio w/ advisor
2 – Spring Year 1	- Submit Annual Report
3 – Fall Year 2	- Outline portfolio
4 – Spring Year 2	<ul style="list-style-type: none"> - Take Comp Exam Credits (2) – complete outline template, organize folders, and aim to have at least 50% of exam evidence complete - Submit Annual Report

5 – Fall Year 3	- Take Comp Exam Credit (1) – aim to have 80-100% of evidence complete
6 – Spring Year 3	- Target Taking Comprehensive Exam - Take Comp Exam Credit (1) – Finalize exam portfolio and submit, prepare for oral defense - Submit Annual Report
7 – Fall Year 4	- Continue work on portfolio
8 – Spring Year 4	- Submit Annual Report
9 – Fall Year 5	- Continue work on portfolio
10 – Spring Year 5	- Submit Final Portfolio

Recommended Portfolio Timeline - Post-Masters (3-year program)

Semester	Portfolio Tasks to Stay on Track
1 – Fall Year 1	- Discuss portfolio w/ advisor
2 – Spring Year 1	- Submit Annual Report - Take Comp Exam Credits (2) – complete outline template, organize folders, and aim to have at least 50% of exam evidence complete
3 – Fall Year 2	- Take Comp Exam Credit (1) – aim to have 80-100% of evidence complete
4 – Spring Year 2	- Target Taking Comprehensive Exam - Take Comp Exam Credit (1) – Finalize exam portfolio and submit, prepare for oral defense - Submit Annual Report
5 – Fall Year 3	- Continue updating portfolio
6 – Spring Year 3	- Submit Final Portfolio

During the final year of the program, students will dedicate a portion of their HDFS 890 Career Development credits to completing their final portfolio. In order to schedule defense of the dissertation, students must submit a complete, final copy of the portfolio to their advisor, dissertation committee, and the DS Program Coordinator. The advisor and DS Coordinator will review the portfolio for completion of all requirements prior to approving the form to schedule final defense.

7. Comprehensive Examination

The mid-program portfolio will serve as the Comprehensive Examination, with the written portfolio serving as the Qualifying Exam and an oral defense of that portfolio serving as the Preliminary Examination. Full guidelines for the Exam are found in the Portfolio and Comprehensive Exam Guidelines document on Blackboard.

A. The Qualifying Exam. The written portion includes:

- A written overview of portfolio aspects completed, in progress, and planned for the final portfolio (following the required template).

- Current Curriculum Vitae (CV)
- Most recent annual activity report
- Copy of approved doctoral plan of study
- Organized documentation (in electronic portfolio form) of all required evidence across three domains of proficiency in 1) Research & Scholarship, 2) Teaching & Mentoring, and 3) Service / Professional Identity.
- Three written components (research statement, teaching statement, and professional identity statement) that will be assessed for your preparation as developmental scientists.
- Note: Your writing on this exam must be your own work. Be sure your responses reflect the words and ideas you have generated independently. While you might receive some feedback on earlier drafts, your writing is expected to be your own. While helpful in other contexts, use of generative AI tools such as ChatGPT is prohibited on this exam. You may use simple word processing tools to update spelling and grammar, but you may not use AI tools to draft your statements, even if you edit, revise, or paraphrase.

Summary of Required Evidence by Domain for Qualifying Exam

1 - Research	2 - Teaching	3 – Service & Prof Identity
<input type="checkbox"/> Research Statement (<i>graded component</i>) <input type="checkbox"/> Presentations (2 for 5-year plan; 1 for 3-year plan) <input type="checkbox"/> 1 submitted DS publication <input type="checkbox"/> 1 item for specialization selected from: <ul style="list-style-type: none"> - Significant research training - External funding submission - Manuscript review - Research internship - Technical report - Award or Honors - Additional manuscript submission 	<input type="checkbox"/> Teaching Statement (<i>graded component</i>) <input type="checkbox"/> Independent teaching experience OR preparation + guest lectures <input type="checkbox"/> Mentoring Statement <input type="checkbox"/> 1 item for specialization selected from: <ul style="list-style-type: none"> - 1 additional guest lecture - Lead a community presentation - Significant teaching training - Professional development seminar presentation - Development of outreach curriculum - Extension bulletin or product - Award or Honor - Teach additional independent course 	<input type="checkbox"/> Prof Identity Statement (<i>graded component</i>) <input type="checkbox"/> Summary of professional development activities <input type="checkbox"/> Evidence of active service involvement <input type="checkbox"/> 1 item for specialization selected from: <ul style="list-style-type: none"> - Chairing a committee - Community board member - Service internship - Written statement of outreach and engagement - Award or Honor - Essay or infographic about the future of the field

Note: All evidence must have a relevant, developmental science focus.

The written portion should be submitted as an electronic portfolio, organized into folders and subfolders and submitted to the Graduate Program Coordinator as a [OneDrive](#) folder.

B. The Preliminary Exam. The oral defense includes:

- A brief oral and visual presentation of the written portfolio.
- Responses to standard questions about the portfolio provided by the DS faculty committee.
- Responses to additional questions devised by the dissertation committee members.

C. Scheduling Process and Deadlines. Approximately midway through the program, the student will work with their advisor to determine if they are ready to take the Comprehensive Examination. Students must complete 27 credits and have filed their doctoral plan of study prior to being eligible to take the Exam. The student will request advisor approval to take their Comprehensive Examination and file the 'Intent to Submit' form. Upon approval, the student will complete their exam: they will compile and present their initial structured portfolio which assesses readiness for entry into the candidacy portion of the doctoral program. Students have flexibility in the timing for which they choose to complete the comprehensive exam; however, they cannot propose their dissertation until the semester after they successfully pass the comprehensive exam. The comprehensive examination and dissertation proposal may not be completed in the same semester. Further, no more than 3 credits of dissertation may be taken prior or concurrent to passing the comprehensive exam.

Students take 3 credits of HDFS 890 Comprehensive Exam in the 2-3 semesters prior to completing the exam, and then 1 credit of HDFS 890 Comprehensive Exam during the semester that they will complete the exam. These credits will be taken with the advisor and graded satisfactory/unsatisfactory.

The Intent to Submit Form is required to be submitted prior to the start of the semester (by 11am Monday the first day of the semester) in which the student intends to take the comprehensive exam.

- The student should notify their advisor first and obtain their permission.
- The advisor should doublecheck that all required pieces are in the portfolio and that the student is ready to take the exam.
- The plan of study must be filed and approved prior to submitting the Intent to Submit form.
- The deadline to submit the Intent to Submit form is prior to the official first day of classes of the semester in which you intend to take the exam.

The portfolio must be submitted electronically as a OneDrive folder to the DS program coordinator by the Monday of the 5th week of the semester.

The results of the qualifying exam will be provided by Monday of the 10th week of the semester.

- If the student passes the qualifying exam, the oral defense of the preliminary examination must be scheduled and completed by the end of the semester.
- If the student does not pass, they must submit a revision plan within 2 weeks of receiving notice of not passing. The revision plan should indicate whether they will complete the comprehensive exam the following semester or at a later date.

D. Evaluation of the Qualifying Examination. The written portfolio will be evaluated as the ‘qualifying exam’ by a committee of 2-3 randomly selected DS faculty members (excluding the advisor(s)) who will serve as ‘evaluators’ for the exam. The qualifying exam will consist of components evaluated on a ‘met/not-met’ basis, as well as one written component per domain (3 total) graded on a five-point scale.

Evaluation of evidence met within each domain:

- Each faculty member evaluator will assess the presence of evidence as well as the sufficiency of the evidence in each domain—research and scholarship, teaching and mentorship, and service and professional identity.
- Based on the evidential standards set, each faculty member evaluator will independently determine whether minimum requirements are met for evidence within each domain.
- If discrepancies between the faculty evaluators emerge, a third faculty member will join the evaluation committee and the committee will work together to identify and resolve inconsistencies.
- All required components must be met to pass the exam. If the student fails to meet any required component, they will fail the exam.

Grading of the domain-specific written prompts:

- Each faculty member evaluator will independently assess the graded written prompt for each domain for evidence of proficiency.
- A five-point scale corresponding to the letter grades A through F will be used, with each letter grade assigned its traditional point value (A = 4 points, B = 3, C = 2, D = 1, F = 0).
- If a large discrepancy occurs between raters for a given domain (2 points or more), that domain will be evaluated by third rater. The numerical scores from all graders of a section will be averaged to determine a proficiency score for that domain, and the scores from all 3 domains will be averaged to determine the overall score for the exam.
- The committee and DS Program Coordinator will aggregate the responses, identify and work to resolve any inconsistencies among grades, and notify the students of the results.
- The minimum passing grade on the written exam is 3.0, with no domain score lower than 2.5.

Opportunities to retake the exam:

- If a student fails the examination, it indicates one or more deficiencies in either preparation or proficiency. They should meet with their advisor to discuss ways to

remediate these deficiencies. The Examination could be retaken as early as the next semester, with the submission of a new Letter of Intent.

- If a student fails the exam a second time, the DS committee will meet to decide whether the student will be allowed to try again. This decision will be made based on a review of the student's academic and research competencies, as well as their professional behavior. A two-thirds affirmative vote by the developmental science faculty, as well as the agreement of the major advisor, is necessary for the student to be allowed to continue in the program and attempt the exam again.
- If a student fails the Qualifying Examination a third time, they are removed from the program.

E. Evaluation and Requirements of the Preliminary Examination. Once the student has passed the written Qualifying Examination, they can move on to scheduling the oral defense (i.e., the Preliminary Examination) with their dissertation committee

- The comprehensive exam must be scheduled with the graduate school at least one week prior to the schedule date (see “Notification of Scheduled Examination” form [here](#)).
- The dissertation committee will review the written portfolio (including feedback from the DS qualifying exam committee) and attend the oral defense of the preliminary exam to determine whether the student passes the preliminary exam.
- The student will prepare a brief presentation overviews their submitted portfolio and respond to questions provided by the DS Faculty Committee as well as the dissertation committee.
- Once the presentation and questions are complete, the committee votes on whether the student has passed the preliminary oral exam, and the advisor submits the record of that vote to the Graduate School. This “Report of Preliminary Examination” form must be submitted to the graduate school within 14 days of the exam.
 - The dissertation committee has the right to request revisions to the written portions of the exam and may require a retake of the oral defense or entire comprehensive exam if the student fails the oral defense.
- The student will advance to doctoral candidate upon successfully passing the written and oral components of the comprehensive exam.

Upon passing the comprehensive exam, they should now focus on their dissertation work.

8. Doctoral Dissertation and Final Oral Examination

The culmination of research training for the Ph.D. is the doctoral dissertation. This dissertation takes the form of original empirical research designed, conducted, analyzed, and written by the candidate. For students on the five-year track, dissertation credits cannot be initiated prior to defending the Master's thesis.

A. Dissertation Course Credits. Students who plan to make significant use of faculty time or university resources to work on a dissertation must enroll in HDFS 899, commonly called “dissertation credits.” Students enrolling in dissertation credits must complete a Dissertation contract and submit it to the department secretary in order to receive permission to enroll. This contract must be signed by the student and the student’s major professor, who must agree on and document the number of credits and the goals that will be achieved during the semester to earn those credits. Careful consideration of these goals is important, as they form the basis for grading the dissertation credits. The possible grades that could be received for dissertation credits are S (Satisfactory) or U (Unsatisfactory). In order to achieve an ‘S’ the student must complete all the goals set forth in the dissertation contract. If a student does not adequately meet the written goals for the semester, credits will have to be retaken.

Each semester that a student plans to work on the dissertation, a new dissertation contract must be completed. If approved by the advisor, students planning to make use of faculty time in the summer must also complete a contract and enroll in dissertation credits for the summer term. Students not working on a dissertation but needing to maintain continuous enrollment (and not taking a leave of absence) must also complete a contract and enroll in at least 1 credit each fall and spring term.

B. Dissertation Forms and Format. Guidance for Graduate School requirements regarding dissertations can be found on the Graduate School website. The website includes information about formatting the dissertation and links to forms for scheduling the final examination (the defense), as well as for participating in commencement. The student should become familiar with these forms and deadlines well in advance of completing the dissertation proposal and final document.

C. Dissertation Content. Dissertation topics and methods are agreed upon by the candidate and the dissertation committee in the proposal phase of dissertation work. Experimental laboratory research, survey research, naturalistic observations, etc., are all appropriate. Dissertation data can be collected by the candidate individually, or as part of a larger research team, or involve analyses of already collected data from some appropriate large-scale database. In all cases, however, the questions, analyses, and write up must reflect the student’s original thinking and efforts.

Though longer and in more depth, a typical dissertation should approximate in focus and structure an articles in one of the major journals in the field, (e.g., *Child Development*, *Developmental Psychology*, *Journal of Research on Adolescence*, *Journals of Gerontology*). In most cases, dissertations have a more extended literature review and discussion section than the typical journal article and the data analyses are typically more thoroughly documented. A recommended format is the two-article format, in which the dissertation is comprised of two related manuscripts in preparation for submission (or two related previously submitted or published articles that had been approved by the committee prior to submission) authored by the student (as first author; coauthors also acceptable), bookended by chapters that provide a general introduction and general conclusion. See the dissertation library on Blackboard for example DS dissertations.

D. Supervisory Committee for Dissertation. When starting dissertation work, the student assembles their dissertation committee. This committee guides students through the dissertation process, reviews their progress and eventually accepts the completed dissertation after the final examination (the defense). The committee is comprised of at least four faculty members. Two members must be core Developmental Science faculty. The third can be core or affiliated HDFS faculty. The fourth member must serve as the Graduate School representative and cannot be HDFS faculty. If this member is a faculty in the College of Health and Human Sciences, they must be tenured. Typically, students work closely with their major advisor as the dissertation research is being conducted. The student may also request advice regarding data, analyses, interpretations, etc. from other committee members as needed.

E. Dissertation Proposal. The written dissertation proposal describes the student's intended dissertation research. The proposal document should be comprised of the literature review, method, and proposed analysis strategy. The proposal ensures acceptance of the study design by the committee before beginning the dissertation research.

Only students who have passed the comprehensive exam can proceed to proposing the dissertation. Thus, the comprehensive exam and dissertation proposal may not take place in the same semester.

This meeting is scheduled with the student's supervisory committee members only after the major advisor approves the proposal as ready. To account for busy schedules, expect to need at least a month in advance for scheduling. At least two full weeks before the oral exam, the student provides each committee member with the proposal. Then, the student focuses on preparing for their proposal meeting.

At the proposal meeting, the candidate must present their project orally and via a 15-20 minute PowerPoint presentation. The proposal is then discussed by the committee and modifications are suggested or required. The proposal process ends when the candidate and their supervisory committee agree upon a promising and acceptable dissertation project. If the committee is not satisfied with the proposal, they may require the student to revise the proposal document and schedule a new proposal meeting. The student cannot proceed with their dissertation project until the committee has agreed that the proposal is acceptable.

F. Submission of Final Portfolio. In order to schedule defense of the dissertation, students must submit a complete, final copy of the portfolio to their advisor, dissertation committee, and the DS Program Coordinator. The advisor and DS Coordinator will review the portfolio for completion of all requirements prior to approving the form to schedule final defense.

G. Dissertation and Final Oral Examination (the "Dissertation Defense")

The final examination (dissertation defense) cannot take place in the same semester as the dissertation proposal. Thus, students need to plan well in advance to ensure they propose the dissertation at least one semester prior to the semester they plan to defend.

Scheduling the Defense. The final examination must be scheduled in advance with the Graduate School and must take place, at minimum, a specified number of days before the anticipated graduation date (typically a month or more; see the Graduate School website for details). To account for busy schedules, reach out to your committee at least a month in advance to schedule the defense meeting. When the major advisor has approved the dissertation document, it must be given to the supervisory committee members at least two full weeks in advance of the final examination. At least one week before the oral exam, the student submits the Notification of Scheduled Examination form to the Graduate school. The dissertation defense is advertised in advance to departmental faculty and graduate students, who are invited to come for the public portion. The student must provide details of the meeting to the DS coordinator at least one week in advance so that the oral exam can be advertised.

Oral Examination (the defense meeting). The candidate begins with a 15-20 minute PowerPoint presentation of the research questions and results of the dissertation. During this public presentation, the committee members and audience members may ask questions and discuss points of interest. After the public audience leaves the room, the committee will question the candidate further. The candidate is expected to "defend" their scientific work academically, i.e., weighing arguments carefully and reacting to criticism appropriately. Final acceptance of the dissertation is often made contingent on revisions before the final copy of the dissertation is submitted to the graduate school. The committee needs to approve the dissertation text. In the event the student fails the final oral exam, the student will be allowed one more chance to take the exam in a subsequent semester. Students should not bring food to the defense meeting.

Working With Your Major Professor and Your Committee

Major professors serve a number of important functions. Each serves as an advisor, mentor, guide, and instructor. Your major professor will help you to choose your committee members, making sure they are appropriate for the topic of study. Your committee and your major professor will approve your plan of study. Your major professor will work with you as you develop and revise your thesis proposal, thesis, dissertation proposal, and dissertation. This person must approve your final draft of each of these documents before you can set up your proposal or defense meetings. In addition to these clearly defined functions, though, major professors may serve in other capacities. They may nominate their students for awards, scholarships, and/or fellowships if applicable. They may invite students to work on other projects of mutual interest. Major professors may serve as role models for professional behavior, and encourage you to engage in activities

that will enhance your professional development (e.g., attend and/or present at professional conferences). While not therapists or counselors, major professors can serve as an important source of encouragement and emotional support. They can serve as a sounding board for ideas about your career path. Finding a major professor who will also serve as a mentor might be particularly helpful to students who are traditionally underrepresented in graduate school. These are just a few of the ways a major professor may nurture your development as a professional.

There are individual differences among different professors' styles with regard to advising graduate students. There are also differences in what type of advising an individual student may want. For this reason, it is important that students carefully consider whether there is a good match with a potential major professor in two different areas: 1) area of research interest and 2) advising style and student needs. It is recommended that you read two to three recent publications of potential major professors, and then meet with them to discuss the possibility of working together. Professors understand the need to find the best fit, and so will not object to this style of information gathering. This process might also help you identify potential committee members.

Major Professor Responsibilities

Choosing a major advisor is one of the most important decisions you will make during your graduate studies. You will work closely with your advisor to develop your proposal and master's thesis and to prepare for your oral defense. It is important that your advisor has some knowledge in your specific topic area. It is also important that you can work well with your advisor over the period of your program.

When you first begin your program, you may be assigned a temporary advisor. You may decide to continue with that person or switch to someone else. Feel free to talk with several professors about the possibility of working together, to ensure that you make "the best match." Some questions that you may want to ask potential major advisors include:

1. Are you willing to work on a project not directly linked to your line of research?
2. What is your basic philosophy or strategy when working with graduate students?
3. Have you planned any sabbaticals or leave of absences during the next two years?
4. Are you willing to allow students to work off of your own data sets? Under what conditions?
5. How involved do you like for the committee members to be?
6. Are you available to work with students in the summer?

Once you select a major professor, you will work together on developing a time line for completing your Plans of Study, your thesis, and your dissertation.

It is possible to change your major professor; in fact, it is very common to change if you had an advisor who was temporarily assigned to you. Other reasons for switching might include a professor going on developmental leave or leaving NDSU. Changing your major professor is strongly discouraged after your thesis work has begun, and would have to be approved by your current and proposed major professor. In order to change, it is necessary to make

arrangements with your new major professor and complete the Request for Change form. If you are admitted to work with a particular faculty member as your advisor, it is not guaranteed that a different advisor will agree to work with you should you decide to switch.

Graduate Program Coordinator and Department Head Responsibilities

The Graduate Program Coordinator (i.e., DS Coordinator) and/or Department Head will give final approval for several decisions that are made during your graduate career. The DS Coordinator must approve the Plan of Study Committee and changes to the Plan of Study. They are also responsible for approving your scheduled oral examination dates (thesis and dissertation defenses). The Department Head is responsible for signing the final copy of your thesis and dissertation. If your thesis involves the collection of data with human participants, the Head must also approve the request to the Institutional Review Board.

Plan of Study Committee

During the second semester, you, in consultation with your major professor and with the approval of the Graduate Program Coordinator, should select your Plan of Study Committee. Requirements for the membership of this committee are the same as for the doctoral supervisory committee. It is advantageous to select committee members that have expertise in a specific component of your disquisition. For example, if you selected as your thesis topic “Parent-adolescent conflict during puberty for Native Americans,” it is possible that your major advisor will have expertise in parenting. In this case, it would be a good idea to select committee members that have a strong knowledge of adolescence or Native Americans. Sometimes it may be important to choose a committee member with an expertise in methodology, particularly if you foresee complicated analyses.

Revisions of the Plan of Study require the completion of a Request for Change form and approval by the major professor, the Plan of Study Committee, Graduate Program Coordinator, and the Graduate Dean. The major professor and committee may be different on the doctoral Plan of Study from the master’s Plan of Study without completing a Request for Change form.

Opportunities to Enhance Your Educational Experience

Endorsement in Quantitative Methodology

We offer doctoral students the opportunity to enhance their statistical knowledge by obtaining an endorsement in quantitative methodology. This endorsement can be listed on the student’s vita alongside their degree. In order to obtain this endorsement, students must complete the following courses:

- HDFS 705 Quantitative Methods in Developmental Science (if entering with a bachelor’s degree)

- HDFS 854 Advanced Quantitative Methods in Developmental Science
- HDFS 856 Longitudinal Research Methods and Analysis

Additionally, students must choose two of the following listed courses, or other courses as approved by the DS committee:

EDUC 881: Data Management and Decision Making

EDUC 882: Institutional Analysis Techniques

EDUC 883: Survey Research

EDUC 885: Structural Equation Modeling

PSYCH 762: Advanced Research Methods and Analysis

STAT 764: Multivariate Methods

STAT 767: Probability and Mathematical Statistics

Internship Experience

For students who plan careers as college professors, multiple teaching experiences are recommended. For those who have specific research, service, or consulting careers in mind, teaching experience is helpful but other internship experiences are important as well. Internships can significantly advance the understanding of developmental science when the students work and train in a setting related to their interests (e.g., school setting, hospital or state institution, a congressional office, an agency or a center associated with child or adult development). Internships may be taken for course credit. For both teaching and internships, it is advantageous for students to document their experiences (e.g., teaching or internship evaluations) for use when applying for positions.

Graduate Certificate Program in College Teaching

Students in Developmental Science are eligible to earn a graduate certificate in college teaching. There are 9 credits required, including HDFS 802/COMM 702/STEM 810, which is already required in the DS program. A practicum/field experience (HDFS 892/EDUC 795) is also required during the semester the student is teaching. See https://www.ndsu.edu/otl/programs/college_teaching_certificate/ for more information.

Core Faculty and Affiliated Faculty

Students will choose a major advisor from among the core Developmental Science Faculty. In addition to the core, several NDSU faculty members both inside and outside of HDFS have indicated a willingness to be affiliated with the Developmental Science Ph.D. program. This means that they are a good pool to draw from when composing supervisory committees, they might offer classes that would be of interest as electives, and they might be good resources to consult at any stage of the research process.

Core Developmental Science Faculty:

Sean Brotherson, Ph.D., Professor
Heather Fuller, Ph.D., Professor
Joel Hektner, Ph.D., Professor
Carmen Kho, Ph.D., Assistant Professor
Leanna McWood, Ph.D., Assistant Professor
Melissa Lunsman O'Connor, Ph.D., Associate Professor
Wen Wang, Ph.D., Assistant Professor

Affiliated Faculty within HDFs:

Christine McGeorge, Ph.D., Professor

Funding Opportunities

Graduate Assistantships. Graduate assistantships may be awarded to students to support the teaching and research missions of the department. Most graduate assistants receive a stipend and full tuition waiver. In order to hold an assistantship, students with coursework other than disquisition or practicum credits remaining need to be enrolled a minimum of 6 credits per semester and be making adequate progress to degree. Students in their last semester before graduation must enroll in at least 1 credit and must be making adequate progress to degree. Requests for a waiver of this policy may be made in writing to the Department Head. Graduate assistants are evaluated at the end of each semester; continuation of appointment is contingent on satisfactory evaluations.

Grants, Scholarships and Fellowships

- *NDSU Graduate School.* Funding opportunities are available to graduate students in the form of grants, scholarships and fellowships. Opportunities through the Graduate School include NDSU Graduate School Dissertation Fellowships, Graduate School Teaching and Research Awards, the Doctoral Dissertation Assistantship program and non-faculty travel awards. For information on these and several other funding possibilities visit: <https://www.ndsu.edu/graduate-school/graduate-assistantships/graduate-funding-options>
- *Scholarships in the College of Health and Human Sciences.* Students may also apply for scholarships through the NDSU College of Health and Human Sciences: <https://www.ndsu.edu/health-human-sciences/current-students/scholarships>

There are a number of agencies and organizations that provide funding to doctoral students. Simply conducting a Google search of “doctoral fellowships in the social sciences” will provide several opportunities to sort through to see if you qualify! Following are some examples of where you can find information on funding opportunities that might apply—but this is *just a sample* of what is available:

- Members of Phi Upsilon Omicron Honor Society may apply for fellowships. For information visit: <https://phiu.org/fellowships>
- National Science Foundation Graduate Research Fellowship Program (NSF GRFP) <http://www.nsfgrfp.org/>
- Ruth L. Kirschstein National Research Service Award (NRSA) <http://grants.nih.gov/training/nrsa.htm>
- Guide to U.S. Department of Education Programs <https://www.ed.gov/grants-and-programs>
- National Defense Science and Engineering Graduate (NDSEG) Fellowship Program (cognitive, neural, & behavioral sciences) <https://www.onr.navy.mil/en/Education-Outreach/undergraduate-graduate/NDSEG-graduate-fellowship>
- International Dissertation Research Fellowships (IDRF) <https://www.ssrc.org/programs/idrf/>
- Mellon/ACLS Dissertation Completion Fellowships (ACLS American Council of Learned Societies) <http://www.acls.org/programs/dcf/>
- Charlotte W. Newcombe Foundation: Doctoral Dissertation Fellowships <https://newcombefoundation.org/programs/fellowships/>

Postdoctoral Opportunities

The APS Postdoc Exchange (Association for Psychological Science)
<https://jobs.psychologicalscience.org/categories/763/postdoctoral-jobs/>

Program Policies

Graduate Assistantships

Graduate assistants in Developmental Science work for a faculty member usually for 20 hours per week. Students with 20-hour assistantships receive a full waiver of all tuition as well as a stipend. International students are responsible for furnishing appropriate documents required for their employment on campus. In order to hold an assistantship, students in any semester except their last semester before graduation need to be enrolled a minimum of 6 credits per semester and be making adequate progress to degree. Students in their last semester before graduation must enroll in at least 1 credit and must be making adequate progress to degree. Requests for a waiver of this policy may be made in writing to the Department Head.

Other Financial Aid

The North Dakota Board of Higher Education also offers scholarships for returning graduate students. Application forms are on the Graduate School website. If finances are an issue for you, keep in mind that proper planning can help you minimize the length of time

required to complete your program and thus minimize expenses. Keep your financial status in mind as you follow through on your program of study.

Maintaining Continuous Enrollment

Students must maintain continuous enrollment for fall and spring semesters each year until all degree requirements are completed. Students who need to interrupt their studies may obtain a leave of absence by applying in writing to the Graduate Dean. The penalty for not maintaining continuous enrollment until submitting final thesis or paper copies can become steep. The Graduate Dean will not approve the degree until the student has registered for the appropriate number of credits of research for any Fall and/or Spring Semesters not covered by either registration or leave of absence. The number of these credits, determined by the Graduate Dean after consulting with the student and the chair of the student's supervisory committee, will amount to at least one (1) credit per semester not covered by either registration or leave of absence, but not more than four (4) credits total. A student who has not registered and/or is on a leave of absence for longer than a continuous two-year period must also reapply for admission and is subject to the degree requirements at the time of readmission. Students who move out of the state may maintain their North Dakota residence status for up to 12 months, after which it is assumed that out-of-state tuition applies.

10-Year Limit

Graduate credit for any course work that is more than ten (10) calendar years old at the time of the final examination cannot be used to satisfy a Ph.D. degree program. Following the final examination (i.e., oral defense), the candidate has one (1) additional year during which 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. Leaves of absence do not amend in any way the ten year time limit.

Checking NDSU Email Address

Each student is issued an NDSU email address (usually of the form firstname.lastname@ndsu.edu). Students are required to check this address regularly, as it will be a primary mode of communication from University faculty, staff, and administration. If students do not wish to set up their email program to make their NDSU email account primary, NDSU email can be checked without an email program via the Internet here: <https://kb.ndsu.edu/it/97800>. Alternatively, students can have all of their NDSU email delivered to another account (such as gmail). If this option is chosen, students must insure that any spam filters they use do not delete mail from NDSU.

Courses Not Eligible for Tuition Waiver

All core courses are offered at least once every two years in a form that is eligible for tuition waiver. These courses and some elective courses may also be offered at other times in an online format either through Distance and Continuing Education (DCE) or Innovative Digital Education Alliance (IDEA). In these cases, these courses would not be eligible for tuition waiver. All courses not eligible for tuition waiver are clearly marked as “DCE” or “IDEA” in the Schedule of Courses published online each semester by the Registrar. In addition, students taking courses in Public Health (PH) will need to pay differential tuition.

Participating in Commencement

Students are eligible to participate in commencement at the end of the semester in which they complete their final examination (thesis or dissertation defense). A Commencement Application form must be completed and submitted to the Graduate School for fall or spring commencement. The final examination must be scheduled at least one week prior to the date of commencement. Participating in commencement is not proof of earning a degree. The degree is earned and graduation is posted on the date that the Graduate School grants final approval to the student’s disquisition.

Full-time and Half-time Status

Full-time graduate students take 9 or more credits per semester; half-time students take 5 credits. However, taking fewer than 5 credits, if those credits are for thesis or practicum, will count for half-time status for financial aid purposes.

Awards for Graduate Students

Departmental awards are given annually to students for “Outstanding Assistance to faculty in HDFS” and for the “Mark T. Suffolk Award for Outstanding Contributions to Developmental Science”. The awards come with a certificate and a monetary prize. Awardees’ names are inscribed on a plaque in the HDFS office. At the college level, awards are also given annually in coordination with the graduate school for Teaching and Research, and one DS student may be nominated for each.

Authorship Guidelines

HDFS has an “Authorship Guide” that provides general principles for deciding issues of authorship and recommends procedures for making and documenting these decisions. Among the principles are that authorship should be discussed at the initiation of a project, but ultimately be determined by the relative contribution of participants. Publishing and authorship expectations should be discussed between students and potential advisors prior to the final selection of an advisor. Publications resulting from a student’s disquisition should, under most circumstances, list that student as the lead author. Exceptions might be considered in the case where the student is using a faculty member’s data. Authorship on additional articles from the data based on new research questions and analysis should be

determined based on relative contributions. More details on these guidelines and a template to use to document authorship decisions are available from the Graduate Coordinator.

Approval Required on Publication and Grant Submissions

Any student who submits a manuscript for publication in a journal or book must first have the approval of a DS faculty member who is a coauthor or the approval of their advisor, if there is no coauthor who is a DS faculty member. Students who intend to submit a proposal for external research funding must also have the approval of a DS faculty member and must route the proposal through NDSU Sponsored Programs Administration.

Protection of Human Subjects

All research using human participants, including the use of secondary data sources, requires approval by the University's Institutional Review Board (IRB). Required CITI training guidelines, information, and links to the Novolution system where you can submit a research project for IRB approval can be found on the NDSU IRB website (<https://kb.ndsu.edu/research/148421>). NDSU requires that the faculty advisor serve as PI on all research, including thesis and dissertation projects.

Unethical or Unprofessional Conduct

Students who violate policy or otherwise display unethical or unprofessional conduct may face disciplinary action ranging from a letter placed in the student's file documenting such conduct to expulsion from the program. The student has a right to an appeals process, following the "Grievances" process outlined on the next page.

Academic Standards

Only grades of A, B, C, or S are acceptable for graduate credit. All courses taken by a graduate student for which grades are given will be used in calculating the grade point average, except where a course has been repeated. Both grades will appear on the transcript, but only the second grade will be used in calculating the grade point average. (A specific course can be retaken only once, and only three total courses can be retaken). Satisfactory or Unsatisfactory is assigned for some non-didactic courses (HDFS 798/890/892/894/899), and they are not used in calculating the GPA. Acquisition of more than two grades of C, D, F or U may be grounds for dismissal upon recommendation by the program administrator.

To be in a scholastic status of GOOD STANDING and to receive a graduate degree, a student must maintain a cumulative grade average of at least 3.0.

Any student in GOOD STANDING whose cumulative grade average drops to less than 3.0 at any time of attendance is automatically placed on academic WARNING. Any student admitted in CONDITIONAL status because of grade deficiency is automatically placed on academic WARNING. A student on academic WARNING cannot register for the following semester until the grades for the current semester post. If a student on academic WARNING fails to achieve a cumulative grade average of at least 3.0 in the subsequent semester of attendance then the student will be placed on academic PROBATION.

A student on academic PROBATION may not continue the pursuit of a graduate degree program without a recommendation from the appropriate program administrator and a waiver from the Dean of the Graduate School. This recommendation must include a review of the student's current status and a proposed plan of remediation which provides the student an opportunity to return to a cumulative GPA of at least 3.0 within one additional semester (fall or spring). The remediation plan must be submitted and approved in time for the student to register for the academic term (fall or spring) that immediately follows the term in which the student was placed on probation. If the student does not submit an acceptable plan in time to enroll for the next academic term (fall or spring), or if the cumulative GPA is not at least 3.0 after this one additional semester, the student will be dismissed from their graduate program.

A student on academic PROBATION is not eligible for a graduate assistantship or tuition waiver. These minimal scholastic requirements apply to all students enrolled in the Graduate School. Additional requirements may exist for certain graduate departments and programs.

Grievances

- Step 1. The first step in grievance resolution is to discuss the problem with the faculty person it concerns. If resolution cannot be obtained between concerned parties, the student should move to Step 2. Do not proceed to Step 2 until Step 1 has been completed.
- Step 2. It is the right and responsibility of the Department Chair to work toward conflict resolution within the Department. The student may request a meeting with the individual faculty person and the Department Chair.
- Step 3. Only if satisfactory resolution is not forthcoming in Step 2, the concerned parties move to Step 3, contacting the Dean of the college and or the Dean of the NDSU Graduate School.

Resolution of grievances beyond this stage should follow grievance policies of the university.

Recommended Electives

HDFS

HDFS 711 Youth Development
HDFS 714 Contemporary Youth Issues: Promoting Optimal Mental Health in Youth
HDFS 723 Foundations in Integrative Aging Studies
HDFS 760 Aging Policy and Advocacy
HDFS 824 Special Topics Socioemotional

School of Design

ADHM 705 Environments and Aging

Biological Sciences

BIOL 825 Biology of Aging
BIOL 859 Evolution

Communication

COMM 702 Introduction to College Teaching in the Humanities and Social Sciences
COMM 704 Qualitative Research Methods in Communication
COMM 712 Emerging Trends in Teaching and Learning Online

Criminal Justice

CJ 702 Program Evaluation
CJ 707 Juvenile Corrections
CJ 709 Criminal Justice Policy
CJ 722 Crime and the Life Course
CJ 760 Police and Race Issues
CJ 768 Gender and Justice

Education

EDUC 753 Managing/Monitoring Learning
EDUC 851 Adult Learning
EDUC 853 Instructional Methods for Adult Learners
EDUC 871 Planning and Conducting Needs Assessment
EDUC 872 Qualitative Research Methods
EDUC 881 Computer Data Management and Decision Making
EDUC 882 Institutional Analysis Techniques
EDUC 883 Survey Research
EDUC 884 Program Evaluation Research
EDUC 885 Structural Equation Modeling Fundamentals

Health, Nutrition, and Exercise Science (HNES)

HNES 703 Graduate Biomechanics of Sport and Exercise
HNES 713 Graduate Exercise Physiology
HNES 726 Nutrition in Wellness
HNES 727 Physical Activity Epidemiology

HNES 729 Grant Writing for the Health Professional

HNES 760 Skeletal Muscle Physiology

HNES 777 Scholarly Writing and Presenting in Health, Nutrition, and Exercise Science

Nursing

NURS 715 Population Health / Epidemiology for Advanced Practice Nursing

NURS 810 Health Promotion and Disease Prevention (2 credits)

Psychology

PSYC 731 Fundamental Processes/Cognition

PSYC 733 Social Judgment

PSYC 756 Empir. Supp. Interventions II

PSYC 760 Res. Meth/Visual/Cogn/Neurosci

PSYC 761 Applied Research Methods

PSYC 762 Advanced Research Methods / Analysis

PSYC 763 Grant Writing for Psychological Scientists

PSYC 770 Testing and Assessment

PSYC 771 Social/Health Psych Research

PSYC 782 Emotions

PSYC 787 Adv. Social Psych/Health

Public Health

(most PH courses are not open to students outside of that program and tuition may not be covered by a tuition waiver, but students can ask permission)

PH 704 Public Health Management and Policy

PH 705 Global Health

PH 706 Essentials of Epidemiology

PH 712 Public Health research methods

PH 720 Environmental Health

PH 722 Applied Community Health

PH 725 Promoting Health through Policy, System, and Environment

PH 741 Social and Behavioral Sciences in Public Health

PH 765 Cultural Competence in Health Professions

Sociology

SOC 700 Qualitative Methods

SOC 701 Quantitative Methods

SOC 723 Social Theory

Statistics

STAT 725 Applied Statistics

STAT 726 Applied Regression and Analysis of Variance

STAT 730 Biostatistics

STAT 732 Introduction to Bioinformatics

STAT 761 Advanced Regression

STAT 764 Multivariate Methods

STAT 767 Probability and Mathematical Statistics I
STAT 768 Probability and Mathematical Statistics II
STAT 774 Generalized Linear Models
STAT 786 Advanced Inference
STAT 851 Bayesian Statistical Inference
STAT 852 Longitudinal Data Analysis

Women and Gender Studies

WGS 790 Graduate Seminar

List Of Forms

	Name of Form	When Needed
Departmental Forms (on Blackboard)	HDFS Thesis Contract HDFS Individual Study Contract HDFS Dissertation Contract	When registering for any semester in which you plan to take thesis, individual study, or dissertation credits
	HDFS Cumulative Graduate Student Activity Report for Evaluation of Progress	Due by April 15 every year to the DS Coordinator
	Funding Request Form	To request approval to use professional development funds, must be requested well in advance of travel or other use.
	Travel or Purchase Reimbursement Form	To request reimbursement after traveling or purchasing. Must be submitted ASAP after purchase.
	HDFS Comprehensive Exam: Intent to Submit Form	Due prior to the start of the semester in which the student intends to take the comprehensive exam
Forms on Graduate School Website	Master's Degree Plan of Study and Supervisory Committee	By end of 2 nd semester
	Doctoral Degree Plan of Study and Supervisory Committee	By end of 2 nd semester if already have MS degree; by end of 6 th semester if not.
	Request for Change: Plan of Study, Advisory/Supervisory Committee	Any time a change is made in courses taken or committee members
	Graduate School Notification of Scheduled Examination	Due at least 1 week before the date of the thesis defense, preliminary exam, and/or dissertation defense to the Graduate School
	Graduate School Commencement Application	If participating in commencement, due October 31 or March 15 to the Graduate School, as long as defense will be completed by one week before commencement

These forms are available either on the Graduate School website (http://www.ndsu.edu/gradschool/current_students/forms/) or on the Developmental Science Resources Blackboard page.

Core Developmental Science Faculty

Sean Brotherson (Ph.D., Oregon State University)

My doctoral degree is in Human Development and Family Studies from Oregon State University, with added emphases in gerontology and family policy. My master's degree is in Family Science from Brigham Young University, with an emphasis in family life education. My areas of interest include research, teaching and program and resource development in fathering, parent-child relationships, couple and marriage relationship quality, family well-being, grief and bereavement, individual and family transitions, and family life education. I am a member of the National Council on Family Relations and work with various organizations in family life education and family policy, primarily through the Cooperative Extension Service.

Heather Fuller (Ph.D., University of Michigan)

My research focuses on social relationships and their effect on well-being across the lifespan. Specifically, my interests include family dynamics and aging, intergenerational relationships, and sociodemographic and cross-cultural variation in lifespan development. My teaching focuses on aging, lifespan development, family dynamics, and aging-related resources, policies and advocacy. I received my bachelor's degree in Psychology and Spanish Studies from the University of Minnesota, and both my master's and doctoral degrees in Developmental Psychology from the University of Michigan. I am a member of the Gerontological Society of America and the Society for the Study of Human Development.

Joel Hektner (Ph.D., University of Chicago)

My interests and research are in social emotional learning (SEL) as a means of well-being promotion and problem prevention in school-age children; peer affiliation patterns and peer influences on behavior; parent training programs; and family and school conditions that facilitate optimal experiences (flow) and optimal development. I enjoy teaching courses in socioemotional development, statistics, and research methods. My doctoral field of study was in Human Development at University of Chicago. I earned my B.A. in Psychology from Princeton University. I am a member of the Society for Prevention Research, the Society for Research in Child Development, the American Educational Research Association, and the National Council on Family Relations.

Carmen Kho (Ph.D., University of California Merced)

As an international scholar and immigrant, I am interested in how different contexts (i.e., cultural background, family dynamics and parenting dimensions, and neighborhood characteristics) shape our development and wellbeing. My research also focuses on the timescale in which these developmental processes occur (i.e., moment-to-moment, day-to-day, across years). I received my doctoral degree in Psychological Sciences from the University of California Merced, with an emphasis in both Developmental and Health Psychology. My master's degree is in Clinical Psychology from the California State University Dominguez Hills. I am a member of the Society for Research in Child Development and the Society for Research on Adolescence.

Leanna McWood (Ph.D., Auburn University)

My research focuses on how social contexts relate to adolescent development. I am particularly interested in how organized activity involvement and peer relationships contribute to sleep and adolescent functioning. My teaching interests are in child and adolescent development including peer and family relationships/processes. I received my bachelor's degree from Miami University in psychology (with a minor in criminology) and my Master's and Doctoral degrees from Auburn University in Human Development and Family Science. I also completed a postdoctoral fellowship at Auburn University for two years. I am a member of the Society for Research in Child Development and the Society for Research on Adolescence.

Melissa Lunsman O'Connor (Ph.D., University of South Florida)

I received a bachelor's degree in Psychology (with a minor in Creative Writing) from St. Cloud State University, a master's degree in Experimental Psychology from the University of Wisconsin Oshkosh, and a Ph.D. in Aging Studies from the University of South Florida. My research focuses on characterizing changes in cognitive and functional abilities across the adult lifespan, and my ultimate goal is to promote healthy aging. Specifically, my research interests include: examining age-related differences and changes in cognitive and functional abilities, such as driving, among healthy adults and clinical populations; quantitative methods and psychometrics; interventions for improving cognition, health, and everyday functioning; and attitudes toward dementia. My teaching interests include adult development and aging, lifespan development, cognitive psychology, and research methods. I am a member of the American Psychological Association (Division 20, Adult Development and Aging) and the Gerontological Society of America.

Wen Wang (Ph.D., Michigan State University)

I am interested in using quantitative methods to understand the diversity of socialization processes in families and the inequality among children. In particular, my research aims to understand how the development of child mastery motivation, communication, and prosocial behaviors is shaped by parenting since infancy and whether the socialization varies across cultural and ethnic context. I received my bachelor's degree in Applied Psychology from Tianjin Normal University, China, a master's degree in Educational and Developmental Psychology in the Institution of Psychology, Chinese Academy of Sciences, and a doctoral degree in Human Development and Family Studies at Michigan State University. I am a member of the Society for Research in Child Development.

Helpful Resources About Graduate School

Following is a list of resources that contain information and insights that will help you negotiate different phases of the graduate school process, from the first year to finishing a dissertation. There is also information about funding for graduate education. The resources have been grouped according to topics. However, some sources cover multiple topics. These resources may be available through the library (either directly at the library or via Interlibrary Loan). The following website may also be a good resource: <http://www.apa.org/apags/resources/index.aspx>. If these sources raise additional questions for you, it is recommended that you consult with an academic advisor.

Beginning Graduate School

1. Rossman, M. H. (2002). *Negotiating graduate school: A guide for graduate students*. 2nd ed. Thousand Oaks, CA: Sage.
Great information on practical, social, and emotional aspects of graduate school.
2. Calarco, J.M. (2020). *A field guide to grad school: Uncovering the hidden curriculum*. Princeton, NJ: Princeton University Press.
3. Shore, Z. (2016). *Grad school essentials: A crash course in scholarly skills*. University of California Press.

Funding

1. Hamel, A. P., & Furlong, J. S. (2011). *The graduate school funding handbook*. 3rd ed. Philadelphia, PA: University of Pennsylvania Press.
Pre-application and in-grad school funding.
2. Diffley, P. (2005). *Paying for graduate school without going broke*. New York: Princeton Review.
Good financial advice, money management, funding sources.

In Graduate School

1. Johnson, B. W. & Huwe, J. W. (2003). *Getting mentored in graduate school*. Washington, DC: American Psychological Association.
2. Marx, D. (2023). *Mentor me please: Building a mentorship community for doctoral success*. Self-published.
3. Mauch, J. E., & Park, N. (2003). *Guide to the successful thesis and dissertation: A handbook for students and faculty*. 5th ed. New York: Marcel Dekker.
4. Foster, S. L. & Cone, J. (2019). *Dissertations and thesis from start to finish: Psychology and related fields*. 3rd ed. Washington, DC: American Psychological Association.

5. Peters, R. L. (1997). *Getting what you came for: The smart student's guide to earning a master's or Ph.D.* Rev. ed. New York: Farrar, Straus, and Giroux.
6. Kline, R. B. (2019). *Becoming a behavioral science researcher: A guide to producing research that matters.* 2nd ed. New York: Guilford.
7. Hyatt, L. & Roberts, C. M. (2023). *The dissertation journey: A practical and comprehensive guide to planning, writing, and defending your dissertation.* 4th ed. Thousand Oaks, CA: Corwin.
8. White, G. E. (2017). *The dissertation warrior: The ultimate guide to being the kind of person who finishes a doctoral dissertation or thesis.* Triumph Heart International.
9. <https://teachpsych.org/page-1603066> and <https://teachpsych.org/DivisionTeachingResources>
Great for teaching resources

In Graduate School: Underserved and Non-traditional Groups

1. Farmer, V. L. (2006). *The Black student's guide to graduate and professional school success.* Charlotte, NC: IAP LCC.
2. Toth, E. (2008). *Ms. Mentor's new and ever more impeccable advice for women and men in academia.* Philadelphia, PA: University of Pennsylvania Press.
3. Leonard, D. (2001). *A woman's guide to doctoral studies.* Buckingham, PA: Open University Press.
4. Negrón-Gonzales, G., & Barrera, M. L. (2023). *The Latinx Guide to Graduate School.* Durham, NC: Duke University Press.
5. Martínez-Vu, Y., & Chavez-Garcia, M. (2024). *Is Grad School for Me?: Demystifying the Application Process for First-Gen BIPOC Students.* Univ of California Press.
6. *Proud and Prepared: A Guide for LGBT Students Navigating Graduate Training.*
<https://www.apa.org/apags/resources/lgbt-guide>
7. *Resources Guide for Psychology Graduate Students of Color.*
<https://www.apa.org/apags/resources/ethnic-minority-guide>
8. *Resource Guide for Psychology Graduate Students with Disabilities.*
<https://www.apa.org/pi/disability/resources/publications/resource-guide>

Developmental Science Ph.D. Student Manual

*Developmental Science Ph.D. program, Department of Human Development and Family Science
College of Health and Human Sciences*

This form acknowledges your receipt of the Developmental Science Ph.D. Student Manual. Please review the document closely and ask the Developmental Science Program Coordinator or your advisor if you have any questions before signing this form.

By September 5, you must complete this form and submit it to the Developmental Science Program Coordinator.

- ☐ I have read and understood the policies and procedures outlined in the Developmental Science Ph.D. Student Manual.
- ☐ I agree to abide by the professional standards and requirements for graduate students as described in the manual.

Signed: _____ Date: _____

Printed name _____

Agreement to Abide by Professional and Academic Standards

Developmental Science Ph.D. program, Department of Human Development and Family Science

Graduate students are professionals in training, and being an effective professional requires more than what can be learned in a classroom setting. In addition to meeting academic standards, graduate students are expected to conduct themselves in an ethical, responsible, and professional manner. The purpose of this document is to connect you to student and professional standards of conduct and create a record of your agreement to abide by these standards during your graduate program. When you complete and sign this document, you agree to:

- Abide by the NDSU Student Code of Conduct.
<https://www.ndsu.edu/fileadmin/policy/601.pdf>
- Abide by the NDSU University research conduct standards.
<https://kb.ndsu.edu/research/147306>
- Abide by the NDSU Graduate School policies and scholastic standards.
<https://catalog.ndsu.edu/graduate/graduate-school-policies/#academicstandardstext>
- Abide by the Developmental Science Doctoral Program standards of professional conduct. (see pages 16-17 of the manual)

Upon officially entering the program (and no later than September 5), you must complete this form and submit it to the Developmental Science Program Coordinator.

- ☐ I have reviewed the standards identified above and/or have taken relevant training and agree to fully abide by them.
- ☐ I understand the process for establishing consequences for violations of professional and academic standards and my rights of review and appeal.
- ☐ I understand that if I violate the professional standards indicated above, consequences could include action up to dismissal from the program.

Signed: _____ Date: _____

Printed name _____