Department of Health Outcomes Research and Policy Graduate Student Handbook

2020 - 2021

Auburn University
Harrison School of Pharmacy
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Department Overview

The Department of Health Outcomes Research and Policy (HORP) consists of faculty with complementary skills and expertise. The areas of research emphasis in HORP integrate theories and structure from various disciplines within health care, and also from outside health care. The department’s ultimate goal is to contribute to improvements in patient health and well-being. This is accomplished by studying pharmacy practice, health care delivery, and health outcomes. Research areas focus on:

- Patient health behaviors
- Provider care behaviors
- Health outcomes assessment
- Patient reported outcomes assessment
- Pharmacoepidemiology and drug safety
- Organizational change and innovation adoption
- Implementation science research
- Health information technology
- Pharmacy informatics
- Comparative effectiveness research
- Medication adherence
- Behavioral economics
- Health services research
- Pharmaceutical economics and policy
- Health disparities
- Omics and informatics

The objective of the graduate program is to prepare students for independent, theory-based research to improve healthcare delivery and patient outcomes and well-being. The HORP program uses a student-centered approach, customizing the plan of study to meet specific learning needs for the chosen field of study.
Faculty Profile

C. Edward Chou, PhD, Associate Professor
Edward Chou received his B.S. degree in Pharmacy and M.S. in Pharmaceutical Sciences from National Taiwan University, his M.S. in Biostatistics from the University of Michigan-Ann Arbor, and his Ph.D. in Social and Administrative Sciences from the University of Wisconsin-Madison. He also completed a postdoctoral fellowship in Health Economics and Outcomes Research at the Center for Clinical and Genetic Economics at the Duke Clinical Research Institute. Dr. Chou is a health services researcher with multidisciplinary training background in pharmacy, public health, and outcomes research, and is experienced in interdisciplinary research collaborations. His research focuses on evaluating the impact of medical interventions and health-related policies/programs on healthcare access and use among vulnerable populations, in hope of developing effective interventions to address issues of health disparities.

Brent I. Fox, PharmD, PhD, Associate Professor
Originally from Daphne, Alabama, Brent Fox holds Doctor of Pharmacy and Doctor of Philosophy degrees, both from Auburn University Harrison School of Pharmacy. Prior to earning the PhD, Brent worked in the health-system software development industry. He is the former Director of the Center for Pharmacy Informatics at Shenandoah University’s Dunn School of Pharmacy. Dr. Fox’s scholarly activities focus on pharmacy informatics education and on the optimal use of healthcare information technology to improve medication-related patient outcomes. He is active in several national, professional associations. Dr. Fox has coauthored two informatics books and coauthors columns in national pharmacy publications.

Kimberly B. Garza, PharmD, MBA, PhD, Associate Professor and Graduate Program Officer
Kimberly Garza received a Doctor of Pharmacy from Auburn University. She completed a Pharmacy Practice Residency at Erlanger Health System in Tennessee and practiced as a clinical pharmacist before returning to graduate school. She then completed an MBA followed by a PhD in Health Outcomes Research, both at West Virginia University. She also served as a Fellow of the American Foundation for Pharmaceutical Education. Dr. Garza’s research involves application of behavioral economic theory to study preventive health behaviors, including healthful diet, physical activity, immunization, and medication adherence. Specifically, she studies incentive systems that help individuals overcome present-biased preferences in order to engage in and maintain preventive health behaviors. She also serves as a member of the Alabama Obesity Task Force and is active in several national and international professional organizations.

Richard A. Hansen, PhD, RPh, Professor and Dean
Richard Hansen is Sandra Kent Gilliland and David Louie Gilliland Professor and Dean of the Harrison School of Pharmacy. He holds a bachelor’s degree in pharmacy from the University of Wisconsin, and a PhD in Social, Administrative, and Clinical Pharmacy from the University of Minnesota. His research focuses on helping policymakers, clinicians, and consumers make more informed decisions about medication use. He also is interested in patient safety issues, including medication errors and adverse drug reactions. His work has been funded by numerous organizations, including the National Institutes of Health, the Agency for Healthcare Research and Quality, the Foundation for the National Institutes of Health, the National Pharmaceutical Council, State Medicaid programs participating in the Drug Effectiveness Review Project, and the U.S. Food and Drug Administration.
Jan Kavookjian, MBA, PhD, Associate Professor
Jan Kavookjian joined the Harrison School of Pharmacy in 2006. Her research areas include behavior sciences and outcomes research in chronic disease management (especially diabetes, obesity, cardiovascular disease), studying the impact of interventions on patient health behaviors (medication adherence and others) and provider behaviors (prescribing, counseling, monitoring), and measure development/assessment for patient reported outcomes (satisfaction, quality of life, depression). She has written four book chapters, including the 2011 Motivational Interviewing chapter in the ACCP PSAP Book 8, 7th Ed, is an author on peer-reviewed publications that have been cited over 600 times, has delivered over 100 presentations, posters, or papers on subjects related to motivational interviewing (MI) and patient communication. Dr. Kavookjian is also active nationally, having served on the Research Committee for the American Association of Diabetes Educators (AADE), and consistently contributing presentations, MI trainings, and other efforts for AADE, APhA, AACP, CDC, and others. She is also expert faculty on the Merck Speakers Bureau for the topics, Motivational Interviewing, Health Literacy Communication, and Shared Decision-Making in chronic disease management.

Surachat Ngorsuraches, PhD, Associate Professor
Surachat Ngorsuraches, a pharmacist by training, earned his doctoral degree in Social and Administrative Pharmacy from the School of Pharmacy at the University of Wisconsin-Madison. Since that time, he has more than 15 years of experience in teaching, conducting research, and serving the pharmacy profession. Recently, he received a research grant from the National Multiple Sclerosis Society (NMSS) to examine patients’ treatment preferences and their willingness-to-pay for disease-modifying therapies. He has also worked on engaging patients and their family members in patient-centered multiple sclerosis research for which he received a grant award from the Patient-Centered Outcomes Research Institute (PCORI). Dr. Ngorsuraches has been an invited speaker to numerous professional meetings and is well published in the area of pharmaceutical economics and policy research. He has been an active member of International Society of Pharmacoeconomics and Outcomes Research (ISPOR). He chaired the ISPOR Asia consortium and served as an executive board member for the consortium.

Jingjing Qian, PhD, Associate Professor
Jingjing Qian holds a PhD in Pharmaceutical Health Services Research from University of Maryland School of Pharmacy and a master degree of Epidemiology at University of Maryland School of Medicine. Dr. Qian’s research interests reside in Health outcome and pharmacoepidemiology research, particularly with regards to comparative effectiveness and safety of drug products. She is also interested in mental health and disability research, treatment optimization and outcomes for patients with multiple chronic conditions, medication adherence, and quality of care among vulnerable populations. The goal of her research is to provide effective strategies and interventions to improve population health and eliminate health disparities. Her research has been funded by AACP and the U.S. Food and Drug Administration.
**Daniel W. Surry, EdD, Professor and Associate Dean**

Dan currently serves as the school’s Associate Dean for Curriculum & Assessment. He holds a Doctor of Education in Instructional Technology from the University of Georgia, a M.S. in Instructional Design from the University of South Alabama, and a B.A. in Mass Communication from the University of Alabama. He has been on the faculty at the University of South Alabama, the University of Southern Mississippi and the University of Alabama and served as Instructional Technologist at California State University, Fresno. His research and consulting interests focus on how technology, organizations, and social systems influence each other. He is Co-Editor of three books, including the Wiley Handbook of Learning Technology (2016). In addition, he has written numerous articles and book chapters and presented his research at local, regional, national, and international conferences. Dan and his wife, Melinda, an Elementary School Teacher and Instructional Coach, reside in Auburn.

**Salisa Westrick, PhD, Professor and Department Head**

Salisa Westrick holds a BS degree in Pharmacy from Chulalongkorn University, Thailand, MS in Training and Development from Illinois State University and PhD in Social and Administrative Sciences in Pharmacy from University of Wisconsin-Madison. She utilizes organizational theories and implementation science principles to guide her research program. Her research interests include: (a) implementation of pharmacy-based patient-care services, (b) pharmacists’ roles in public health and primary care, and (c) program evaluation in health services. Most of her research has been in the area of pharmacy-based immunization services and patient care services in community pharmacies. She has also partnered with Alabama Department of Senior Services to increase access to health care among Medicare population.
## Important Contact Information

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<td>Work Study Student</td>
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Honor Code and Confidentiality Agreement

Honor Code
The Student Academic Honesty Code applies to all graduate students in the Department of Health Outcomes Research and Policy. Violations of the Student Academic Honesty code and potential sanctions are detailed in Title XII, Chapter 1200 of the SGA Code of Laws. Potential violations to the Student Academic Honesty Code will be reviewed with the student before being referred to the Student Academic Honesty Committee. See the policy at https://sites.auburn.edu/admin/universitypolicies/Policies/AcademicHonestyCode.pdf

Confidentiality Agreement
Research conducted by Department faculty and students often involves patient information protected by State and Federal Laws. Your participation in this research requires strict confidentiality and protection of patient information. You will be required to sign data use agreements for access to existing patient data resources, and all research involving human subjects or data derived from human subjects must be reviewed and approved by the Auburn University Institutional Review Board (IRB). Information related to the IRB and protocol submission forms can be found at http://www.auburn.edu/research/vpr/ohs/. Information detailing the Privacy Rule and the role of the IRB in protecting patient privacy can be found at http://privacyruleandresearch.nih.gov/irbandprivacyrule.asp.

For those involved in department teaching activities, your access to student information is governed by the Family Educational Rights and Privacy Act (FERPA), which protects the privacy of student records. Information regarding FERPA can be found at http://www.auburn.edu/administration/registrar/ferpa.html and http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html
Advising and Advising Committees

Advisory Committee

Students entering the graduate program will be assigned a temporary advisor (typically the Graduate Program Officer), who shall serve as the student’s advisor until the student selects a thesis or dissertation advisor. The temporary advisor will work with the student to select courses for the first and the second semesters of study. During the first academic year (Fall, Spring and Summer semesters), students will participate in three research rotations with the HORP faculty. Students are expected to work with the supervising HORP faculty for approximately 20-30 hours total over the course of each 6-week rotation. Students will submit their preferences for faculty members with whom to rotate at the beginning of the student’s first semester. Assignments will be made considering student preferences and faculty availability.

At the end of the first year of study students must submit an advisor selection ranking form (https://auburn.app.box.com/file/673381805550). This ranking form will be reviewed by HORP faculty considering fit, advisor capacity for advising additional students, and funding. Advising decisions will attempt to maximize the best outcome for both students and faculty advisors. The selected advisor will then work with the student and HORP faculty to select two additional HORP faculty members to serve on the Advisory Committee. The Advisory Committee will advise the student on graduate coursework and serve as professional mentors prior to formation of a Thesis or Dissertation Committee. The student should meet with his or her Advisory Committee at a minimum of twice per year, in the Fall and Spring semesters. A link to the Committee Meeting Advisory Committee can be found at https://auburn.app.box.com/file/673387618658. This report should be completed and submitted to the Graduate Program Officer at the conclusion of each committee meeting.

Thesis and Dissertation Committees

When the student is ready to begin thesis or dissertation work, the Advisory Committee (see above) is dissolved and replaced by a permanent Thesis and Dissertation Committee. Note that the Advisory Committee members may be asked to continue on as members of the Thesis or Dissertation Committee, or new members may be selected in consultation with the advisor. Should there be a need to change the major advisor, a request should be made to the Graduate Program Officer and the Department Head.

In addition to the major advisors and two other members of the Graduate Faculty of the HORP Department, the Thesis and/or Dissertation Committee must have at least one member external to the department, but holding graduate faculty status within the University. Committee members external to the University are allowed with submission of appropriate documentation. The advisor will help students select and invite other members to form the rest of the committee. Once a thesis or dissertation committee is formed, frequency of meetings will be determined by the committee, but should occur at least once per academic year. A link to the Committee Meeting Report can be found at https://auburn.app.box.com/file/673387618658. This report should be completed and submitted to the Graduate Program Officer at the conclusion of each committee meeting.
Graduate Program Requirements

Overview
The long-range goal of the graduate program in Health Outcomes Research and Policy is to produce graduates who have unique and needed capabilities for addressing problems and opportunities regarding the medication use process in our society. This includes studying many facets of medication use, including areas such as the safety and effectiveness of existing medications, access to medications, behavior and decision-making by patients and providers, healthcare delivery and communication models affecting medication use, use of medications by patients (adherence), outcomes of medications or healthcare interventions, and evaluation of policies influencing all aspects of medication use. Research conducted by faculty and students in the Department addresses many of these different aspects of medication use, and therefore our graduate program is designed to be equally diverse, exposing you to a spectrum of different aspects of the medication use process in society. At the same time, you will be able to customize your curriculum and research to focus on the specific aspects of medication use in society that you find most interesting.

General requirements and required courses must be completed by all students in both the Master’s and PhD Program. Master’s degree students must complete at least 30 semester hours of coursework, including at least 6-credit hours of statistics. Master’s students must also complete thesis requirements. PhD students must complete at least 60 semester hours of coursework, including at least 12-credit hours of statistics. PhD students must pass the doctoral comprehensive exams and complete dissertation requirements.

Student Learning Outcomes

Students graduating from the Health Outcomes Research and Policy M.S. program will:

1. Apply integrated knowledge of social, behavioral and economics sciences to health services research

   Students should be able to apply principles related to: health services program planning and evaluation, social and behavioral theories, pharmaceutical economics, health outcomes and policy as well as pharmacoepidemiology to health services research with the overall goals to address health care problems, improve quality, and reduce cost.

2. Demonstrate developing ability to synthesize scientific evidence

   Students should be able to analyze literature relevant to the field, select pertinent information and present it in a concise manner.

3. Demonstrate developing ability to select appropriate research methods and statistical analyses for given scenarios

   Students should be able to identify appropriate research design, method, and statistical analysis as well as justify as to why they are appropriate. Also they need to recognize the key limitations.

4. Conduct a scholarly research project within the area of expertise

   Under their advisor’s guidance, students should be able to carry out a research project, perform appropriate analyses, and discuss the results and implications in written and verbal communication.
5. Demonstrate acceptable scientific communication skills

Students should be able to disseminate research ideas and evidence to research communities including verbal and written communication.

**Students graduating from the Health Outcomes Research and Policy doctoral program will:**

1. Apply integrated knowledge of social, behavioral and economics sciences to health services research

   Students should be able to apply principles related to: health services program planning and evaluation, social and behavioral theories, pharmaceutical economics, health outcomes and policy as well as pharmacoepidemiology to health services research with the overall goals to address health care problems, improve quality, and reduce cost.

2. Demonstrate ability to synthesize scientific evidence

   Students should be able to analyze literature relevant to the field, select pertinent information and present it in a concise manner.

3. Demonstrate ability to select appropriate research methods and statistical analyses for given scenarios

   Students should be able to identify appropriate research design, method, and statistical analysis as well as justify as to why they are appropriate. Also they need to recognize the key limitations.

4. Provide evidence of being independent theory-based researcher

   Students should be able design, carry out, and evaluate outcomes of a rigorous study using theories, principles and methods within their expertise in order to address literature gaps.

5. Demonstrate acceptable scientific communication skills

   Students should be able to disseminate research ideas and evidence to various stakeholders using verbal and written communication and in both informal and formal venues.

**Required Courses**

**Core Departmental Courses**

**HORP 7510: HEALTH SERVICES DELIVERY AND EVALUATION (3 credits – Fall Odd Years)**
Introduction to basic methods and frameworks for undertaking research and program evaluation within health services organizations and systems.

**HORP 7520: SOCIAL AND BEHAVIORAL THEORY IN HEALTH (3 credits – Spring Even Years)**
Introduction to the basic theories of behavior and intervention used in practice and research to evaluate changes in health, humanistic, and economic outcomes among patients.

**HORP 7530: PHARMACEUTICAL ECONOMICS, OUTCOMES, AND POLICY (3 credits – Fall Even Years)**
Introduction to concepts relevant to pharmaceutical outcomes, economics, and policy. The course provides foundational knowledge surrounding healthcare and evaluation of health outcomes.
HORP 7540: PHARMACOEPIDEMIOLOGY METHODS AND APPLICATIONS (3 credits – Spring Odd Years)
The course covers topics in pharmacoepidemiology focusing on the methods and applications of analyzing large, healthcare claims databases and electronic medical records.

Graduate Research Seminar

HORP 7950 (MS) / HORP 8950 (PhD): GRADUATE RESEARCH SEMINAR (1 credit)
All students and faculty in the Department participate in the weekly Graduate Research Seminar (Fall and Spring). Seminar is designed to socialize students to the research process, cover current topics not covered in other didactic courses, and serve as a sounding board for discussion of ideas and research in progress. Students enrolled in the MS program should register for HORP 7950, and students enrolled in the PhD program should register for HORP 8950. PhD students must register for the Graduate Research Seminar each semester for the first two years of study, obtaining a minimum of 4 credit hours. MS students should register for a minimum of 3 credit hours. Students are expected to continue to attend and participate in seminar each semester they are enrolled in the graduate program.

Research Methods

HORP 7820: RESEARCH METHODS IN HEALTH SCIENCES (2 credits – Fall)
The course is designed to provide a comprehensive introduction to the primary research methods used in clinical and health services research. It introduces various research designs including experimental and non-experimental, as well as quantitative and qualitative research methods.

Statistics Requirement
All students are required to be competent in programming and analysis with Statistical Analysis Software (SAS). Satisfying this requirement is a prerequisite for HORP 7540 – Pharmacoepidemiology: Methods and Applications. Exceptions to this requirement include those students who are granted a waiver under the following conditions: 1) Made an A or a B in a comparable didactic course at another institution and have provided adequate documentation of the course’s applicable content, or 2) Have already demonstrated SAS proficiency by working on a project here in the HORP department using SAS to analyze real data. Formal SAS training is available from the Department of Statistics.

STAT 6110: SAS PROGRAMMING AND APPLICATIONS (3 credits – Fall, Spring, and Summer)
Application of SAS routines to obtain statistical analyses for common statistical methods and interpreting output

Optional Statistics Sequences
In addition to SAS training, students must take at least 6 credits of statistics to satisfy requirements for a master’s degree, and at least 12 credits of statistics to satisfy requirements for the PhD degree. Several different course sequences exist to satisfy the statistics requirement. Students should consult with the Graduate Program Officer and their Advisory Committee to determine which statistics courses are most appropriate for their plan of study. In general, students interested in the social, behavioral, or pharmacy practice-based research areas should consider taking their statistics courses from ERMA (Educational Research, Measurement and Analysis). Students interested more in health outcomes research or pharmacoepidemiology should take their statistics courses from the Department of Statistics (STAT). Students should not mix and match courses from multiple tracks, unless granted permission from their major advisor. Students interested in other administrative aspects of the healthcare system and medication use process may consider taking their statistics from either of these Departments. Some courses are offered via distance learning (i.e., ERMA 7306 is distance version of ERMA 7300),
but students should take the campus-based course unless special request is provided by the HORP Graduate Program Officer.

**Educational Research, Measurement, and Analysis**

**ERMA 7300/7306: DESIGN AND ANALYSIS IN EDUCATION I (3 credits – Fall and Spring)**
Basic methods of inferential analysis including t-tests, between and within subjects ANOVA, mixed ANOVAs and hierarchical designs as they are utilized in educational research.

**ERMA 7310/7316: DESIGN AND ANALYSIS IN EDUCATION II (3 credits - Fall, Spring, and Summer)**
Bivariate and multiple correlation and regression analysis, trend analysis, analysis of covariance, and logistic regression, as they are utilized in educational research.

**ERMA 8320/8326: DESIGN AND ANALYSIS IN EDUCATION III (3 credits – Fall and Spring)**
Discriminate analysis, MANOVA, canonical correlation, path analysis, exploratory and confirmatory factor analysis, and hierarchical linear modeling as they are utilized in educational research.

**Department of Statistics**

**STAT 7000: EXPERIMENTAL STATISTICS (4 credits – Fall, Spring, and Summer)**
Paired and independent sample t-tests, ANOVA, F-tests, contrasts, tests for trends, multiple comparisons, CR and RCB designs of experiments, regression.

**STAT 7010: EXPERIMENTAL STATISTICS II (3 credits – Spring)**
Advanced topics in experimental design: writing linear models for experiment-expected mean squares, variance components, nested designs, Latin Square Designs, split plot designs, ANOVA and multiple regression.

**STAT 7020: REGRESSION ANALYSIS (3 credits – Fall)**
Introduction to the method of least squares as it applies to regression and analysis of variance. Simple linear regression, multiple regression, model selection, and diagnostics.

**Grant Writing**
A grant writing course is offered to expose students to the fundamentals of proposal writing. Ideally, this course should be taken during the fall of the second year of study in order to prepare students for writing competitive fellowship or dissertation funding applications that might support their graduate work during subsequent years. This course is required for both the MS and PhD degrees.

**DRDD 7000: GRANT WRITING (3 credits – Fall)**
Introduction to grant writing, with focus on the structure of common NIH grant applications. Students will prepare a mock NIH grant application, and a mock review will be conducted for these proposals.

**Additional Requirements for International and Non-Healthcare Students**
International students are required to take a semester long course to become familiar with graduate education in the US and at Auburn University.

**UNIV 7000: INTERNATIONAL GRADUATE EXPERIENCE (0 credits – Fall)**
The goal of this course is to allow new international graduate students a semester-long opportunity to become familiar with the not only the inner workings of Auburn University, but also American and Alabamian life and culture.
Graduate students who are not familiar with the U.S. health care system should attend several sessions within Unit I of PYDI 9320. This course covers basic concepts related to the delivery of healthcare and pharmaceutical care in the US.

International students may be required to take additional coursework through the English as a Second Language Program. Relevant coursework includes INTL 1800 or INTL 1820, as determined by the Graduate Program Officer, in addition to INTL 1830. This requirement may be waived through a minimum score of 23 on the speaking section of the Internet Based TOEFL or a 50 on the SPEAK test offered by the Auburn University ESL Department, or other exceptional evidence of English language proficiency.

**Elective Courses**

In consultation with the Graduate Program Officer and their Advisory Committee, students may select from a number of graduate electives that meet their needs and interests. Note that only courses at the 6000 level or higher count towards degree requirements. Students may take courses below the 6000 level if no other graduate course exists to meet their needs. Courses below the 6000 level will still be covered by graduate student assistantship tuition waivers, as long as the student does not exceed the credit hour maximum during their graduate study (110% of credit hours required for the degree). Students are encouraged to consider auditing such courses to reduce the risk of exceeding the maximum allowable hours for a tuition waiver (see [https://web.auburn.edu/alpha/audit.aspx](https://web.auburn.edu/alpha/audit.aspx)). Grades earned in undergraduate courses will not be used in calculation of the GPA for either retention or graduation, but will appear on the graduate transcript. The Auburn University Course Bulletin provides a complete listing of courses offered on the Auburn campus. The following provides a summary of courses relevant to particular aspects of research in Health Outcomes Research and Policy. Availability of elective courses will vary by year and semester.

**Department Electives**

**HORP 7720: MOTIVATIONAL INTERVIEWING FOR HEALTH BEHAVIORS (3 credits)**
Prerequisites: open to HORP graduate students in the MS or PhD programs; graduate students from other graduate programs may be admitted with instructor permission. The course includes Motivational Interviewing (MI) concepts, current research applications, and MI intervention development and skills training.

**Economics**

**ECON 3020: INTERMEDIATE MICROECONOMICS (3 credits)**
Prerequisite ECON 2020 or ECON 2027. Theory of pricing under varying market conditions and distribution of income among the factors of production.

**ECON 5020: ADVANCED MICROECONOMICS (3 credits)**
Prerequisite ECON 3020 and MATH 1610. Mathematical analysis of market-based pricing and production. Includes the economics of information and uncertainty, and strategic behavior.

**ECON 6700/6706: HEALTH ECONOMICS (3 credits)**
Prerequisite ECON 3020. Analysis of the economics of health care, including demand for and supply of health care, and health care policy.

**ECON 7000: MANAGERIAL ECONOMICS (3 credits)**
Microeconomic theories of the firm and of markets, with emphasis on their applications to current business issues.
ECON 7110: MICROECONOMICS I (3 credits)
Prerequisite ECON 3020. Consumer behavior and market models of competition and monopoly. Traditional and contemporary theories of consumer/household

ECON 4600: ECONOMETRICS I (3 credits)
Prerequisite ECON 3600 and STAT 2610. This course provides students with a basic statistical toolbox that can be used to analyze economic data and evaluate economic models. We cover topics relating to simple and multivariate linear regressions, maximum likelihood estimation, serial correlation and heteroscedasticity, simultaneous equations, qualitative response models, and basic time series.

ECON 7130: MATHEMATICAL ECONOMICS (3 credits)
Prerequisite ECON 3020 and ECON 6030. Fundamental mathematical methods in economics and econometrics: linear and matrix algebra, calculus, comparative statistics, optimization, concavity, constrained optimization dynamics, difference equations, and differential equations.

ECON 7310: ECONOMETRICS I (3 credits)
Advanced treatment of the standard linear model of least square theory, including assumptions and properties of the SLM, and the statistical testing of behavioral hypotheses.

ECON 7330: MICROECONOMETRICS (3 credits)
Prerequisite ECON 7310. Econometric techniques for applied microeconomics. Limited dependent variable models, survival and count data analysis, and selection bias.

ECON 7340: MACROECONOMETRICS (3 credits)
Prerequisite ECON 7310. The analysis of economic time series and the identification and estimation of parameters in multiequation models.

Information Systems

Management Information Systems

ISMN 6040/6046: ADVANCED BUSINESS DATA COMMUNICATIONS (3 credits)
Prerequisite (MNGT 7120 or ISMN 7120) or (MNGT 3140 or ISMN 3140). Experienced-based class building on domain knowledge of prerequisites; gives personal and team experience in data communications technology and networks.

ISMN 6270/6276: CURRENT ISSUES IN INFORMATION SYSTEMS FOR ORGANIZATIONS (3 credits)
This course covers current issues in Information Systems Management and Technology. As such, topics may differ from semester to semester. The objective of the course is to allow students to become familiar with issues such as emerging technologies, information systems and their role in vertical portals, and the role of information systems in industry. Course is designed to enable students to take it twice with subject change. Course may be repeated for a maximum of 6 credit hours.

ISMN 6670/6676: SECURITY AND INFORMATION ASSURANCE (3 credits)
This course covers the fundamentals of computer security and information assurance from a management perspective. The student will be exposed to security and information assurance topics such as security policies, confidentiality and ethics. Organizational issues of security and methodologies for information assurance will be discussed from a managerial perspective.
ISMN 6690/6696: KNOWLEDGE MANAGEMENT AND ORGANIZATIONAL LEARNING (3 credits) Introduction to knowledge management and its role in organizational decision-making and learning. Studies of issues related to management, creation, and use of knowledge as well as issues related to system design and implementation.

ISMN 6720/6726: ELECTRONIC COMMERCE (3 credits) A managerial and interdisciplinary investigation into the many different business activities done on the Internet including buying and selling products and services, servicing customers, collaborating with stakeholders inside and outside the organization, social networking, and learning, among others. Students will come away with a broad knowledge of electronic commerce and its implications to modern business life and social life. Credit will not be given for both ISMN 5720/5723 and ISMN 6720/6726.

ISMN 6770/6776: INFORMATION SYSTEMS ETHICS (3 credits) Prerequisite (PHIL 1020 or PHIL 1040) and ISMN 3140. Information systems ethics, including: fundamentals; professional and user standards; and issues related to privacy, freedom of expression, intellectual property, and software development.

ISMN 7020/7026: BUSINESS TELECOMMUNICATIONS AND NETWORKS (3 credits) Provides an understanding of voice and data communications, e.g., networks (LAN, internet), protocols standards, legislation and project development, so that managers might utilize telecommunications effectively.

ISMN 7140/7146: MANAGING END USER COMPUTING (3 credits) Studies MIS from user’s perspective, and compares it with the roles of the professional department. Course covers support of desktop applications, data usage, and communications.

ISMN 7730/7736: MANAGEMENT OF INNOVATION (3 credits) Prerequisite BUSI 7220. The process of product and service innovation on two levels: managing product design and general strategies for managing multiple innovation streams.

ISMN 7870/7876: EXPERT SYSTEMS IN BUSINESS (3 credits) Prerequisite BUSI 7220. Study of expert systems and other knowledge-based systems in the organization, including relevant concepts, methodologies, architectures, strategies, and issues.

Mobile Software Development - Undergraduate courses for foundational programming knowledge

COMP 1210: FUNDAMENTALS OF COMPUTING I (3 credits) Introduction to the fundamental concepts of programming from an object-oriented perspective. Emphasis on good software engineering principles and development of the fundamental programming skills in the context of a language that supports the object-oriented paradigm.

COMP 2210: FUNDAMENTALS OF COMPUTER SCIENCE II (4 credits) Prerequisite COMP 1210 Software development in the context of collections (e.g., lists, trees, graphs, hashtables). Communication, teamwork, and a design experience are integral course experience.

COMP 2710: SOFTWARE CONSTRUCTION (3 credits) Prerequisite COMP 2210. Intensive experience in software construction, to include topics such as testing, debugging, and associated tools; configuration management; low-level file and device I/O; systems and event-driven programming.
COMP 3710: WIRELESS SOFTWARE ENGINEERING (3 credits)
Prerequisite COMP 2710. Software engineering for wireless applications: specification, process, testing, and performance evaluation. Design and development of wireless application layer software, including current protocols.

Mobile Software Development for Healthcare
Students have the opportunity to enroll in course(s) focused on mobile health (mHealth). This coursework introduces students to challenges and solutions via mobile technology. Offered as a Special Topics (see below) course(s), students work with departmental faculty to design a learning experience that fits their interests. Collaboration with the Auburn’s Computer Science and Software Engineering program is possible.

Computer Science and Software Engineering

COMP 6000/6006: WEB APPLICATION DEVELOPMENT (3 credits)
Design and implementation of web sites and associated applications. Emphasis on user interface design and information organization and presentation. Fall, Spring. Departmental approval.

COMP 6010/6016: INTERACTIVE APPLICATIONS IN VISUAL BASIC (3 credits)
Prerequisite COMP 6000. Design and implementation of applications like simulations, frontends to Excel for modeling, interfaces to databases and multimedia applications. Departmental approval.

COMP 6020/6026: ADVANCED WEB APPLICATION DEVELOPMENT (3 credits)
Prerequisite COMP 6000. Design and implementation of interactive web applications in Java as applets and servlets. Use of concepts like security, internationalization, multi-threading and server/client architectures. Fall, Spring. Departmental approval.

COMP 6030/6036: OBJECT-ORIENTED TECHNOLOGIES (3 credits)
Prerequisite COMP 6000. Object-oriented design and implementation of a variety of applications including databases and intelligent agents with one or more object-oriented programming language. Departmental approval.

COMP 6120/6126: DATABASE SYSTEMS I (3 credits)
Theoretical and applied issues related to the analysis, design, and implementation of relational database systems. Departmental approval.

COMP 6600/6606: ARTIFICIAL INTELLIGENCE (3 credits)
Introduction to intelligent agents, search knowledge representation and reasoning, machine learning. Departmental approval.

COMP 6620/6626: USER INTERFACE DESIGN AND EVALUATION (3 credits)
Theory and practice of designing interfaces for interactive systems, usability engineering techniques; implementing and evaluating interfaces. Departmental approval.

Organizational Theory and Management

POLI 7260: ORGANIZATIONAL THEORY AND ADMINISTRATIVE BEHAVIOR (3 credits)
The structure and functioning of government organizations with an emphasis on applied management and on leadership techniques.
POLI 8260: PUBLIC ORGANIZATIONAL THEORY AND MANAGEMENT (3 credits)
The development and refinement of research on administrative and organizational theory in public management. Credit will not be given for both POLI 7270 and POLI 8260.

EDLD 7520: LEADERSHIP AND THE LEARNING ORGANIZATION (3 credits)
Management of schools as learning organizations; issues related to student learning and achievement through attention to organizational components.

EDLD 8200/8206: ASSESSMENT AND EVALUATION IN LEARNING ORGANIZATIONS (3 credits)
Study of assessment and evaluation practices that enable learning organizations to use data for decision-making purposes. May count either EDLD 8200 or EDLD 8206

EDLD 8250: ORGANIZATIONAL POWER, POLITICS AND POLICY FORMATION (3 credits)
Analysis of social forces, antecedent movements, and political actions affecting organizations. The study of policy development and practice.

EDLD 8260/8266: THEORY AND DEVELOPMENT OF ORGANIZATIONS (3 credits)
Theoretical frameworks of educational organizations. May count either EDLD 8260 or EDLD 8266.

EDLD 8340: TRANSFORMATIONAL PROCESSES AND ORGANIZATIONAL CHANGE (3 credits)
Organizational and transformational change at personal, interpersonal, and institutional levels.

ISMN 6690/6696: KNOWLEDGE MANAGEMENT AND ORGANIZATIONAL LEARNING (3 credits)
Introduction to knowledge management and its role in organizational decision-making and learning. Studies of issues related to management, creation, and use of knowledge as well as issues related to system design and implementation.

COMM 7480: SEMINAR IN ORGANIZATIONAL COMMUNICATION (3 credits)
An in-depth approach to the study of communication processes within the setting of modern organizations.

COMM 7600: MASS COMMUNICATION THEORY (3 credits)
Explores major areas of concern to the theoretical study of mass communication and the social impact of mediated messages.

MNGT 7150/7156: MANAGING ORGANIZATIONAL CHANGE (3 credits)
Advanced study of organizational behavior in individual and group interactions within the environment of business organizations. Departmental approval.

MNGT 7160/7166: STRATEGIC MANAGEMENT OF INNOVATION AND TECHNOLOGY (3 credits)
Development of competitive advantages in high-technology businesses. Examines product/service innovation and technology development and commercialization strategies, and related issues and processes.

MNGT 7420/7426: SEMINAR IN ORGANIZATION CHANGE (3 credits)
Prerequisite MNGT 7150. The diagnostic and evaluation issues in organizational change.

MNGT 8300: SEMINAR IN ADVANCED ORGANIZATION THEORY (3 credits)
Advanced study of theories and research in organization theory. Departmental approval.
MNGT 8310: SEMINAR IN ADVANCED ORGANIZATIONAL BEHAVIOR (3 credits)
Advanced study of theories and research in organizational behavior. Overarching organizational behavior paradigms and theoretical perspectives and research findings at the individual and group levels of analysis. Departmental approval.

MNGT 8320: SEMINAR IN STRATEGY IMPLEMENTATION (3 credits)
Review of the major theoretical perspectives and the empirical literature supporting the research field of strategic management with an emphasis on strategy implementation. Departmental approval.

MNGT 8700: SEMINAR IN ADVANCED HUMAN RESOURCE MANAGEMENT (3 credits)
Examination of empirical issues and technical considerations pertaining to the human resource management function in organizations or departmental approval.

MNGT 8820: ORGANIZATIONAL CHANGE RESEARCH METHODS (3 credits)
Prerequisite MNGT 7150. The study and application of research methods to conduct organizational diagnoses and to assess organizational effectiveness. Special emphasis is placed on qualitative methods.

HRMN 7080/7086: ADVANCED HUMAN RESOURCE MANAGEMENT (3 credits)
Advanced study of the role of personnel and human resource management. Topics include employee selection, performance appraisal, compensation, training, and development.

MNGT 8030: RESEARCH METHODS IN MANAGEMENT I (3 credits)
Prerequisite MNGT 8400. Research methodologies used in conducting research with emphasis on empirical organizational behavior research methods. A graduate-level course taken in major field, and working knowledge of SPSS or SAS.

MNGT 8040: RESEARCH METHODS IN MANAGEMENT III (3 credits)
Prerequisite MNGT 8030. Development of research skills and experience in writing an empirical research article based on research proposal developed in MNGT 8030.

Pharmacoepidemiology

VBMS 3010: INTRODUCTION TO EPIDEMIOLOGY (3 credits)
Principles of epidemiology, with emphasis on approaches for prevention/control of diseases of humans and animals. Broad applications of studies of populations will be stressed.

VBMS 7470: ADVANCED EPIDEMIOLOGY (3 credits – Fall)
Prerequisite STAT 7000 or equivalent and departmental approval: Advanced epidemiological techniques and their application to disease research, clinical retrospective and prospective studies, and disease outbreak investigation.

STAT/SOCY 7100: STATISTICAL ANALYSIS OF SURVEY, AGGREGATE AND LARGE DATA SOURCES (3 credits)
Prerequisite STAT 2010 or departmental approval. Techniques commonly used in multivariate statistical analysis of data sources such as surveys, archival records and other large data sets. Credit will not be given for STAT 7100 and SOCY 7100.
STAT 7780: SURVIVAL ANALYSIS (3 credits)
Prerequisite STAT 7000 or departmental approval. KaplanMeier estimator, logrank tests, Cox proportional hazard model, fully parametric models.

STAT 7040: BIOSTATISTICS (3 credits)
Prerequisite STAT 7000. Epidemiology, biometry, methods of survival analysis. Departmental approval.

KINE 8760: PHYSICAL ACTIVITY EPIDEMIOLOGY (3 credits)
Prerequisite HLHP 7010 or KINE 7010 and (HLHP 7680 or KINE 7680) Development of analytic skills to evaluate and/or conduct population-based research related to physical activity and disease.

NURS 7350: QUALITY, SAFETY, AND PREVENTION USING TECHNOLOGY (3 credits)
This course examines the concepts of clinical illness prevention, population health, quality and safety in health care, and the use of information technologies. Admission to the MSN Program or departmental approval.

Social and Behavioral Research

ANTH 6600: CULTURE MEDICINE AND POWER (3 credits)
Power in the context of illness and healing at local, national, and international levels.

COMM 7000: COMMUNICATION THEORY (3 credits)
A critical examination of contemporary theories in the field of communication.

COMM 7010: HISTORICAL, DESCRIPTIVE, AND CRITICAL APPROACHES TO COMMUNICATION RESEARCH (3 credits)
Consideration of the scope and nature of these types of research and their contribution to understanding human communication.

COMM 7020: EMPIRICAL APPROACH TO COMMUNICATION RESEARCH (3 credits)
Quantitative research in communication; emphasis on understanding and doing empirical research.

COMM 7230: RHETORICAL CRITICISM (3 credits)
Advanced methods in rhetorical criticism including tools for the analysis of persuasive messages.

COMM 7300: APPROACHES TO STUDYING LANGUAGE AND SOCIAL INTERACTION (3 credits)
Major approaches to studying language and social interaction that collectively make up a substantive area of inquiry known as discourse analysis.

COMM 7420: SEMINAR IN PERSUASION AND ATTITUDE CHANGE (3 credits)
A critical examination of current theory and research in the area of the persuasive act and its effects.

COMM 7450: SEMINAR IN INTRAPERSONAL PROCESSES IN COMMUNICATION (3 credits)
Theories of cognitive and affective processing of information during speaking and listening.

COMM 7460: SEMINAR IN INTERPERSONAL COMMUNICATION (3 credits)
Theories of the structure and function of interpersonal (dyadic) communication focusing on conversational behavior, traits, relationships, and persuasion.

COMM 7470: SEMINAR IN SMALL GROUP COMMUNICATION (3 credits)
Advanced study of the principles of communication as they apply to the small group setting.
COMM 7480: SEMINAR IN ORGANIZATIONAL COMMUNICATION (3 credits)
An in-depth approach to the study of communication processes within the setting of modern organizations.

COMM 7490: HEALTH COMMUNICATION (3 credits)
Examination and application of social science research approaches to the study of health communication.

COMM 7500: GENDER COMMUNICATION (3 credits)
Explores current theories and research on the relationship between communication and gender.

COMM 7660: CULTURAL STUDIES IN MASS MEDIA (3 credits)
Examination of communication research approaches to the study of culture and media.

COUN 7210: APPRAISAL IN COUNSELING AND PSYCHOLOGY (3 credits)
Prerequisite COUN 7200 and P/C, COUN 7350. Development, administration, scoring and interpretation of personality, interest, aptitude, achievement, attitude tests. Includes assessment interview, behavioral observation.

COUN 7320/7326: COUNSELING THEORIES (3 credits)
Prerequisite P/C, COUN 7100 or P/C, COUN 7400 or P/C, COUN 8530 Study of major counseling theories. May count either COUN 7320 or COUN 7326.

COUN 7330: COUNSELING DIVERSE POPULATIONS (3 credits)
Special counseling and advocacy issues. Needs of diverse populations are considered. Departmental approval.

COUN 7340: GROUP COUNSELING (3 credits)
Prerequisite (P/C, COUN 7320 or P/C, COUN 7326) and COUN 7350. Leading, developing, evaluating a counseling group; including group proposal, session development, group dynamics, group leadership and evaluation, treatment planning; group intervention, counseling skills.

COUN 8100: PERSONALITY AND INDIVIDUAL DIFFERENCES (3 credits)
Origins and structure of individual differences in personality and intelligence, and their application to counseling.

COUN 8110: COUNSELING ASSESSMENT ACROSS THE LIFESPAN (3 credits)
Development, administration, scoring and interpretation of personality, interest, aptitude, achievement, and attitude tests across the lifespan.

COUN 8200: INTELLECTUAL ASSESSMENT OF ADULTS (3 credits)
Prerequisite COUN 7200. Theory and measurement of adult intelligence. Administration and interpretation of selected tests.

COUN 8610: ADVANCED THEORIES: EXISTENTIAL/HUMANISTIC (3 credits)
Theory and practice of humanistic/existential approaches to individual and group therapy.

COUN 8620: ADVANCED THEORIES: COGNITIVE/BEHAVIORAL THEORIES (3 credits)
Current cognitive/behavioral models for understanding human problems and behavior change.

COUN 8630: ADVANCED THEORIES: PSYCHODYNAMIC THEORIES (3 credits)
The origins, current status, and emerging applications of psychodynamic approaches to counseling. Departmental approval.
EPSY 7400/7406: ED PSYCH & EDUCATIONAL IMPLICA (3 credits)
Educational psychology theory and research addressing critical problems, challenges, and opportunities in
education or other growth-oriented settings. Content ranges from the study of learning to educational evaluation
and authentic assessment. May count either EPSY 7400 or EPSY 7406

EPSY 7410: THE INDIVIDUAL IN THE TEACHING-LEARNING PROCESS (3 credits)
The study of human growth, development, and motivation theory and research, including culture, socio-
economic status, language, gender and race as a base for understanding individual differences and their sources.

EPSY 7420/7426: LEARNING THEORY AND EDUCATIONAL PRACTICE (3 credits)
Advanced study of learning theory and research with an emphasis on application to effective design,
implementation, and evaluation of instruction. May count either EPSY 7420 or EPSY 7426.

EPSY 7430: MOTIVATION AND ACHIEVEMENT (3 credits)
Social, cultural, and psychological antecedents of achievement motivation are examined. This process requires
reviewing theories and research, and emphasis is placed on discerning implications for practice and policy.

FOUN 7000/7006: CULTURAL FOUNDATIONS OF EDUCATION (3 credits)
Advanced study of culture and its impact on the development and structure of education and schooling. Utilizing
historical, philosophical, anthropological, and sociological perspectives, contemporary issues regarding the
nature and practice of schooling will be examined. May count either FOUN 7000 or FOUN 7006.

HDFS 6200: PROGRAM DEVELOPMENT AND EVALUATION (3 credit)
Application of research to the development and evaluation of programming for children and families. Graduate standing.

HDFS 6300: FAMILY AND SOCIAL POLICY (3 credits)
Examination and critique of social policies from a family perspective. Graduate standing.

HDFS 7000: ADOLESCENT DEVELOPMENT (3 credits)
Critical examination of empirical research and theories of adolescent development. Fall.

HDFS 7010: DEVELOPMENTAL SCIENCE I: CHILDHOOD AND ADOLESCENCE (3 credits)
Survey and critical examination of research on development from birth through adolescence. Fall.

HDFS 7020: DEVELOPMENTAL SCIENCE II: ADULTHOOD AND AGING (3 credits)
Survey and critical evaluation of research on development in the adult and aging periods of the life cycle. Fall.

HDFS 7030: RELATIONSHIP DEVELOPMENT AND PROCESS IN CHILDHOOD AND ADOLESCENCE (3 credits)
Theoretical and empirical themes focused on processes and dynamics of relationships in childhood adolescence.

HDFS 8060: APPLIED LONGITUDINAL METHODS IN HUMAN DEVELOPMENT AND FAMILY STUDIES (3 credits)
Prerequisite HDFS 7060 Coreq., HDFS 8061. In depth examination of applied longitudinal methodology as analytic
strategies used for research in Human Development and Family Studies.

HDFS 8061: APPLIED LONGITUDINAL METHODS IN HUMAN DEVELOPMENT AND FAMILY STUDIES LAB (1 credit)
Prerequisite HDFS 7060 Coreq., HDFS 8060 Lab designed to enhance the examination of longitudinal
methodology as an analytic strategy used in HDFS research.
KINE 6400/6406: EXERCISE PRESCRIPTION FOR NORMAL AND SPECIAL POPULATIONS (3 credits)
Prerequisite (HLHP 3680 or KINE 3680). Principles of exercise prescription for normal and special populations with emphasis on specific exercise strategies in elderly, obese, hypertensive and hyperlipidemic populations. May count KINE 5400, KINE 6400, or KINE 6406.

KINE 7010: RESEARCH METHODS IN PHYSICAL ACTIVITY (3 credits)
Study of research methods and analysis of current research in physical education, health promotion, and exercise science.

KINE 7780: EXERCISE MOTIVATION AND ADHERENCE (3 credits)
Prerequisite (HLHP 4620 or KINE 4620) Theoretical foundations and recent research in exercise motivation and adherence. Or equivalent.

KINE 8760: PHYSICAL ACTIVITY EPIDEMIOLOGY (3 credits)
Prerequisite (HLHP 7010 or KINE 7010) and (HLHP 7680 or KINE 7680) Development of analytic skills to evaluate and/or conduct population-based research related to physical activity and disease.

PSYC 6620: BEHAVIORAL PHARMACOLOGY (3 credits)
A review of drugs that affect nervous system function and behavioral or neural mechanisms, that modify these effects. Topics include substance abuse, preclinical and clinical psychopharmacology, learning and memory, behavioral mitigation of drug effects. Meets APA criteria for Level 1 training in psychopharmacology.

PSYC 7140: LEARNING AND CONDITIONING (3 credits)
Respondent conditioning and operant behavior, including acquisition of language and other forms of individual/environmental interactions.

PSYC 7180: SOCIAL PSYCHOLOGY (3 credits)
Topics and literature on the social foundations of behavior.

PSYC 7190: COGNITIVE PSYCHOLOGY (3 credits)
A survey of the nature of human intellectual functioning, including pattern recognition, memory, problem solving, reasoning and language comprehension and generation.

PSYC 8440: HEALTH PSYCHOLOGY AND BEHAVIORAL MEDICINE (3 credits)
Contemporary research in health psychology and behavioral medicine and the empirical foundations of clinical practice.

PSYC 8470: BEHAVIORAL ECONOMICS OF SUBSTANCE ABUSE (3 credits)
Introduction to behavioral theories of choice and behavioral economics, and the application of these basic science areas to the study of substance abuse.

PSYC 8510: CONTEXT AND CONSEQUENCES OF BEHAVIOR (3 credits)
Prerequisite PSYC 7140. Advanced survey of the role that consequences play in acquisition, maintenance, and structure of behavior, and the methods by which this role is studied.

RSOC 6610: RURAL SOCIOLOGY (3 credits)
Theories and conceptual approaches to rurality in international and domestic contexts. Rural-urban differences in demographic composition, occupational structure, attitudes and values of rural people and regional cultures. Rural services and institutions as determinants of the quality of life.
RSOC 7700: METHODS OF SOCIAL RESEARCH (3 credits)
Prerequisite SOCY 3700. Problem identification, hypothesis development and empirical analysis. Quantitative and qualitative procedures for obtaining social data using surveys, direct observation and secondary sources.

SOCY 6400: SOCIOLOGY OF MENTAL HEALTH (3 credits)
Prerequisite SOCY 1000. The social analysis of the nature, development, identification, and treatment of mental illness. May count either SOCY 5400 or SOCY 6400.

SOCY 6670: SOCIOLOGY OF GENDER (3 credits)
Prerequisite SOCY 1000. Social definitions and implications of gender, with emphasis on work, media, law, and interpersonal relationships.

SOCY 7000: ADVANCED SOCIOLOGICAL THEORY (3 credits)
Prerequisite SOCY 4400. Reviews major types of sociological theory within the context of theoretical paradigms, and significant theoretical issues that face the discipline. Departmental approval.

SOCY 7200: SEMINAR IN SOCIAL BEHAVIOR (3 credits)
Research and theory concerning social and group influences on behavior.

Other Miscellaneous Recommended Courses

ERMA 7210: THEORY AND METHODOLOGY OF QUALITATIVE RESEARCH (3 credits)
Major modes of qualitative research, their underlying philosophical assumptions about knowledge, and the major strategies for collecting and analyzing relevant data.

ERMA 7220: APPLIED QUALITATIVE RESEARCH (3 credits)
Prerequisite (ERMA 7210 or FOUN 7210) Study of detailed strategies of data collection, principles of observation, interviewing, focus groups, recording and coding data, triangulation, strategies for analyzing coded data, and writing up of one’s findings.

ERMA 8200/8206: SURVEY RESEARCH METHODS (3 credits - Fall, Spring, and Summer)
Overview of survey research, sampling issues, selection and construction of survey instruments, response effects, issues influencing response rate, reliability and validity of survey data, and analysis of survey data.

POLI 8120: QUALITATIVE RESEARCH METHODS (3 credits)
Prerequisite POLI 8110. In-depth analysis of the use of qualitative methods in Political Science research.

ERMA 8100: PROGRAM EVALUATION (3 credits)
Study of various theories and models of curriculum evaluation, methodological issues regarding planning and conducting evaluation studies, reporting and using information from evaluation.

POLI 7520: PROGRAM EVALUATION (3 credits)
Theory and practice of program evaluation in the public sector with attention to program planning, process assessment and impact assessment.

STAT 7030: CATEGORICAL DATA ANALYSIS (3 credits – Fall)
Methods for analysis of categorical response data. Topics include Chi-square tests, Likelihood Ratio tests, Logistic Regression, and Loglinear Modeling.
STAT 7600: STATISTICAL THEORY AND METHODS I (3 credits)
Prerequisite STAT 3600. Random variables, probability distributions, parametric models, likelihood theory, testing. Departmental approval.

STAT 7610: STATISTICAL THEORY AND METHODS II (3 credits)
Prerequisite STAT 7600. Likelihood ratio, regression, ANOVA, categorical data, non-parametric methods, decision theory.

STAT 7620: NONPARAMETRIC STATISTICS (3 credits)

STAT 7800: LINEAR MODELS (3 credits)
Prerequisite STAT 7610 and MATH 2660 or departmental approval. A rigorous development of some of the important topics of applied statistics: the multivariate normal distribution analysis of variance, regression, aspects of experimental design.

Special Problems and Special Topics
Special Problems course work (HROP 7960 (MS) and HROP 8960 (PhD)) may be taken for a maximum of 6 credit hours. The purpose of this course work is to encourage individual study (research) in the student’s particular area of interest. The student, in collaboration with the professor, should develop a plan of study for the Special Problems course and the student shall submit written evidence (report, manuscript, exam, etc) of progress made as a result of the course at the end of the course. Special Topics courses (HROP 7970 (MS) and HROP 8970 (PhD)) may be offered on a temporary or experimental basis. Special Topics courses typically cover material not being covered in other courses. These courses are not taught on a continuing basis.

Any student wishing to register for one of these courses must complete Part I of the Independent Study Approval Form; https://auburn.app.box.com/file/673386127319. This form should be submitted to the Instructor for completion. Be advised that any coursework taken for credit, including Special Topics and Special Problems, will count toward the maximum number of hours covered by the tuition waiver (110% of credit hours required for the degree), regardless of whether they count toward degree completion.

Human Subjects Training
All students are required to complete the CITI human subjects and research ethics training during their first semester. The training can be done on-line at https://cws.auburn.edu/OVPR/pm/compliance/irb/training. Students should complete the CITI modules most relevant to their planned area of study, which may include the basic course (i.e., biomedical module), HIPAA and human subjects research, the social and behavioral module, web-based research, records-based research, etc. Students participating in funded research must also complete the conflict of interest module. Upon completion of the training, printed certificates of completion must be provided to the Department Head and Graduate Program Officer. This training and documentation is required by the Institutional Review Board and should be kept up-to-date for the duration of graduate study.

Publication Requirement
All PhD students must publish (or have accepted for publication) at least two peer reviewed manuscripts between entering the PhD program and graduation. Students who enter with a thesis-based master’s degree do not need to be first author on either of these publications. For students without a thesis-based master’s degree,
at least one of these publications must be first authored. The papers may be related to the dissertation topic, but must not be derived as part of the dissertation. The papers should be related to the research disciplines covered by the Department of Health Outcomes Research and Policy. Students are highly encouraged to work collaboratively with other department students and/or faculty on these papers.

**Participation in Professional Meetings**
The Department encourages attendance and participation at national and regional professional and scientific meetings. Students are encouraged to seek travel funds from the Graduate School ([http://graduate.auburn.edu/current-students/awards-and-grants/graduate-research-and-travel-fellowships/](http://graduate.auburn.edu/current-students/awards-and-grants/graduate-research-and-travel-fellowships/)). Students should consult with their advisor in seeking travel funds. Generally speaking, only students who are presenting a paper or poster at the meeting may apply for departmental support. It is expected that any graduate student who attends these meetings will attend all feasible research and educational sessions along with pertinent business meetings. Failure to do so will result in forfeiture of funding. Students attending meetings are representing Auburn University and the Department of Health Outcomes Research and Policy. As such, students are expected to dress professionally, arrive to meetings on time, and participate in discussion.

**Teaching Development and Experience**
While not required, all graduate students are encouraged to seek further training and experience in teaching. The Seminar in College Teaching is particularly appropriate for students interested in academic careers.

**HEID 8510: SEMINAR IN COLLEGE TEACHING (3 credits – Spring)**
Overview of major issues in Higher Education and methods of instruction in college teaching. Involves use of experiential learning, group and collaborative activities such as microteaching, case studies, e-mail dialogue and reflective writing.

Additional resources are available from the Biggio Center (listed in order of intensity), including the Professional Development Seminar Series, the Preparing Future Faculty (PFF) Program, and the Graduate Certificate in College/University Teaching. Registration is not needed for the Professional Development Seminar Series, and the schedule can be found at [http://wp.auburn.edu/biggio/prodev/](http://wp.auburn.edu/biggio/prodev/). The PFF and Graduate Certificate Programs require that students apply and are accepted before beginning the programs.

**PREPARING FUTURE FACULTY**
This program improves readiness to assume faculty roles, helping graduate students understand the expectations and functional realities of faculty life, developing wider institutional and personal networks, and making graduate study even more responsive to disciplinary and professional needs. Graduate students from all disciplines at Auburn University are eligible to participate in the program. Students are eligible to apply for this program during the Spring of their 1st year. Applications are typically due in April for admission to the next year’s class. Students participating in the PFF Program will earn 2 credits towards their degree for registering for GRAD 8940 (Fall) and GRAD 8950 (Spring). The program meets once every 2 weeks for 1 hour. The program is best suited for students closer to end of their program of study. More information can be found at [https://biggio.catalog.auburn.edu/courses/pffpd](https://biggio.catalog.auburn.edu/courses/pffpd).

**GRADUATE CERTIFICATE IN COLLEGE/UNIVERSITY TEACHING**
Students with an interest in academic careers may earn a Graduate Certificate in College/University Teaching ([http://www.education.auburn.edu/graduate-degree-cert/college-university-teaching-graduate-certificate/](http://www.education.auburn.edu/graduate-degree-cert/college-university-teaching-graduate-certificate/)). Requirements for the Graduate Certificate include a total of 12 graduate hours, with a grade of B or better in the following courses:
• HEID 8500 The Professoriate (3 credits)

• HEID 8510 Seminar in College Teaching (3 credits)

• Supervised teaching practicum with faculty member in the student’s home department (3 credits)

• 3 elective credits selected from approved courses (2 credit hours of the PFF seminar series count)

**Annual Progress Report**

An annual review of each graduate student is conducted by the department in Summer each year. Students are required to complete the annual progress report form found at [https://auburn.app.box.com/file/673382087994](https://auburn.app.box.com/file/673382087994) and submit their completed form to their advisor and the Department Head by the deadline.

**Submission of Plan of Study**

The Plan of Study must be reviewed and approved by the student’s advisory committee prior to submission. For full-time students, the Plan of Study must be submitted no later than the end of the first semester of the second year. For part-time students, the Plan of Study must be submitted before registration for the fourth course taken in Graduate School. Plans of Study should be submitted to the Office of the Director of Graduate Programs for HSOP for approval. Notification of all changes must be provided before the beginning of the final semester. The student is responsible for carrying out the planned program and for asking the major professor to make necessary changes.

No student will be permitted to graduate who fails to submit a Plan of Study and a graduation check to the Graduate School prior to the semester of expected graduation. Graduation day is the official last day of each semester and, therefore, is the deadline for submitting Plans of Study and graduation checks for graduation the following semester.

**Master’s Degree Requirements**

Students in the Master’s degree program will be required to complete a thesis. The thesis topic should be selected in consultation with the advisor. Students should begin preparing their thesis proposal no later than their second year in the Master’s degree program.

**Thesis Credits**

A master’s student must enroll for a minimum of 4 hours of thesis research (HORP 7990: Research and Thesis). A student may register for more than 4 hours of thesis, but may not receive credit for more than 5 hours. Note, that even when no longer taking didactic courses, students must register for a minimum of one credit hour each semester.

**Thesis Proposal and Proposal Defense**

A thesis committee comprised of the advisor and at least two other members of the department’s faculty should be formed after selecting a thesis topic. At least two members of the thesis committee must be members of the graduate faculty. After all graduate course work has been completed the student shall submit a written thesis proposal to his/her thesis committee. The proposal shall be submitted at least 4 weeks before a scheduled meeting for the defense of the proposal. All members of the committee must agree on the time and date of the defense.
If the student does not unanimously pass the initial proposal defense, additional work will be recommended to strengthen the proposal. A second proposal defense will then be scheduled.

**The Thesis**

After approval of the thesis proposal by the student’s committee, the student may proceed with work on the thesis research. It is suggested that each phase of the research be submitted to the student’s advisor for approval. After all phases (problem statement, literature review, methodology, etc.) are done, a complete draft of the thesis shall be submitted to the committee. Within 2 weeks, the committee should return its evaluation, recommendations, and corrections to the graduate student. At that time, the student is responsible for responding to these comments in the final draft to be submitted to the committee. The committee shall be given the final draft at least 2 weeks in advance of the thesis defense. The student must follow the Graduate School’s formatting requirements and is responsible for obtaining and filing all necessary documents. See “Thesis and Dissertation Formatting and Structure” for details on structuring the written thesis.

**Thesis Defense**

Students should schedule their final thesis defense at least 4 weeks in advance, and only with approval of all thesis committee members. One week before the scheduled thesis defense, the student shall send an announcement of the defense date to all members of the committee, as well as all other students and faculty in the department. Defense presentations are open to the public, with the exception of the closed session for committee member questions. At the thesis defense, the student shall begin with a 15-30 minute oral summary of the research. This will be followed by public questions, followed by closed committee questions. Public questions will be limited to the thesis topic. Closed session committee questions may also include related course work as listed on the student’s plan of study. In the event that the student fails the defense, one re-examination may be given on recommendation of the committee and approval of the Dean of the Graduate School.

The Associate Dean for Research and Graduate Education of the School of Pharmacy shall be notified at the same time as committee members regarding the dates of the proposal defense and thesis defense.

**Doctoral Degree Requirements**

Students in the PhD degree program will be required to pass comprehensive exams, pass the general oral examination, and complete a dissertation.

**Comprehensive Exams**

After the student has completed the required course work (and Master’s thesis for those in the Master’s degree program), the comprehensive examinations may begin. An exception to this requirement is the Grant Writing course, which is required for graduation, but may be taken after completion of the comprehensive exam. This comprehensive examination is often referred to as a preliminary examination. The purpose of this examination is to establish that the student: 1) has the theoretical basis to do dissertation research in the student’s field of study, 2) has had sufficient preparation to be considered a scholar in that field of study, 3) is able to relate this expertise to problems of pharmacy practice, and 4) has the ability to address an original problem. The exam includes a written examination and may include an oral examination.

The written examination component consists of two parts: two three-hour test sessions and a take-home examination. The written examination is based on the Departments core curriculum, including Research Methods, Health Services Delivery and Evaluation, Social and Behavioral Theory in Health, Pharmaceutical Economics, Outcomes and Policy, and Pharmacoepidemiology Methods and Applications. For the two 3-hour test sessions, the student shall use a computer to type his/her answers. However, the student shall not consult any
resources during the test session. At the end of the third hour, the student will electronically submit his/her answers. As for the take-home component, the student will have a maximum of four days to complete the examination. The student will be tested primarily in the student’s major area of study. The student is allowed to consult published resources when preparing answers to the take-home questions, but must cite these resources accordingly. Though, consulting any individuals is prohibited. The student shall submit a typed response to each of the questions.

The oral examination component will be scheduled within two weeks after the completion of the written examination. The student may be asked to further clarify the answers in the written examination or asked to respond to new questions related to the student’s major area of study.

**Examination Policies**

In the event the student performs unacceptably in 2 or more of the 5 closed book domains OR in the open book exam, the student may be assigned remedial work, will need to reschedule a new exam, or be advised by the committee to discontinue doctoral study. For students allowed the opportunity for remediation or exam retakes, students performing unacceptably on only 1 or 2 of the 5 closed book domains will only need to retake the failed section(s). Students performing unacceptably on 3 or more of the 5 closed book domains will be required to retake the entire examination. Students who perform unacceptably on the take-home exam but acceptably on the closed book exam will be required to retake the take home exam. Students will not be allowed to re-take any part of the exam more than once.

**Dissertation Credits**

A doctoral student must enroll for a minimum of 10 hours of dissertation research (HORP 8990: Research and Dissertation). No more than 12 hours may count toward the degree. Note, that even when no longer taking didactic courses, students must register for a minimum of one credit hour each semester.

**Dissertation Proposal and Proposal Defense**

This step is referred to as the general oral examination. The dissertation topic should be selected in consultation with the advisor. Students should begin preparing their dissertation proposal no later than their third year in the PhD program. A dissertation committee comprised of the advisor, at least two other members of the department’s graduate faculty, and at least one member external to the department should be formed after selecting a dissertation topic. After all graduate course work has been completed the student shall submit a written dissertation proposal to his/her dissertation committee. The proposal shall be submitted at least 4 weeks before a scheduled meeting for the defense of the proposal. All members of the committee must agree on the time and date.

The student must inform the Graduate School, in writing (via form from the Graduate School: ![Link to form](https://web.auburn.edu/alpha/forms/Login.aspx?ReturnUrl=%2falpa%2fforms%2fform-a.aspx)), of the oral general examination date at least one week prior to the proposal defense. If the student does not unanimously pass the initial proposal defense, additional work will be recommended to strengthen the proposal. A second proposal defense will then be scheduled.

The student becomes a candidate for the degree on successful completion of the general oral examination. Upon admission to candidacy, the student has four calendar years to complete all remaining requirements for the doctoral degree. If unable for any reason to complete the requirements on time, the student may petition the dean of the Graduate School for a maximum of a one year extension. Students failing to complete the degree in
the allotted time revert to the status of an applicant and must petition the dean of the Graduate School to retake the general examination.

**The Dissertation**

After approval of the dissertation proposal by the student’s committee, the student may proceed with work on the dissertation research. It is suggested that each phase of the research be submitted to the student’s advisor for approval. After all phases (problem statement, literature review, methodology, etc.) are done, a complete draft of the dissertation shall be submitted to the committee. After two weeks, the committee should return its evaluation, recommendations, and corrections to the doctoral candidate. At that time the student is responsible for responding to these comments in the final draft to be submitted to the committee. The committee shall be given the final draft at least 2 weeks in advance of the dissertation defense. The student must follow the Graduate School’s formatting requirements and is responsible for obtaining and filing all necessary documents. See “Thesis and Dissertation Formatting and Structure” for details on structuring the written dissertation.

**Dissertation Defense**

Students should schedule their final dissertation defense at least 4 weeks in advance, and only with approval of all dissertation committee members. One week before the scheduled dissertation defense, the student shall send an announcement of the defense date to all members of the committee, as well as all other students and faculty in the department. Defense presentations are open to the public, with the exception of the closed session for committee member questions. At the dissertation defense, the student shall begin with a 30-45 minute oral summary of the research. This will be followed by public questions, followed by closed committee questions. Public questions will be limited to the dissertation topic. Closed session committee questions may also include related course work as listed on the student’s plan of study. In the event that the student fails the defense, one re-examination may be given on recommendation of the committee and approval of the Dean of the Graduate School.

The Associate Dean for Research and Graduate Education of the School of Pharmacy shall be notified at the same time as committee members regarding the dates of the proposal defense and dissertation defense.

The Graduate School has a strict protocol for dissertation completion process. Students should check the Graduate School’s checklist at [http://graduate.auburn.edu/current-students/doctoral-completion-checklist/](http://graduate.auburn.edu/current-students/doctoral-completion-checklist/). Several forms must be submitted to the Graduate School including the First Submission Approval Form (including recommended University Reader), Application for Final Oral Exam (Form X) and the Electronic Dissertation Approval Form.

**Dissertation Submission**

Only dissertations prepared according to The Guide to the Preparation and Submission of Theses and Dissertations, available at the University Bookstore and on the web at [http://graduate.auburn.edu/current-students/electronic-thesis-dissertation-guide/](http://graduate.auburn.edu/current-students/electronic-thesis-dissertation-guide/), are accepted by the Graduate School. Submission of a dissertation is defined as the time at which the first complete draft of such is submitted to the major professor for review. All dissertations must be microfilmed by University Microfilms International of Ann Arbor, Michigan, which publishes the abstract in Dissertation Abstracts. Students also must provide a bound copy of the dissertation for the department repository, located in the Health Outcomes Research and Policy Conference Room. The student is required to pay for these services. Auburn University reserves the right to make copies of the thesis, but the student retains all publication rights.
University Reader
The assistance of outside readers is required in evaluating all doctoral dissertations since the Graduate School staff cannot possibly possess in-depth knowledge of all dissertation subjects. The major professor nominates from three to five potential outside readers from outside the student’s department and provides their names to the Graduate School. The major professor may request appointment of the university reader at any time during the student's doctoral work. If no such request is made, the outside reader will be appointed at the time the first draft of the dissertation is submitted to the Graduate School.

The primary role of the outside reader is to represent the entire Graduate Faculty of Auburn University and advise the Graduate School on the quality of the dissertation from the standpoint of originality, significance, research, analysis, accuracy, and overall scholarship. The reader will recommend to the Graduate School that the committee proceed with the final oral examination or that the document be returned to the student for further work. More information on the role of the outside reader can be found at http://graduate.auburn.edu/current-students/review-of-dissertations-the-university-reader/.

Thesis and Dissertation Formatting and Structure
The HORP graduate programs use standard formatting for thesis and dissertation documents, and these must conform to the requirements of the Graduate School (http://graduate.auburn.edu/current-students/electronic-thesis-dissertation-guide/). Students have two options from which to choose for structuring their final documents. Choice of model should be approved by the student’s major advisor and committee and declared at the time of the thesis or dissertation proposal.

Option 1: Traditional 5-chapter Model
This model consists of an abstract, five chapters, references and appendices.

- Chapter 1 is a brief overview of the study, with background and rationale, study objectives, and summary of methodology.
- Chapter 2 contains an extensive literature review and study significance.
- Chapter 3 outlines in detail the study design, rationale, study objectives, hypotheses, and methodology.
- Chapter 4 includes results of the study with tables and figures (although these may be included in an appendix instead of the main body of Chapter 4).
- Chapter 5 contains a discussion of the results and how they compare to the current literature, study limitations, summary conclusions, and ideas for future research.

Option 2: 3-Manuscript Model
This model consists of an abstract, five chapters, references, and appendices. Appendices may include tables, figures, or other products related to the study that are not contained in any of the manuscripts. The main difference is that Chapters 2, 3, and 4 are each a stand-alone manuscript in the format required by the target journal. The student submitting the thesis or dissertation MUST be listed as first author on all three manuscripts. The advantage of this model is that papers are closer to being ready for submission to the journal and the publication process is then expedited. It is possible that manuscripts submitted as part of the final document have already been accepted for publication and/or published.

- Chapter 1 is a brief overview of the study, with background and rationale, study objectives, and summary of methodology.
- Chapter 2 is Manuscript 1.
- Chapter 3 is Manuscript 2.
• Chapter 4 is Manuscript 3.
• Chapter 5 contains a discussion of the results and how they compare to the current literature, study limitations, summary conclusions, and ideas for future research. The intent of this chapter is to tie all three manuscripts together and discuss them as a whole in regard to the overall contribution to the literature.

Other considerations
1. Final structure is ultimately up to the major advisor.
2. It is important to note that the three manuscripts should be related to one another and not be completely disparate studies without any unifying theme.
3. Committee members should be included as co-authors on the manuscripts, where appropriate. Other students should not be listed as co-authors on any manuscript submitted as part of the final thesis or dissertation except in special circumstances (to be determined by the major advisor).

Proposals should be submitted in the traditional 3-chapter structure, consisting of what would be Chapters 1, 2, and 3 of the traditional 5 chapters.
Policies and Forms

Academic Progress and Standing
The Department of Health Outcomes Research and Policy follows Graduate School guidelines on what is considered normal progression through graduate degree programs. Students are expected to complete the Master’s degree within no more than 2 to 3 years, and the PhD degree within no more than 4 to 6 years (including time contributing to Master’s degree, if relevant). The Graduate School requires that students enrolled in a Master’s degree program must complete the degree in five years or less. For doctoral programs, students must complete the degree within four calendar years after successfully passing the oral general examination. Exceptions may be made for illness or other extenuating circumstances. However, the Graduate School must approve them. Students having difficulties in progressing because they believe that their advisor is not assisting them in an appropriate manner should first raise these concerns with their advisor. If the problem is not resolved to the student’s satisfaction, the student should then discuss the situation with the department head or a committee consisting of all graduate faculties in the department.

Each graduate student’s progress toward a degree is monitored by the student’s Advisory Committee, and issues of professional and personal development may be considered. While failure to maintain academic standards merits automatic dismissal, a student also may be dropped from the Graduate School if progress is unsatisfactory in other areas such as unprofessional behavior or failure to follow Graduate Program Requirements or Policies. In such cases, the Advisory Committee will prepare a statement of deficiencies and/or grievances and discuss it in a meeting with the student. The statement must have the unanimous support of all members of the committee. The student will be warned that corrective measures must be taken within a specified time to avoid action that might result in dismissal. The committee determines the period allowed for correction. Copies of the statement of grievance and summary of the meeting will be provided the student, the department head, the academic dean, and the graduate dean. If the deficiency is not corrected within the time allowed by the committee, a statement reiterating the grievance and recommending dismissal should be sent to the graduate dean with copies to the student, the department head, and the academic dean. The graduate dean will give the student an opportunity to respond and will make a final determination. The student and the advisory committee will be notified. The action taken will not appear on the student's official transcript, and release of information is restricted under the University’s policy on the confidentiality of student records.

Only grades in Auburn University courses approved for graduate credit will be used in determining the overall GPA for continuation in the Graduate School. If at the end of any semester the term GPA is below 3.0 or the cumulative graduate GPA (CGGPA) falls below 3.0, the student will be placed on academic probation. If the CGGPA remains below 3.0 after the next nine credit hours of graduate enrollment (both graded and ungraded), the student will be placed on academic suspension. The student may be readmitted only after completion of a remediation plan recommended by the academic unit and approved by the Dean of the Graduate School. No course work taken as part of the remediation plan may count toward the student’s degree or CGGPA. Graduate-level courses for which grades below C were earned may not be repeated during the remediation period.

Email
E-mail is considered the official medium for University communication. All students are responsible for checking and responding to their Auburn University issued e-mail account daily.
Social Media
Use of social media is acknowledged and supported as a means to interact with others through the Web and other media. Students are encouraged to be diligent in establishing and maintaining a professional social media persona, including but not limited to: picture creation and sharing, video creation and sharing, " friending", status updates in social networks, tagging of you and others in pictures and other media, blogs posts/comments, location updates, etc. Inappropriate use of social media will be investigated. Penalties for inappropriate use of social media may include academic probation or expulsion. Students are discouraged from interacting with other students in the professional degree program (i.e., PharmD) via social media, especially for students that are receiving a graduate assistantship that includes responsibilities as a teaching assistant.

Course Transfers
Graduate credit taken in residence at another approved graduate school may be transferred to Auburn University. No prior commitment is made concerning whether transfer credit will be accepted. A student must earn at least 24 semester hours, or half of the total hours required for a master's degree, whichever is greater, at Auburn University. A program that requires 30 hours of credit will be limited to 6 semester hours of transfer credit. No such limitation is applied to doctoral degrees except 18 semester hours must be earned as a graduate student at Auburn University in graded course work at the 7000-level or above. The credit must be acceptable to the student's Advisory Committee and be pertinent to the student's Plan of Study. No transfer credit will be approved without a syllabus and an official transcript. No course on which a grade lower than B was earned may be transferred. Additionally, credit will not be allowed if the combined GPA on graduate work taken at other schools is less than 3.0 on a 4.0 scale, nor may transfer credit be used to improve the GPA on courses taken at Auburn University. All transferred credit to be counted toward a master's degree must have been earned within five years of the date the Auburn degree is awarded. There is no such time limit on credit for doctoral degrees.

Transferring Between the MS and PhD Program
Changes in application status (master's to doctoral, doctoral to master's) or enrollment status (master's to doctoral, doctoral to master's) must be requested by the applicant/student involved and endorsed by the department head or chair, major professor, and advisory committee for enrolled students and approved by the Dean of the Graduate School. Current international students must recertify full financial sponsorship for the issuance of a "new" I-20 form.

Grades
To receive a graduate degree at Auburn University, a student must earn a cumulative GPA of 3.0 on a 4.0 scale on all courses carrying graduate credit. No more than nine hours beyond the student's Plan of Study is allowed in obtaining the cumulative graduate GPA (CGGPA). No grade below C (including unsatisfactory grades for courses taken under the S/U option) is acceptable for credit toward a graduate degree. Each graduate course in which a grade below C is received must be repeated at Auburn University whether or not it is listed on the student's Plan of Study. Both the original grade and the grade for the repeated course will be counted in calculating the CGGPA. Course credits transferred from another institution may not be used to satisfy this requirement. Courses retaken will not count against the nine-hour limit beyond the student's Plan of Study in obtaining the minimum CGGPA.

Registration Requirements
Every student expecting credit toward a graduate degree must be registered with the Graduate School, and no student is considered a candidate for a degree unless properly registered. A student must be registered in the term in which degree requirements are completed. Students also must register in any semester during which the staff or the facilities of the university are used for work on a thesis or dissertation, for the taking of oral
examinations, or for removal of an "incomplete" grade. Thesis and dissertation students needing thesis or dissertation final approval and submission and the final examination register for 7990 Research and Thesis or 8990 Research and Dissertation.

A graduate student may carry a maximum course load of 16 hours per semester (14 in the summer term). This includes undergraduate courses, but does not include 7990 (Research and Thesis) and 8990 (Research and Dissertation) when required of all graduate students in a department each semester. Graduate students must carry nine hours per semester, or enroll in GRAD 7@@0/8@@0 with concurrent enrollment for a minimum of one hour of 7990/8990 to be classified as full-time students. Enrollment in GRAD 7@@0/8@@0 requires the completion of this form: [http://graduate.auburn.edu/wp-content/uploads/2019/04/Grad_7@@0_8@@0_Form_2019.pdf](http://graduate.auburn.edu/wp-content/uploads/2019/04/Grad_7@@0_8@@0_Form_2019.pdf). To maintain full-time status, students do not need to register for summer courses. However, students receiving assistantships during the summer term must register for at least 1-credit. International students who have completed all course work and are engaged in research must file this form ([http://www.auburn.edu/academic/international/isss/docs/drop_below_instructions.pdf](http://www.auburn.edu/academic/international/isss/docs/drop_below_instructions.pdf)) with the Office of International Education if they wish to register for less than 9 hours of coursework. Master’s students are only allowed 4 Gold Forms and PhD students are only allowed 6.
Student Resources

Graduate Assistantships and Assistantship Policies
A limited number of Graduate Assistantships may be available. Your admission letter will have specified whether you have been offered an assistantship. Assistantships may come in the form of teaching and/or research. The Department Head will make decisions on whether you will be designated as a Graduate Teaching Assistant (GTA) and/or Graduate Research Assistant (GRA) on a semester-by-semester basis, based on availability and need.

Assistantship Requirements
Assistantships typically are only awarded to full-time students. Under special circumstances, students not classified as full-time may still receive an assistantship. To be on assistantship, you must be registered for at least one course (anything carrying an Auburn University course number) during each academic term of the assistantship. You must satisfy the minimum course load specifications (1 credit) and be making satisfactory progress toward the degree.

International graduate students on F1 visas cannot hold a greater than 50 percent work appointment. International graduate students on F2 visas cannot hold a work appointment. Rules for summer terms are different. Please check with the International Education office in Foy Hall.

Tuition Support
For Graduate Assistantships, university funded in-state tuition support will be limited to 110% of the number of hours required for a graduate degree. This tuition support will be provided for one of the following: one Master's degree or recognized dual-degree Master’s program; one PhD degree, one Master's degree plus one PhD degree within the same or a complementary field. University funded full tuition support will only be provided to graduate assistants receiving a 0.33 or higher FTE assistantship for each semester during the academic year. To receive the out-of-state tuition waiver for non-resident students, a graduate student must also be on no less than a 33 percent graduate assistantship. Waivers are available only to graduate assistantships assigned for an entire semester, defined as beginning no later than the eighth class day each semester and ending no earlier than the last day of classes each semester. Non-Alabama resident graduate assistants who have been on assistantship for at least two consecutive semesters will automatically have their out-of-state tuition waived for the next semester whether or not they are on assistantship that semester. The "next" semester is defined as the next calendar semester. For example, a graduate student on 33 percent or higher assistantship for consecutive fall and spring semesters will still have the out-of-state tuition waived if registered summer semester whether the student is on assistantship or not that summer semester. If the student were not to enroll the summer semester in this example, but were to enroll the following fall semester, this benefit would not apply because fall would not be the next calendar semester.

Assistantship Workload
Workloads for graduate assistants are defined on the basis of a normal teaching load or the equivalent time in other duties as determined by the department head. The expected workload for a 50% graduate assistant appointment (0.5 FTE) in Health Outcomes Research and Policy is 20 hours per week.

Teaching Assistant Policies
Students assigned as Graduate Teaching Assistants will be responsible for course operations and teaching responsibilities in courses in the Doctor of Pharmacy Program. Teaching Assistants must dress professionally, consistent with the School of Pharmacy Dress Code.
Only official, university communication mechanisms (university email or university phone numbers) should be used by teaching assistants when interacting with students. Use of social media, texting, or cell phones should be avoided when interacting with students, unless otherwise specified by the course coordinator.

Potential conflicts of interest, such as students connected to the GTA by kinship, common origin, marriage, or GTA-student relationships that might be perceived as inappropriate, should be reported to the Department Head prior to accepting the GTA assignment. Conflicts of interest can be managed, as long as they are disclosed in advance. Not disclosing potential conflicts of interest related to GTA duties may result in loss of the Graduate Assistantship.

International students must meet certain requirements of English language proficiency to serve in this role thereafter (see “Additional Requirements for International and Non-Healthcare Students”.)

Students who serve as graduate teaching assistants will be evaluated at the end of the semester by the course coordinator (and potentially other faculty member(s) who have enough interaction with the GTA) to provide constructive comments for the course and term specified, as determined by the course coordinator. The coordinator will be responsible for collecting completed evaluations and reviewing these with the student. Evaluations will be signed by the student and evaluator and returned to the Graduate Program Officer to place in the student’s file. A copy of this form can be found in the Appendix.

Vacation and Personal Leave
Graduate students do not accumulate vacation, personal, or sick leave time and the provisions of FMLA do not apply. Thus, HSOP graduate students are approved for absence only for official holiday periods as specified by the Auburn University Office of Human Resources. Those HSOP graduate students on assistantship will be granted paid leave only for those official holiday periods. These dates can be found on the web at http://www.auburn.edu/administration/human_resources/holidays.htm. Note, most students in Health Outcomes Research and Policy are appointed for 12 months, and thus graduate assistants are responsible for their duties 12-months per year.

Requests for exception to the leave policy for vacation and personal leave must be submitted at least 7 days in advance (https://auburn.app.box.com/file/673380407281). These requests must be approved by the graduate student’s faculty advisor, assistantship supervisor (if applicable), Department Head, and the Associate Dean for Research and Graduate Programs. If sick leave cannot be approved in advance, please submit a leave form upon your return. All requests for exceptions to the leave policy for sickness must be accompanied by an explanation from a primary health care provider. Graduate students on assistantship may not be paid for absences during other periods. Excessive unexcused absences may serve as grounds for terminating a graduate student’s financial support and/or their position in the graduate program.

Continuation of Assistantships
Your academic and assistantship performance will be evaluated during each semester, and assistantships will only be renewed for those with acceptable performance. Your efforts to secure funding from other sources will also be positively considered when renewing assistantships. While it is our goal to provide Graduate Assistantships to all students, our ability to provide assistantships for the duration of your academic program may also be limited by funding and availability. Master’s degree students should not expect to receive more than 2 years of support, and PhD students should not expect to receive more than 4 years of support. Exceptions to
this time limit will be reviewed on a case-by-case basis, considering academic progress, performance as a graduate assistant, and availability of funds.

**Workspace**
Each student will be provided access to the departmental office suite and desk space in 4205 Walker, or comparable office space. Students must obtain card access by first making a request with the Department’s Administrative Assistant. Cards may then be picked up at Auburn University Tiger Card office, located on the bottom floor of the Student Center.

**Phones**
Phones are provided in the office and should be used only for University teaching and research activities. The graduate student phone number is 334-844-8330. Please be respectful of your office-mates when using the shared phone. On-campus phone numbers require only the last 5 digits (4-xxxx) and you must dial 9 to access off-campus phone numbers. Long distance phone calls are not permitted, except for department-related, approved purposes, and with the use of a university-provided access code.

**Photocopies and Office Supplies**
All work on the equipment available in the Department should be related to graduate course work, research, or an assistantship assignment. Photocopying may be done on Departmental equipment if it involves collaborative research between the student and a faculty member, graduate course work, or an assistantship assignment. Work unrelated to any of these areas is not an acceptable reason to use Departmental equipment. In an effort to help curb unnecessary expenditures, all graduate students should make an effort to proactively insure that copies are made in black and white unless color copies are absolutely needed.

**Administrative Support**
Administrative support is limited. Usually, the only justification for soliciting administrative or work-study student assistance is regarding work related to an assistantship assignment. All requests for help should be submitted through your advisor and/or the department head.

**Library and Electronic Resources**
The library provides search tools and access to multiple health-related resources. Search tools most relevant to pharmacy can be found at [http://www.lib.auburn.edu/find/bysubject.php#40](http://www.lib.auburn.edu/find/bysubject.php#40). PubMed is a public access search engine that also is very useful ([http://www.ncbi.nlm.nih.gov/pubmed/](http://www.ncbi.nlm.nih.gov/pubmed/)).

The Harrison School of Pharmacy licenses additional pharmacy and medical resources, including products like Clinical Pharmacology, Lexi-Comp, Facts and Comparisons, and Micromedex. These resources can be accessed via the HSOP student webpage.

Electronic resources of Auburn University must be used responsibly. Inappropriate or illegal activities conducted using University computers, networks, or email addresses will not be tolerated.

**Computers**
Graduate students are required to own and maintain a laptop computer. Wireless internet is provided in most places on campus, and wired ports are provided in student office space. The Harrison School of Pharmacy Office of Information Technology (OIT) can provide minimal support for your computers, only as needed for departmental teaching or research activities. This includes help in establishing internet connectivity or connecting to University printers. The School is primarily a Windows-based computing environment. Students are
welcome to use their preferred laptop operating system but should be aware that support for non-Windows machines is very limited. The Department will not purchase software licenses for student’s personal computers, but software licenses may be obtained through AU Install
https://cws.auburn.edu/shared/auth/index?r=http%3A%2F%2Fcws.auburn.edu%3A80%2Foit%2Fauinstall&i=86. HSOP OIT may also be able to provide discounted licenses on other needed software, and these requests should be made through your advisor.

The Department will maintain public desktop computer(s) for use by graduate students. These computers will have software installed that will be needed for coursework and research, including SAS, SPSS, EndNote, and Adobe.

Dress Code
The Walker Building of the Harrison School of Pharmacy is a professional patient care site; a dress code policy is in place for activities being conducted in the building. Graduate students with Teaching Assistantships who will be attending PharmD courses in the Walker Building should comply with the HSOP Dress Code while fulfilling course attendance requirements in the Walker Building. The HSOP Professional Dress Policy can be accessed at the following link: https://www.auburn.edu/academic/pharmacy/about/pp/dress-code.pdf. There is not a dress code policy for time spent in the Department office, but students will be expected to dress professionally if making presentations at other campus or distant venues, including research presentations, representing the Department or HSOP in campus-based organizations, or others.

Funds for Travel, Research, and Stipend Support
Each graduate student, upon entering the HORP program will receive an allowance to help defray costs of travel, software purchases, and thesis/dissertation project expenses.*

- **Allowance amounts:**
  - PhD students will receive an allowance of $3,000 over the course of the PhD training period.
  - Students seeking a terminal MS degree will receive an allowance of $1,000.

- PhD students may use up to $1000 of allowable funds prior to successfully passing the dissertation proposal defense, then the balance of the funds will be released for use up until graduation from the program.

- Funds shall be used to cover university approved expenses and must be approved by the student’s major advisor. No additional funds may be requested, and any funds not spent at the time of graduation cannot be transferred or cashed out.

- In the event that a student transfers from the MS program into the PhD program, any balance may be carried over and a total of up to $3,000 will be allowed.

- All funds will be processed through the Department’s account. Funds cannot be withdrawn nor transferred to an individual student’s personal account.

- Use of funds must be justified and requests submitted using a RAT for travel and the Application for Department Research Support form for all other requests. The link to the request form can be found at https://auburn.app.box.com/file/673387756390.

- Funds may not be used for international travel.
- Funds cannot be used to pay for students’ fees and health insurance.
- Students are required to purchase and maintain a personal laptop as part of the requirements for admission; these funds may not be used for that purpose.
- Under unusual circumstances, exceptions to these rules may be considered on a case-by-case basis.
*NOTE: This policy applies to students entering the program in Spring of 2019 or later and takes the place of the former travel allowance of $500 per year.

The following recurring opportunities might be available to you.

**American Foundation for Pharmaceutical Education (AFPE)**
First-year graduate student fellowships, pre-doctoral fellowships, and minority awards are available to US citizens or permanent residents ([http://afphepharm.org/wp-content/uploads/2016/10/2017-PreDoc-Award-Description-Final.pdf](http://afphepharm.org/wp-content/uploads/2016/10/2017-PreDoc-Award-Description-Final.pdf)) These awards are competitive and prestigious, paying between $6,500 to $12,500 per year. Pre-doctoral students who have completed at least 3 semesters of graduate education or eligible to apply for the pre-doctoral fellowships. Awards are renewable, and may be used for student stipends, supplies, books, materials, travel, etc.

**PhRMA Foundation Pre-Doctoral Fellowship in Health Outcomes**
Pre-Doctoral fellowships up to 2-years in length are available to US citizens or permanent residents, as well as international students. ([http://www.phrmafoundation.org/2018-awards/pre-doctoral-fellowship-awards/](http://www.phrmafoundation.org/2018-awards/pre-doctoral-fellowship-awards/)). Students who have completed the bulk of their Pre-dissertation work (at least 2 years) and are beginning their dissertation research are eligible to apply. The award provides a stipend of $25,000 per year, with up to $1000 per year available for dissertation preparation expenses.

**AHRQ Health Services Dissertation Awards (R36)**
The Agency for Healthcare Research and Quality provides dissertation awards of up to $40,000 direct costs for the entire project period ([http://grants.nih.gov/grants/guide/pa-files/PAR-09-212.html](http://grants.nih.gov/grants/guide/pa-files/PAR-09-212.html)). Applicants must be US citizens or permanent residents and must have completed all non-dissertation requirements for their doctoral degree by the time of submission of the application. Approval of the dissertation committee also is required.

**Drug Abuse Dissertation Research (R36)**
National Institute on Drug Abuse provides dissertation support of up to $50,000 direct costs for the entire project period ([https://grants.nih.gov/grants/guide/pa-files/PA-16-443.html](https://grants.nih.gov/grants/guide/pa-files/PA-16-443.html)). Applicants must be US citizens or permanent residents.

**Ruth L. Kirschstein National Research Service Award (NRSA)**
The National Institutes of Health offers a number of training grants for pre-doctoral students. Students who have previously earned a PharmD degree or other terminal healthcare professional degree also may be eligible for post-doctoral awards. These awards are highly competitive, but highly prestigious and financially generous. See [http://grants.nih.gov/training/F_files_nrsa.htm](http://grants.nih.gov/training/F_files_nrsa.htm) for further information on specific awards that are available.

**Summer Internships**
Students with an interest in a career in the pharmaceutical industry, federal or state agencies, or other outcomes related fields may be interested in a summer internship. While no formal program exists to place students in these positions, you may find information by networking with other students and faculty or by reviewing the following sites: [www.amcp.org](http://www.amcp.org) or [https://www.ispor.org/member-groups/new-professionals/professional-development-resources/internships-fellowships-career-opportunities-for-the-future](https://www.ispor.org/member-groups/new-professionals/professional-development-resources/internships-fellowships-career-opportunities-for-the-future).
Appendix – Departmental Forms
Committee Meeting Report

This form is to be completed by the student following each Advisory/Thesis/Dissertation Committee Meeting. The completed form should be signed by the student and all committee members and the original submitted to the Graduate Program Officer for placement in the student’s file.

<table>
<thead>
<tr>
<th>Student:</th>
<th>Date of meeting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committee Type (Advisory, Thesis, or Dissertation):</td>
<td></td>
</tr>
</tbody>
</table>

1. Progress on previous recommendations:

2. Summary of discussion:

3. Recommendations going forward:

4. Other comments:

5. Next planned committee meeting (if known):

________________________  __________________________
Committee chairperson (mentor)  Graduate student

________________________  __________________________
Committee member  Committee member

________________________  __________________________
Committee member  Committee member (external)
Advisor Selection Ranking Form

To be completed at the end of 1st year of program

Name: ___________________________ Banner ID: ___________________________

Program (MS/PhD): ___________________________

Advisor Selection 1: ___________________________

Justification: __________________________________________________________

Advisor Selection 2: ___________________________

Justification: __________________________________________________________

Advisor Selection 3: ___________________________

Justification: __________________________________________________________

Student Signature: ___________________________ Date: _______________________

Advisor selected by faculty: Selection 1 _______ Selection 2 _______ Selection 3 _______

Selected Advisor Signature: ___________________________ Date: __________________

Department Head Signature: ___________________________ Date: __________________
Change of Advisor Form

Date: __________

Student’s Name: ______________________________
Print

Current Advisor’s Name: ______________________________
Print

New Advisor’s Name: ______________________________
Print

I confirm that I will be the new academic advisor for the above mentioned student and I accept all responsibilities of being their advisor.

New Advisor’s Signature: ______________________________ Date:_____

Student Signature: ______________________________ Date:_____

Return this form to the Graduate Program Officer.

---

Do Not Write Below This Line

Date Submitted: ________________

Graduate Program Officer Signature: ______________________________

Former Advisor Signature: ______________________________

Cc: HSOP Office of Research and Graduate Programs
   Student File
Approval for Independent Study/Directed Readings

Part I – To Be Completed By Student

Name: ________________________________  Student ID#: ____________________________

College: ________________________________  Major: ________________________________

Course Number: __________  Course Title: ________________________________

Number of Credit Hours Requested: ______  Semester: __________________________, 20______

Professor: ________________________________  Department: ____________________________

Grade Option:

Letter Grade
Satisfactory/Unsatisfactory

Part II – To Be Completed By Instructor

(Please attach a course syllabus that addresses the following four points.)

I. Objective of the course

II. Nature of the teaching-learning process and the proposed schedule of meeting

III. Proposed work products

IV. Criteria to assess the work product

_________________________________________  ______________________________________
Student Signature  Date  Associate Dean for Research  Date
And Graduate Programs Signature

_________________________________________  ______________________________________
Instructor Signature  Date  Dean Signature  Date

_________________________________________  ______________________________________
Department Head Signature  Date  Provost Signature  Date
Academic Progress Annual Report

To be completed by the student

A copy of the current plan of study and a copy of transcript should be attached to this report.

Date
Your name
Program enrolled    _____ Master’s program
(check one)          _____ Doctoral program
Thesis/dissertation advisor
Date admitted to the program
Current cumulative GPA
Number of credits below B (including an incomplete)
Date (or expected date) of plan of study submission
Number of remaining required courses indicated in the plan of study
Date (or expected date) of comprehensive exam (Doctoral students only)
Date (or expected date) of thesis/dissertation proposal approval
Date (or expected date) of final thesis/dissertation defense
Please describe the following information:

**Goals:**

1. Professional goal statement. Please consider including both academic and career goals

2. Goals for the next academic year

**Accomplishments:**

For questions 3-5, please organize your works in chronological order with complete titles, authors and citation.

3. All manuscripts published or submitted to peer reviewed journals since admission into the program

4. All abstracts published since admission into the program
5. All presentations at conferences since admission into the program

6. Grants for research and travel (list full name of the grant, funding agency, date, and amount of grant since admission into the program)

   Applied For:

   Received:

7. Awards and honors received since admission into the program

Activities:

8. Scientific meetings attended (list complete name and date(s) of meeting(s))

9. Research project(s) that you actively participate in (not including your own thesis/dissertation; list full name of research projects and faculty supervisors)
10. Participation in professional (PharmD) curriculum (list courses taught and/or assisted)

11. Other professional/research activities

Comments:

12. Briefly comment on your progress in achieving your academic goals during the past year. Note areas in which you are experiencing any difficulty and which areas you would like to make an improvement.

13. Briefly address any barriers/challenges that hinder your progress in the program and your future plan to address them.
To be completed by the Major Advisor

1. Has the student made satisfactory progress during the current academic year? Please comment below.

2. Please comment on the overall academic performance of the student.

3. Please comment on any barriers/challenges impeding the progress and plans to address them.
**Student** Your signature below indicates that you have discussed the contents of this progress report with your major advisor.

Student ___________________________ Date ________________

**Major Advisor** Your signature below indicates that you have discussed the contents of this progress report with the student.

Major Advisor ___________________________ Date ________________

Dept Head ___________________________ Date ________________

When both the major advisor and student have reviewed and signed this progress report, copies of the report should be given to the student and the major advisor. The original progress report should be placed in the student's file in the department. Students who wish to appeal any part of the major advisor's evaluation may do so in writing to the department head.
## GTA Evaluation

Pertinent items are to be answered by the GTA’s direct supervisor to provide constructive comments for the course and term specified. Indicate N/A for questions that you are unable to answer or for questions that do not apply.

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The GTA delivers course content effectively.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The GTA is punctual to classroom/lab, meetings, and scheduled appointments.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The GTA is accountable for the assigned duties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>The GTA proactive in identifying tasks that need to be completed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>The GTA accepts constructive criticism and responds accordingly to improve him/herself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The GTA demonstrates diligence, consistency, accuracy, and completes assignments on time.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>The GTA effectively handles problems through communication with students, teachers, administrators, and others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>The GTA adheres to the HSOP policies, practices, procedures and dress code.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Strengths of the GTA:

10. Areas of improvement for the GTA:
Application for Departmental Research Support

APPLICANT INFORMATION

Last Name: ___________________________  First Name: ___________________________
Banner ID: _______________  Phone: ___________________________  Email: ___________________________

EXPENSE INFORMATION

Total funds requested: $______________
Total funds pledged from Major Advisor $______________
Total funds received from other sources $______________

Describe efforts made to secure funding from other sources:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

JUSTIFICATION

Describe why the funds are needed and detail how they will be used:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

APPLICANT CERTIFICATION

Applicant Signature: ___________________________  Date: _______________
Advisor Signature: ___________________________  Date: _______________

Return this form to the Department Head.

Do Not Write Below This Line

Date Submitted: _______________
Department Head Signature: ___________________________
Approved: Yes ________  No ________
HORP Graduate Student Checklist – PhD Program

This checklist is intended to help guide you through your time of study in our program. You will be responsible for maintaining this checklist and may want to share it with your faculty advisor periodically to keep him or her informed of your progress.

<table>
<thead>
<tr>
<th>Task or Milestone</th>
<th>Timeline for Completion</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in at least 3 research rotations</td>
<td>By end of first full year of study</td>
<td></td>
</tr>
<tr>
<td>Complete the Advisor Selection Ranking Form – submit to GPO</td>
<td>By end of first full year of study</td>
<td></td>
</tr>
<tr>
<td>Form an advisory committee</td>
<td>By end of first full year of study</td>
<td></td>
</tr>
<tr>
<td>Complete Academic Progress Report – Year 1 – submit to GPO</td>
<td>By June of first year</td>
<td></td>
</tr>
<tr>
<td>Complete Academic Progress Report – Year 2 – submit to GPO</td>
<td>By June of second year</td>
<td></td>
</tr>
<tr>
<td>Complete Academic Progress Report – Year 3 – submit to GPO</td>
<td>By June of third year</td>
<td></td>
</tr>
<tr>
<td>Submit Plan of Study to Graduate School</td>
<td>By end of first semester of second year</td>
<td></td>
</tr>
<tr>
<td>Comprehensive Exam</td>
<td>After completion of required coursework (with the exception of Grant Writing)</td>
<td></td>
</tr>
<tr>
<td>Form a dissertation committee</td>
<td>Varies, but prior to dissertation defense</td>
<td></td>
</tr>
<tr>
<td>Dissertation Proposal Defense</td>
<td>After completion of comprehensive exam – timing varies. Student should submit application to the Graduate School at least one week in advance</td>
<td></td>
</tr>
<tr>
<td>Final Dissertation Defense</td>
<td>Varies – student should submit application to the Graduate School at least one week in advance</td>
<td></td>
</tr>
<tr>
<td>Corrections made and final dissertation submitted</td>
<td>Varies – student should submit form to the graduate school</td>
<td></td>
</tr>
<tr>
<td>First manuscript accepted for publication</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Second manuscript accepted for publication</td>
<td>Varies</td>
<td></td>
</tr>
</tbody>
</table>

In addition, you should perform the following tasks periodically throughout your course of study.

<table>
<thead>
<tr>
<th>Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold advisory committee meeting and submit report</td>
<td>Each Fall and Spring semester, until you have a dissertation committee</td>
</tr>
<tr>
<td>Complete Academic Progress Report</td>
<td>Each year (Summer semester)</td>
</tr>
</tbody>
</table>
HORP Graduate Student Checklist – MS Program

This checklist is intended to help guide you through your time of study in our program. You will be responsible for maintaining this checklist and may want to share it with your faculty advisor periodically to keep him or her informed of your progress.

<table>
<thead>
<tr>
<th>Task or Milestone</th>
<th>Timeline for Completion</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in 3 research rotations</td>
<td>By end of first full year of study</td>
<td></td>
</tr>
<tr>
<td>Complete the Advisor Selection Ranking Form</td>
<td>By end of first full year of study</td>
<td></td>
</tr>
<tr>
<td>Form a thesis committee</td>
<td>By end of first full year of study</td>
<td></td>
</tr>
<tr>
<td>Complete Academic Progress Report – Year 1 – submit to GPO</td>
<td>By June of first year</td>
<td></td>
</tr>
<tr>
<td>Complete Academic Progress Report – Year 2 – submit to GPO</td>
<td>By June of second year</td>
<td></td>
</tr>
<tr>
<td>Submit Plan of Study to Graduate School</td>
<td>By end of first semester of second year</td>
<td></td>
</tr>
<tr>
<td>Thesis Proposal Defense</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Final Thesis Defense</td>
<td>Varies – student should submit application to the Graduate School at least one week in advance</td>
<td></td>
</tr>
<tr>
<td>Corrections made and final thesis submitted</td>
<td>Varies – student should submit form to the graduate school</td>
<td></td>
</tr>
</tbody>
</table>

In addition, you should perform the following tasks periodically throughout your course of study.

<table>
<thead>
<tr>
<th>Ongoing Tasks</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold advisory committee meeting and submit report</td>
<td>Each Fall and Spring semester, until you have a thesis committee</td>
</tr>
<tr>
<td>Complete Academic Progress Report</td>
<td>Each year (Summer Semester)</td>
</tr>
</tbody>
</table>
**Graduate Student Request To Be Absent**

*(Must be submitted at least seven days in advance of planned absence)*

Graduate Student’s Name (Print): __________________________

Department: ____________________________________________

Student Appointment Type   _____GTA    _____GRA    _____ Not Applicable

Reason for Absence:  
   _____Personal illness/injury  
   _____Death in family  
   _____Scientific Meeting  
   _____Other (explain): ____________________________

Dates of Requested Absence:  
From ________AM/PM  ____________________________  
                         Month     Date     Year

Through ________AM/PM  ____________________________  
                         Month     Date     Year

_________________________________  ____________________________  
Total Hours of Paid Leave          Total Hours of Unpaid Leave

_________________________________  ____________________________  
Graduate Student Signature       Date

_________________________________  ____________________________  
Faculty Advisor Signature        Date

_________________________________  ____________________________  
Graduate Assistant Supervisor Signature (IF APPLICABLE)  Date

_________________________________  ____________________________  
Department Head Signature       Date

_________________________________  ____________________________  
Associate Dean for Research and Graduate Programs Signature  Date