

MS PSYCHOLOGY

PROGRAM HANDBOOK

This document provides an overview of the MS Program in Psychology.

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Department of Psychological Science

Introduction to the Handbook

The following handbook is designed to guide students through the process of obtaining a Master of Science (MS) Degree in Psychology within the Department of Psychological Science at Northern Michigan University. The handbook provides degree requirements and additional policies of the Department. Success in this graduate program will depend on students' own initiative and judgement as they navigate all program requirements, many of which take place outside the traditional classroom setting.

Department Mission

The mission of the Department of Psychological Science is to promote the discovery, dissemination, and application of the scientific principles of psychology by facilitating academic programming, scholarship, and professional engagement both within the University and the community at large.

MS Program Overview

The Master of Science (MS) Degree in Psychology prepares students for doctoral programs in psychology or closely related fields, such as neuroscience, cognitive science, and behavioral psychology. This program provides:

- intensive research experiences in a variety of areas of psychological science
- statistical and methodological training required to examine basic or applied topics in psychological science
- advanced curriculums across subdisciplines of psychological science.

In short, the Psychology MS degree focuses both on the theoretical and hands-on aspects of psychological science. In addition to the satisfaction of completing an advanced degree, many graduates of this program will pursue training at the doctoral level while others will be prepared to work in a wide variety of occupations in which an advanced understanding of psychological theory, research methodology, and/or research experience is of value. If you are interested in pursuing a doctoral degree in psychology and/or are interested in learning the psychological theory and science behind our understanding of human behavior, this MS degree is for you!

MS in Psychology Curriculum

Overview of Coursework and Program Requirements*

The M.S. program requires 32 credit hours of graduate work. To obtain a graduate degree, a student must achieve a cumulative graduate grade point average (GPA) of 3.0 (B). If a student's cumulative GPA drops below 3.0 in any semester, or if a student earns less than a B in more than six (6) credit hours, the student will be placed on probation. *Based on 2023-2024 Graduate Bulletin.

Total Credits Required	32
Research Design and Analysis PSY 505 Advanced Research Methods in Behavioral Sciences PSY 506 Advanced Statistics in the Behavioral Sciences AIS 535 Using Scholarly Library Resources in Support of Graduate Research	8 3 3 2
Electives Choose 18-21 credits of graduate level courses with the PSY or ABA prefix.	18-21
Master's Project Capstone Option (3) PSY 590 Applied Research (3)	3-6
Thesis Option (6) PSY 593 Research Development (3) PSY 599 Thesis (3)	

Example Plans of Study

Below are several example plans of study for the various different directions you can take your MS degree. All plans of study need to meet the program requirements specified on the previous page. During (or before) you first semester, you should meet with your advisor to develop a plan of study that works for you using the **Plan of Study Form** at the Graduate Studies website: https://nmu.edu/graduatestudies/forms-graduate-students.

Example 1: Thesis Option for Students Pursuing PhD Programs

Semester	Course	
1st Fall	PSY 505: Advanced Research Methods in Beh. Sciences	3
	AIS 535: Scholarly Lib. Resources in Support of Grad. Research	2
	PSY/ABA Elective*	3
	PSY 506: Advanced Statistics in Behavioral Sciences	3
1st Winter	PSY/ABA Elective*	3
15t Willel	PSY 588: Topics in Psychological Science	1
	PSY 589: Advanced Research	1
	PSY 593: Research Development (Thesis)	3
2nd Fall	PSY/ABA Elective*	3
ZIIU Fall	PSY 588: Topics in Psychological Science	1
	PSY 589: Advanced Research	1
	PSY 599: Thesis**	3
2nd Winter	PSY/ABA Elective*	3
Zna winter	PSY 588: Topics in Psychological Science	1
	PSY 589: Advanced Research	1
	Total	32

Example 2: Capstone Option

Semester	Course		
	PSY 505: Advanced Research Methods in Beh. Sciences	3	
1st Fall	AIS 535: Scholarly Lib. Resources in Support of Grad. Research	2	
	PSY/ABA Elective*	3	
1st Winter	PSY 506: Advanced Statistics in Behavioral Sciences	3	
ist winter	PSY/ABA Electives*	5	
2nd Fall	PSY/ABA Elective*	8	
2nd Winter	PSY 590: Applied Research (Capstone)	3	
Zna winter	PSY/ABA Elective*	5	
	Total	32	

^{*}Students can enroll in any PSY or ABA elective course. It is recommended that students take these rotating courses: PSY504 Behavioral Neuroscience, PSY561 Cognition: Advanced Theory and Methods, PSY541 Advanced Developmental Psychology, and PSY535 Social Psychology: Advanced Theory and Methods. Students should meet with their advisor each semester to discuss the course options. **Thesis proposal must be completed before enrolling in PSY599.

Example 3: Thesis Option for Students Pursuing PhD program with Certificate in Applied Behavior Analysis

Semester	Course	
	PSY 505: Advanced Research Methods in Beh. Sciences	3
1st Fall	AIS 535: Scholarly Lib. Resources in Support of Grad. Research	2
	ABA 501: Concepts and Principles of Behavior Analysis	3
	PSY 506: Advanced Statistics in Behavioral Sciences	3
1st Winter	ABA 503: Behavior Assessment	3
	ABA 504: Behavior-Change Procedures	3
	PSY 593: Research Development (Thesis)	3
2nd Fall	ABA 505: Conceptual Analysis of Behavior	3
	ABA 507: Personnel Supervision/Management in Beh. Services	3
2nd Winter	PSY 599: Thesis	3
Ziiu wiiitei	ABA 506: Practice and Ethics in Behavior Analysis	3
	Total	32

Example 4: Capstone Option with Certificate in Applied Behavior Analysis

Semester	Course	
	PSY 505: Advanced Research Methods in Beh. Sciences	3
1st Fall	AIS 535: Scholarly Lib. Resources in Support of Grad. Research	2
	ABA 501: Concepts and Principles of Behavior Analysis	3
	PSY 506: Advanced Statistics in Behavioral Sciences	3
1st Winter	ABA 503: Behavior Assessment	3
	ABA 504: Behavior-Change Procedures	3
	ABA 505: Conceptual Analysis of Behavior	3
2nd Fall	ABA 507: Personnel Supervision/Management in Beh. Services	3
	PSY/ABA Elective	1-3
	PSY 590: Applied Research (Capstone)	3
2nd Winter	ABA 506: Practice and Ethics in Behavior Analysis	3
	PSY/ABA Elective	1-3
	Total	32

Course Registrations

Students sign up for content courses (PSY500 - PSY564; ABA501 – ABA508) via mynmu.nmu.edu. Forms are required to register for the following courses:

Course	Form
PSY589 Advanced Research	Research/Practicum Credits Registration Form
PSY590 Applied Research	Research/Practicum Credits Registration Form
PSY592 Psychology Practicum	Research/Practicum Credits Registration Form
PSY593 Research Development	Research/Practicum Credits Registration Form
PSY598 Directed Studies	Directed Study Form – Graduate Level
PSY599 Thesis	Registration for Thesis Credits
ABA581 Behavior Analysis Practicum I ABA582 Behavior Analysis Practicum II	Research/Practicum Credits Registration Form

Required Course Descriptions:

Research Design and Analysis Courses

PSY 505 - Advanced Research Methods in Behavioral Sciences 3 cr.

Description: Survey of designing qualitative, quantitative, and mixed methods research in the behavioral sciences. The course will emphasize database searching and thesis preparation.

PSY 506 Advanced Statistics in the Behavioral Sciences 3 cr.

Description: Provides a conceptual approach to learning descriptive and inferential statistical procedures in the behavioral sciences, including topics on statistical decision theory, analysis of variance, factorial designs, multiple comparison procedures, correlation, and regression. This course emphasizes the use of statistical software.

AIS 535 Using Scholarly Library Resources in Support of Graduate Research 2 cr.

Description: This course guides graduate students through the process of locating, critically selecting, and managing scholarly sources. Emphasis also on graduate program-specific scholarly writing rules of style compliance. Hands-on practice searching of online databases and other Internet resources is an integral part of the course. Issues discussed and applied include plagiarism, authorship & publishing research, using program-specific databases, organization, critical thinking, content evaluation, and copyright basics. Appropriate for any discipline at any graduate level.

Thesis/Capstone Courses

PSY 590 Applied Research 3 cr.

Description: A capstone experience designed to evaluate the student's ability to analyze key theories, principles and current research. Focusing on an identified professional or organizational issue, problem, or need, the student, employing their analytical skills, will complete and publicly present a scholarly research project comprehensively addressing the subject.

or

PSY 593 Research Proposal Development, 3 cr.

Description: Development of the thesis proposal.

PSY 599 Thesis 3 cr.

Description: The student develops a thesis with the help of a thesis committee. Appropriate thesis forms must be completed prior to enrollment. The thesis must be approved by the thesis committee and the Office of Graduate Education and Research. The student should consult the department and the Office of Graduate Education and Research for specific requirements.

Elective Course Descriptions:

PSY 500 Development of Modern Psychology 3 cr.

Description: Content addresses the beginnings of modern psychology from the late 19th century founding of the American Psychological Association (1892) through the 20th-century developments of physiological, learning theory, cognitive, Gestalt, humanistic, behavioral, social, psychoanalytic, and the various applied psychologies of the 21st century. Students will also learn about the structure of the American Psychological Association and its role in both the academic and professional components of the discipline.

PSY 501 Applied Sport Psychology 3 cr.

Description: This course will address the theory, research, and practice of sport psychology that includes topics such as motivation, psychological skills training, confidence, concentration, etc.

PSY 504 Behavioral Neuroscience 3 cr.

Description: Foundation course in the biological basis of behavior: neuronal function, sensory and motor systems, limbic system, and higher cortical functions.

PSY 507 Scientific and Professional Ethics for Psychologists 3 cr.

Description: Ethical principles and practices in the conduct of psychological research and professional psychology, with an emphasis on the American Psychological Association ethics code.

PSY 508 Program Evaluation 3 cr.

Description: Basic methods of evaluation research allowing the student to undertake systematic evaluation of community and social programs.

PSY 520 Gender and Diversity in Sport 3 cr.

Description: This course is an exploration of how ideologies and inequalities related to gender, diversity and race may be constructed, perpetuated and / or challenged in sport.

PSY 535 Social Psychology: Advanced Theory and Methods 3 cr.

Description: Provides an overview of the major research areas in social psychology, including their major theories and historical origins and examples of recent research.

PSY 541 Advanced Developmental Psychology 3 cr.

Description: Theory and research concerning physiological and psychological development with an emphasis on current research findings and methodology.

PSY 545 Applied Positive Psychology 3 cr.

Description: A combination of theoretical and practical applications of positive psychology. This course includes a focus on the background and history of positive

psychology, and includes original research, and practical experience through application of positive psychology.

PSY 550 Psychological Assessment 3 cr.

Description: Theory, development, and evaluation of personality, intelligence, and diagnostic assessment techniques and tests. Emphasis is placed on appropriate usage and interpretation of instruments for assessing personality, mood, intelligence, and psychopathology.

PSY 561 Cognition: Advanced Theory and Methods 3 cr.

Description: Advanced course in cognition and selected issues in cognitive psychology. Includes theoretical review of memory and cognition issues and seminar-style presentations of selected topics in cognition.

PSY 564 Psychological Interventions 3 cr.

Description: This course explores theory and applications of adult psychotherapy interventions for correcting or resolving mental or emotional problems.

PSY 570 Applying Research in Sport for Improved Performance 3 cr.

Description: This course is designed to educate students on how to locate and analyze scholarly work in the field of applied sport psychology and coaching education. Students will learn about qualitative and quantitative data collection and analysis while preparing a research proposal.

PSY 587 Advanced Seminar in Psychological Science 3 cr.

Description: Advanced study of specialized content areas of psychology which have a research or theoretical base, but which are not regularly offered as part of the curriculum. Note: This course may be repeated for credit if topic differs.

PSY 588 Topics in Psychological Science 1 cr.

Description: A weekly seminar for students in the MS Program in Psychological Science. Students, faculty, and/or external speakers will make research, career development, or other psychological science related presentations during the weekly seminar. Note: This course may be repeated.

PSY 589 Advanced Research 1-4 cr.

Description: Advanced research activity under the supervision of a member of the department. Students enrolled in PY589 will participate in research-related laboratory activities in psychological science. Faculty supervisor and research project(s) must be established prior to enrollment in the course.

Note: This course may be repeated.

PSY 591 Internship 2-6 cr.

Description: A supervised work experience designed to afford the student the opportunity to apply concepts learned in the classroom to actual challenges faced by training, development, and performance improvement professionals. Work is assigned and directly

supervised by the participating organization with the student reporting regularly to the faculty member assigned to monitor and grade the student experience. Specifics of the student internship learning plan must be developed prior to enrollment in the course; enrollment requires instructor approval.

PSY 592 Psychology Practicum 1-4 cr.

Description: Focus will be on providing students with experience in a professional psychology setting. May be repeated for a total of 8 credits.

PSY 598 Directed Studies 1-4 cr.

Description: Independent study under the supervision of a member of the department. Supervisor and study must be selected prior to enrollment in the course and appropriate directed study forms must be completed.

Applied Behavior Analysis Courses

ABA 501 Concepts and Principles of Behavior Analysis 3 cr.

Description: This course provides a comprehensive introduction and review of the philosophical underpinnings, concepts and principles relevant to the experimental and applied analysis of behavior.

ABA 502 Research Methods in Applied Behavior Analysis 3 cr.

Description: This course will provide a comprehensive review of the concepts, experimental designs, and methods of analysis used in behavior analytic research and practice. Single-subject methodologies, graphing, and visual analysis will be emphasized.

ABA 503 Behavior Assessment 3 cr.

Description: This course will address conceptual and technical content relating to the identification of target behaviors, implementing behavior recording strategies, conducting functional behavior assessments, and review of issues relating to the assessment of behavior.

ABA 504 Behavior-Change Procedures 3 cr.

Description: This course will address conceptual and technical content relating to specific procedures used to increase, decrease, modify, or maintain socially relevant behaviors.

ABA 505 Conceptual Analysis of Behavior 3 cr.

Description: This course provides a comprehensive review of major areas of conceptual and theoretical research in behavior analysis. The course will cover topics relating to the basic research in complex operant conditioning, theoretical extensions of behaviorism, verbal behavior, and behavior analytic approaches understanding human behavior.

ABA 506 Practice and Ethics in Behavior Analysis 3 cr.

Description: This course will provide a comprehensive introduction to the ethical standards and practices of behavior scientists and applied behavior analysts. The course will cover topics relating to the history and purpose of ethical guidelines, principles of

ethical practices, and the roles of scientists, practitioners, and professional organizations in society. Special emphasis will be placed on the ethical standards and responsibilities of applied behavior analysis in the clinical setting.

ABA 507 Personnel Supervision and Management in Behavior Services 3 cr.

Description: This course covers content relating to the effective training and maintenance of staff performance in behavioral health services. Topics to be emphasized include methods of supervision, instructional and training procedures, performance management, process analysis, and professional requirements of supervision.

ABA 508 Experimental Analysis of Behavior 1-3 cr.

Description: This course is designed to develop competence in understanding how principles of behavior are discovered and described in the context of basic research.

ABA 581 Behavior Analysis Practicum I 3 cr.

Description: The primary objective of this course is to deliver to students an experiential exposure to behavior analytic procedures and consulting practices. This course is designed to meet the experience standards and supervisory requirements as stipulated by the Behavioral Analysis Certification Board (BACB). This course will place emphasis on basic consultation and direct implementation. Note: This course may be repeated for up to nine credit hours.

ABA 582 Behavior Analysis Practicum II 3 cr.

Description: The primary objective of this course is to deliver to students an experiential exposure to behavior analytic procedures and consulting practices. This course is designed to meet the experience standards and supervisory requirements as stipulated by the BACB. This course will place emphasis on program management, consultation and supervisory strategies. Note: This course may be repeated for up to six credit hours.

ABA 589 Research in Behavior Analysis 2 cr.

Description: The primary objective of this course is to guide students through the process of conceptualizing, developing, and implementing research in the field of behavior analysis. Note: This course may be repeated for up to four credit hours.

Note that elective credits may also be taken from outside the department upon approval from your advisor, graduate program director, and department head.

Thesis Research Project

A thesis research proposal will be evaluated by the student's thesis committee before thesis research may formally begin and before the student is advanced to candidacy. The thesis committee includes (1) the student's adviser (chair of the committee), (2) one other member of the Department of Psychological Science, and (3) an appropriately qualified member from outside the department. A faculty member in another department may substitute for the department member, with approval of both the thesis adviser and the department. An open oral defense of the thesis is required. The thesis will demonstrate the student's capacity for independent work of acceptable scientific caliber. It must be completed within three years of completion of all course requirements.

Outline of the Thesis Process

- Obtain advisor
 - Oversees work on thesis
 - Serve as Thesis Committee Chair
- Form thesis idea (this might come before picking out an advisor)
- Form thesis committee
 - o Work with committee chair to determine committee members
 - Obtain https://nmu.edu/psychology/sites/psychology/files/2021-06/Thesis_Committee_Membership.docx proposal with literature review, hypotheses, proposed methods, and proposed analytic plan
 - Oral proposal/presentation to thesis committee
- The proposal must be approved by your committee https://nmu.edu/graduatestudies/forms-graduate-students
- Obtain IRB or IACUC approval
- Conduct thesis project (Register for PSY593 Research Development for semester prior to taking PSY599 Thesis)
 - Funding options (go to <u>www.nmu.edu/grantsandresearch</u> for opportunities)
 - 1. Department support may be available
 - 2. Spooner Grant
 - Due 9/15, 1/15, or 3/15 each year
 - 3. Excellence in Education Grant
 - Due 2/15 each year
- Write thesis in consultation with thesis advisor
 - o Follow APA style
 - Follow formatting guidelines posted at http://www.nmu.edu/graduatestudies/node/32
- Present and defend thesis
 - Public oral presentation, which may contain a private defense with the committee
- Committee approval must be obtained and documented using the <u>Final Thesis</u>
 Approval Form

- Make thesis revisions if necessary
- Submit Thesis to Graduate College
 - Online submission via link at Graduate Studies page (<u>http://commons.nmu.edu/submit.html</u>)

Thesis Timeline				
Semester	1 st Fall	1 st Winter	2 nd Fall	2 nd Winter
Tasks	 Develop Preliminary Topic and Proposal in PSY505 Use AIS535 for finding relevant background literature 	 Identify Chair Form Committee Develop Analytic Plan for the Thesis in PSY506 Thesis Proposal (may be in summer) Apply for IRB/IACUC approval 	Obtain IRB/IACUC approval Conduct Thesis Project	 Submit Thesis Draft to Committee Defend Thesis Submit Final Thesis to Grad School

Note that the timeline above is recommended in order to make timely progress in this program.

General Thesis Guidelines

Each thesis project and committee is unique and ultimately the criteria for a particular thesis project will be determined by the thesis committee. The following guidelines should be used to help establish the expectations you should have for the thesis project.

Organization. Your thesis should include the following sections (and subsections):

- Abstract
- Introduction
- Literature Review
- Rationale and Hypotheses
- Method
 - Participants/subjects
 - General design/procedure
 - Specific description of all tasks and/or other measures (e.g., questionnaires,
 EEG or other neural measures)
 - Description of the independent variable(s) and control conditions/variables
 - Analytic strategy (i.e., how will you test your hypotheses)
- (Note the above information should be included in the proposal & defense/final thesis)
- Results section
 - o Should include at least one graph of the main findings
 - Should include at least one table
- Discussion
- Conclusion section/statement

Demonstrate Mastery. Your thesis project should demonstrate mastery in the content area. This requires appropriate review and synthesis of the field. Therefore, you should plan to include at least 20 peer-reviewed references and 10 pages of synthesis of the literature in the literature review section. Similar guidelines apply to the discussion section.

Capstone Project

A capstone project consists of the completion of a comprehensive product, such as an indepth and analytical review of published literature. Like a thesis, a capstone provides a demonstration of content knowledge and the ability to critically evaluate published scientific work. A thesis, however, goes beyond this by requiring an empirical investigation to study a research question. For the capstone, students will develop ideas during the program, typically beginning in PSY505 Advanced Research Methods in the Behavioral Sciences and AlS535 Using Scholarly Library Resources in Support of Graduate Research. Students will receive guidance from a faculty member, serving as the student's advisor. Students completing a capstone will register for PSY590 Applied Research in their final semester. PSY590 consists of working with an instructor and peers to finalize the paper and to present the paper during a formal meeting with department faculty. Some flexibility is allowed for the capstone, as agreed to by the academic advisor and PSY590 instructor, but projects typically will consist of a product listed below. The body of these papers (excludes front matter and references) is typically a minimum of 50 pages.

Capstone Project Options

- Comprehensive Literature Review and/or Metanalysis: This project option consists
 of a review of literature on a specific topic in psychological science. Ideal papers
 explore topics in need of greater coverage in the literature and provide concluding
 analytical judgements of the current state of knowledge and future directions.
 Papers must provide data-illustrative components in the form of tables and figures.
- Formal Grant Proposal or Two Short Research Proposals: A grant or research
 proposal is similar to the requirements for a comprehensive literature review,
 except that a proposal provides hypotheses, aims for exploring these hypotheses,
 and description of empirical procedures to test hypotheses.
- Clinical Case Study: A comprehensive description of a clinical case in which the student has conducted evidence-based assessment and intervention procedures.
 Literature relevant to the clinical diagnoses and treatments is required.
- Other projects: Another project might be pursued, provided that it is consistent in depth and length of other examples provided here as is approved by the Capstone Coordinator.

Graduate Assistantships

The Department of Psychological Science offers graduate teaching assistantships for a limited number of students each year. Students awarded assistantships typically teach lab sections for 100 and 200 level undergraduate psychology courses, such as introduction to psychology. In addition to gaining valuable teaching experience, graduate assistants receive a tuition waiver and a stipend.

Graduate teaching assistantship positions are granted for one year with a second year generally awarded to graduate assistants who satisfied the conditions of the assistantship, maintained at least a 3.0 GPA for each semester of the assistantship, and provided quality instruction. Please review the general requirements and responsibilities in the Graduate Assistant Handbook posted at http://www.nmu.edu/graduatestudies/node/23.

New applications for the MS Program received prior to Feb 1st will be reviewed and given consideration for these graduate assistantships. Students must be on the thesis track to be eligible for a graduate assistantship.

In the cover letter for your graduate application, please include the following:

- 1. A brief description of previous academic and relevant professional experience
- 2. A description of future academic and/or career goals that a Master's Degree in Psychological Science will contribute to
- A ranking of your preferred laboratory sections to teach (see listing below). We cannot
 guarantee that you will be assigned to your preferred laboratory sections, but your
 preferences will be helpful as we make our scheduling assignments.
 - Possible courses include: Intro to Psychology, Brain and Behavior, Research Methods, Psychological Statistics, Social Psychology, Advanced Methods in Psychophysiology, and others.

In addition to graduate assistantships within the Department of Psychological Science, NMU also offers graduate assistantships in other university offices.

Facilities, Equipment, Faculty, and Staff

Please see the website for an updated list of Facilities, Equipment, and Faculty within the department.