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Welcome
From the Department Chair

Welcome to the College of Public Health at the University of Georgia and the Department of Epidemiology and Biostatistics! We are very pleased that you chose our department as your home for graduate education.

Our faculty are engaged in world-class research in many different areas of Epidemiology, Biostatistics, and Data Analysis and Modeling.

Our department has a strong tradition of collaboration with public and private health agencies and institutions including collaborative ties with the Centers for Disease Control and Prevention (CDC), the Georgia Department of Public Health and its Regional District offices, the Archway Partnership Program, College of Veterinary Medicine- Population Sciences, the Biomedical and Health Sciences Institute and the Faculty of Infectious Disease, and the Center for Global Health.

We are here to foster your success. My door is always open, so please come by if there are questions or you may need our assistance.

José F. Cordero, MD, MPH
Patel Distinguished Professor in Public Health
Head, Department of Epidemiology and Biostatistics
From the Graduate Coordinator and Program Directors

Welcome to the department of Epidemiology and Biostatistics at UGA!

Our department currently offers MS and PhD degrees. For both degrees, students choose one of three areas of emphasis: Epidemiology (EPID) or Biostatistics (BIOS) or Data Analysis & Modeling (DAM). The MS and PhD programs are fully housed within and administered by our department. The handbook you are reading applies to the MS and PhD degrees.

The College of Public Health (CPH) offers the MPH degree. While those students can choose Biostatistics or Epidemiology as concentrations, these programs are administered by the college and not our department. Separate student handbooks for the MPH degree are maintained by CPH. The MPH Handbook can be found here.

The department also offers a certificate in Infectious Disease Epidemiology. A separate handbook exists for this certificate. It can be found here.

The graduate school at UGA is the final decision maker regarding all issues involving graduate education. The departmental graduate coordinator (GC) is the liaison between graduate students and the graduate school. Each department has a single GC. This person is responsible for all official paperwork. For each area of emphasis, there is a designated program director (PD). The program directors handle issues related to the specific programs they oversee. For most forms, a signature from the GC is required.

A staff person in the department handles the majority of paperwork related to graduate education and supports the faculty serving as GC and program directors. This person should be your first point of contact for most questions. The staff person currently responsible for anything related to graduate education in the department is Sara Ervin (scervin@uga.edu). Her office is located in Miller Hall 106.

This handbook covers MS and PhD degrees offered through the department. Some information applies equally to all degrees and programs. Some information is program-specific.

Graduate students are expected to be fully informed regarding all parts of this document pertaining to their degree, as well as all the outside sources to which this document refers. However, if any aspects of your degree program remain unclear after reviewing these documents, please do not hesitate to ask questions.

<table>
<thead>
<tr>
<th>Andreas Handel</th>
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<th>Sara Ervin</th>
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<tr>
<td>Associate Professor, Graduate Coordinator</td>
<td>Program Director Epidemiology and Data Analysis &amp; Modeling</td>
<td>Professor</td>
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<td><a href="mailto:ahandel@uga.edu">ahandel@uga.edu</a></td>
<td><a href="mailto:rathbun@uga.edu">rathbun@uga.edu</a></td>
<td><a href="mailto:scervin@uga.edu">scervin@uga.edu</a></td>
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<td>Miller Hall 124</td>
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General Information

The following pages contain information that applies to all graduate programs administered by our department.

Departmental Mission Statement
The Department of Epidemiology and Biostatistics trains public health professionals and researchers in the use of epidemiological principles, biostatistical methods, and data analysis and modeling approaches with the goal of conducting innovative research to address existing and emerging public health issues.

We are a community of scholars dedicated to integrating research, teaching, and service by collaborating within and across disciplines, including collaborations between faculty, students, and community partners. We are committed to critically evaluating how our program contributes to the greater populations. We are committed to serving, including those who solicit our technical expertise and advocacy and who support our work.

In all of our work, we strive to express the values we hold to be at the heart of our professional commitment including: honesty, compassion, quality, impact, diversity, and social justice. We strive to balance and to act as role models for one another.

Department of Epidemiology and Biostatistics By-Laws
The Department of Epidemiology and Biostatistics is governed by a set of by-laws that were written and approved by faculty in the department. These by-laws specify internal policies and procedures that apply to faculty and comport with UGA guidelines. The by-laws can be obtained from the departmental staff.

Departmental Personnel
Please visit the department’s webpage for the most up-to-date information to learn about the faculty and staff of our department. If you spot errors or outdated information on the web page, please let us know.

Graduate School Policies
The University of Georgia Graduate School policies govern the administration of our graduate degrees. Visit http://www.grad.uga.edu for information on specific academic procedures and regulations. In case of conflicts between departmental policies and those of the graduate school/university, the latter are to be followed.
You are expected to know of and abide by all the rules and policies specified by the graduate school. You should read all information on the graduate school webpage that applies to you very carefully!

**Graduate School Forms**
There are numerous forms that you must fill out and sign throughout your graduate studies. Consult the graduate school webpage, check all the forms and ensure you submit them in a timely manner. Note that your advisor may not necessarily be familiar with all forms. Thus, students should not rely on their advisor for knowing how and when to submit the necessary paperwork. Rather, it is the responsibility of graduate students to ensure correct and timely submission. If in doubt, ask the graduate coordinator, program director, or the faculty/student coordinator.

**Calendars and Deadlines**
The academic calendar is maintained by the Registrar’s office at UGA. Please consult the academic calendar for important dates during the year including the start of school, add-drop dates, dates for early registration, examination periods, graduation dates, etc. The graduate school maintains additional calendars with deadlines pertaining to specific aspects of graduate education. Consult those as well. It is graduate students’ responsibility to initiate any required paperwork well in advance to ensure all deadlines can be met.

**Admissions**
All students seeking admission to one of the departmental graduate programs need to satisfy the requirements specified by UGA’s graduate school. Consult the graduate school webpage for that information. Additional requirements for each specific program are described in the program-specific sections of this document.

**Registration**
Students register via computer using UGA’s student management and registration system. For detailed information concerning procedures and timelines for registration, please check the webpage of the Registrar’s office: [http://www.reg.uga.edu/registration](http://www.reg.uga.edu/registration)

**Enrollment Policy**
Graduate students must register for at least three credit hours for two of the three semesters during the academic year, with some exceptions for some UGA employees. Students who cannot enroll for two of three semesters should seek a leave of absence. More details regarding enrollment policies are found on the graduate school webpage in the “Graduate Enrollment Policy” section.
Time Limitations
All requirements except the dissertation and final oral examination must be completed within a period of six years. For more details, check the “Degree Requirements” information on the graduate school webpage for detailed information.

Health Services
UGA has a comprehensive Health Center, which provides a broad range of services to the UGA community for mental and physical health and wellness. To learn more about available resources, visit the University Health Center website: http://www.uhs.uga.edu.

Health Insurance
UGA currently has a voluntary and a mandatory health insurance plan. Visit here learn more about these plans and to determine if you are required to have health insurance.

Non-Discrimination and Anti-Harassment Policy
The University of Georgia is committed to maintaining a fair and respectful environment for living, work and study. The Equal Opportunity Office is responsible for ensuring such an environment and to follow all laws. To learn more about these issues and available resources, please see the EOO website.

Campus Emergencies – UGA Alert
The UGA Alert system is meant to inform the UGA community of any kind of emergencies in a timely manner. Learn more, sign up or update your information on their website: http://www.ugaalert.uga.edu/

Academic Honesty Policy
Every student must agree to abide by UGA’s academic honesty policy and procedures known as “A Culture of Honesty”. Details on the honesty policy, including explanations of what consist of violations and the consequences for such violations can be found here.

UGA Family Education Rights and Privacy Act (FERPA)
The federal Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. UGA abides by FERPA rules. To read more about these rules, see here: http://www.reg.uga.edu/ferpa_privacy_act NOTE: Please exhibit caution when setting certain FERPA restrictions in the system, as these can have consequences that you may not want, such as legally prohibiting your advisor from writing you a letter of recommendation. If you do choose to change your FERPA settings, you will be able to do so using the system you use to manage your records. If you have any questions, ask.
Source for UGA Policies and Procedures
For a comprehensive list of all University policies and procedures go to
http://www.uga.edu/inside/policies.html

Advising
Upon first entering any of the programs, the main advisor for the student will in general be the GC or the PD of their chosen area of emphasis. Once the student has identified a faculty under whom they plan to do their thesis, this faculty becomes the student’s major professor. The major professor will serve as the student’s main advisor and mentor until graduation. The advisory committee will provide additional support and advice. Usually, documents required for the degree program will require signatures from both the major professor and the GC (and sometimes additional persons). Each form will contain instructions on the required signatures.

Performance Review of Graduate Students
Students are expected to meet with the PD or Major Professor regularly, but at least twice per semester, to discuss and review progress toward degree completion. This can be combined with advising. This review will include course grades, performance on exams, progress with dissertation research, and participation in other program activities. At the end of every academic year, the PD or Major Professor will complete a formal evaluation of student’s performance to determine whether progress is satisfactory or not satisfactory based on performance. If progress is unsatisfactory, the student will plan a course of action with their major advisor, PD and Graduate Coordinator to improve their progress. If a student demonstrates unsatisfactory progress a second year, they may be withdrawn from the program.

The graduate school independently tracks student performance and places students on warning or probation, with eventual dismissal, if grades fail to meet the required GPA. See the graduate school webpage for more information.
DEGREE SPECIFIC INFORMATION

The following pages contain information that are specific to each degree.

Specific information for each degree and area of emphasis are provided.
MS in Epidemiology & Biostatistics
Goals of the Program

The primary objective of the M.S. Program in Epidemiology and Biostatistics is to train students in the knowledge, application and evaluation of core epidemiological, data analysis, modeling and biostatistical methods in public health and biomedicine. In addition, students will become subject matter experts in their chosen area of emphasis of Biostatistics (BIOS), Epidemiology (EPID), or Data Analysis & Modeling (DAM). The Department of Epidemiology and Biostatistics embraces competency-based education as set forth by the Association of Schools and Programs of Public Health. We specifically expect students to acquire the following competencies:

General competencies

Students receiving a M.S. in Epidemiology and Biostatistics are expected to gain the following competencies:

- Demonstrate a command of core epidemiological and biostatistical approaches and techniques.
- Critically review and assess the primary public health and biomedical literature.
- Communicate effectively with stakeholders in public health and biomedical research.
- Demonstrate ethical research practices as pertains to data collection, data management, analysis, and interpretation.
- Demonstrate ability to use computational approaches in the analysis of public health data.

Specific competencies

For the biostatistics area of emphasis, the following additional competencies apply:

- Critically review the statistical content of the public health and biomedical literature.
- Consult with investigators in public health and biomedicine on the design of clinical trials, case-control studies, public health surveys, and other experimental and observational studies.
- Critically evaluate and apply extant and new statistical methods.

For the epidemiology area of emphasis, the following additional competencies apply:

- Evaluate surveillance programs, participate in an outbreak investigation, and design a valid survey instrument.
- Demonstrate ability to design cohort and case-control studies to address a public health question, and appropriately analyze the resulting data.

For the data analysis & modeling area of emphasis, the following additional competencies apply:

- Demonstrate proficiency in writing computer code
- Demonstrate ability to apply sophisticated analysis methods to public health data

Pre-requisites

Applicants must satisfy the requirements specified by the graduate school. Applicants may have training in any discipline including but not limited to mathematics, public health, the biological or
physical sciences, computer science, engineering, psychology, sociology, business, statistics or biostatistics. Previous coursework or standardized test results should demonstrate strong quantitative skills. Students are expected to have previous epidemiological and biostatistical knowledge at a level taught in our EPID and BIOS 7010 courses. Applicants seeking to complete the area of emphasis in data analysis and modeling or biostatistics must have additional biostatistical knowledge at the level of BIOS 7020. Biostatistics students should additionally have a completed course in differential, integral and multivariate calculus. Linear algebra is strongly encouraged. Students may be admitted without all of these pre-requisites under the condition that they take any remedial courses (e.g. EPID/BIOS 7010 or BIOS 7020), during their first semester of study. Any remedial courses do not count toward the degree.

**Curriculum Overview**

The M.S. degree in Epidemiology and Biostatistics will be awarded in recognition of general graduate level knowledge and understanding in Epidemiology, Biostatistics and Data Analysis & Modeling, as well as specialized knowledge in the chosen area of emphasis. Students will have to pass all required classes with a grade of B or above and need to maintain an overall B average. No grade below a C can be counted toward completion of the degree. To show their research proficiency, students have to perform research culminating in a Master’s Thesis. As part of this requirement, students will form a thesis committee, complete the thesis research project, and write and defend the final thesis to the committee and other members of the academic community at the university. The student is guided through the experience by a research advisor (mentor) and advisory Committee. All requirements for M.S. programs as specified by the Graduate School will have to be met.

**Coursework**

Students will complete a minimum of 36 credits. The courses are divided into those that are required to be taken by all students, and courses that are specific to a student’s chosen area of emphasis.

**Required by everyone (18 credits):**
- Fundamentals of Epidemiology (EPID 7020), 3 credits
- Research Data Management and Computing (BIOS 7400), 3 credits
- Regression and ANOVA (BIOS 8010), 3 credits
- Master level research (BIOS/EPID 7000), 3 credits
- Master thesis (BIOS 7300), 3 credits
- Graduate Seminar (BIOS 9100), 2 credits
- Ethics Seminar, 1 credit

**Required for BIOS (11 credits):**
- STAT 6510 3 (might be substituted with STAT 6810)
- STAT 6520 3 (might be substituted with STAT 6820)
- BIOS 8020 3 Linear and Generalized Linear Models
• BIOS 8200  2  Biostatistical Consulting

Required for EPID (12 credits):
• BIOS 7020  3  Introductory Biostatistics II
• EPID 7410  3  Field Epidemiology
• EPID 8010  3  Cohort Study Design
• EPID 8020  3  Case Control Design

Required for DAM (11 credits):
• EPID 7500  3  Introduction to Coding in R for Public Health.
• EPID/BIOS 8060  3  Modern Applied Data Analysis
• BIOS 8200  3  Biostatistical Consulting
• BIOS 8020  3  Linear and Generalized Linear Models

Electives (6+ credits):
• Any EPID or BIOS class, or (with permission of advisor or program director), any other appropriate 7000/8000 graduate level class. Taking further electives is encouraged.

Additional coursework:
• As per UGA rules, a student who receives any level of support or is assigned teaching duties has to take a section of GRSC 7770. This course does not count toward the 36 credit program requirement.

Students who can prove mastery of content taught in a required class may be exempt from such a class at the discretion of the Department of Epidemiology and Biostatistics. Such students must replace exempted courses with qualified electives so as to maintain the total number of course credit hours required for each aspect of the degree.

**Sample Program of Study**
This is an example program of study for the different areas of emphasis. This can be adjusted based on needs and interests of individual students.

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<tr>
<th>Time</th>
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<td>Year 1 Fall</td>
<td>BIOS 7400, EPID 7020, BIOS 8010,</td>
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<td>STAT 6510, EPID 9100</td>
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<td>BIOS 7020, EPID 7500, EPID</td>
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<td>9100</td>
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<tr>
<td>Year 1 Spring</td>
<td>BIOS 8020, STAT 6520, BIOS 8200,</td>
<td>EPID 7410, EPID 8020, EPID 9100,</td>
<td>EPID 8060, BIOS 8020, EPID</td>
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<td>EPID 9100, Ethics, elective</td>
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<td>9100, Ethics, elective</td>
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<td>Year 1 Summer</td>
<td>Classes or Research as Available</td>
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<td>BIOS 8200</td>
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<td>Year 2 Spring</td>
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**Advisement**

Upon entering the program, students are generally advised by the GC or PD for their area of emphasis. **By the end of the first semester, students must identify a departmental faculty as their main advisor and form an advisory committee.** The master's advisory committee must consist of a minimum of three members. The chair and at least one other member must be members of the graduate faculty of the University of Georgia and the Department of Epidemiology and Biostatistics. The third member may be any person holding graduate faculty status at UGA. The third member can also be a non-UGA faculty member with a PhD or equivalent doctoral degree. For an external member, the GC will have to write a letter of justification to the graduate school. For more details, see the graduate school website.

**Thesis**

A candidate must submit a thesis which shows independent judgment in developing and addressing a research question. The thesis shall be written under the direction of the chair of the student's master's advisory committee. The chair is responsible for mentoring the student through the steps and procedures of the research project. Other members of the advisory committee should be engaged by the student as the need arises. The thesis must be approved by the chair of the student's advisory committee. The committee members must have three weeks to read and evaluate the completed thesis prior to its final defense.

A final oral defense of the thesis is required of all candidates. All members of the advisory committee must be present for the entire defense period and must vote to either agree to or dissent from the candidate's thesis approval. Thesis approval can only proceed with no more than one dissenting vote. The Graduate School must receive the Final Defense Approval form and an electronic submission of the corrected thesis prior to graduation. For more detailed requirements regarding deadlines and formatting of the thesis, see the graduate school website.
PhD in Epidemiology & Biostatistics
**Goals of the Program**

The objective of the PhD program in epidemiology and biostatistics is to provide students with in-depth knowledge of core epidemiological, data analysis, modeling and biostatistical methods. Students are expected to apply their knowledge to design, implement and evaluate research in public health and biomedicine. In addition, students will become subject matter experts in their chosen area of emphasis of Biostatistics (BIOS), Epidemiology (EPID), or Data Analysis & Modeling (DAM). The Department of Epidemiology and Biostatistics embraces competency-based education as set forth by the Association of Schools and Programs of Public Health. We expect students to acquire the following competencies:

**General Competencies:**

Students receiving a PhD in Epidemiology and Biostatistics should meet the following competencies:

- Improve public health through the development and application of new and innovative methods and approaches in Epidemiology & Biostatistics.
- Create new knowledge in the field of Epidemiology & Biostatistics, with a special emphasis on identifying emerging areas of enquiry, especially those that cross disciplinary boundaries.
- Translate new knowledge in Epidemiology & Biostatistics so that it may be implemented and used to improve public health.
- Improve the quality of public health and biomedical investigations through the use of sound study design and the appropriate application of state-of-the-art modeling, data analysis and biostatistical methods.
- Train epidemiologists, data scientists & biostatisticians to respond to future challenges in public health, to educate future generations of students in the field, and to provide service to the community.
- Serve the larger communities in which we live and work, by using our skills and knowledge.
- Evaluate and synthesize primary research literature to appraise the state of knowledge in an area of public health.
- Demonstrate and practice ethical research as it pertains to all aspects of data collection, management, analysis, and interpretation. This includes ethical and legal principles as they pertain to the collection, maintenance, use, and dissemination of data.
- Communicate effectively with lay audiences, with investigators in public health and other biomedical researchers.

For the biostatistics area of emphasis, the following additional competencies apply:

- Critically review the statistical content of the public health and biomedical literature.
- Consult with investigators in public health and biomedicine on the design of clinical trials, case-control studies, public health surveys, and other experimental and observational studies.
- Critically evaluate and apply extant and new statistical methods.
- Demonstrate a command of core biostatistical techniques, including their computation,
theoretical underpinnings, and their application in public health and biomedicine.

For the epidemiology area of emphasis, the following additional competencies apply:

- Choose valid observational or interventional study designs, data sources, and analytic methods to answer epidemiological questions.
- Apply key sources of epidemiologic data to inform programmatic and research activities.
- Lead and manage a research team to conduct an epidemiologic study.
- Articulate research questions in epidemiology that address critical problems in public health.

For the data analysis & modeling area of emphasis, the following additional competencies apply:

- Analyze epidemiologic data using valid statistical or mathematical methods to draw appropriate inferences from the results.
- Collect, organize, and manage data to ensure data integrity.
- Demonstrate a command of core biostatistical techniques, including their computation, theoretical underpinnings, and their application in public health and biomedicine.

Pre-Requisites
Applicants must satisfy the requirements specified by the graduate school. In addition, all students entering the program must show strong quantitative skills as evidenced by performance on standardized tests (e.g. GRE) or in prior quantitative courses (e.g. math, statistics, physics, engineering etc.).

Students are expected to have proficiency in the content and material equivalent to that covered in the EPID and BIOS 7010 and 7020 courses offered by the department. If students do not have that knowledge, they might still be admitted but might need to take those courses before starting the PhD course sequence outlined below. Those courses will not count toward the degree.

Applicants seeking to complete the area of emphasis in biostatistics must have completed courses in differential, integral and multivariate calculus, and linear algebra.

Curriculum
The degree of Doctor of Philosophy in Epidemiology & Biostatistics will be awarded in recognition of a strong foundational understanding of fundamental concepts in Epidemiology & Biostatistics, together with in-depth knowledge in the chosen area of emphasis. All students will demonstrate the ability to perform independent research and to communicate clearly the results of such research.

In this program, all students will acquire foundational knowledge and expertise in epidemiology, data analysis and biostatistics through successful completion of core course series. The student must further demonstrate their mastery of their chosen area of emphasis by taking required and elective courses in that area and by completing an independent research project under the direction of a faculty mentor.
Advanced academic knowledge will be demonstrated by meeting the requirements of each required and elective course and by passing both a department-wide written qualifying exam, which covers the general curriculum content, and a comprehensive exam, administered by the student’s advisory committee, which focuses on what the student needs to know for their chosen program of study. The exams are described in more detail below.

Research expertise will be demonstrated through the successful completion and defense of a dissertation research project. As part of this requirement, students will form a dissertation committee, write and defend a dissertation prospectus (i.e., proposal), complete the dissertation research project, and write and defend the final dissertation for the committee and other members of the academic community at the University. The student is guided through the experience by a research advisor (mentor) and Advisory Committee. This is described in more detail below. A minimum of 12 credits of dissertation research, and at least three credits of dissertation writing are also required.

The PhD program in Epidemiology & Biostatistics has three areas of emphasis. Biostatistics (BIOS), Epidemiology (EPID) and Data Analysis & Modeling (DAM). All students are expected to take core courses required for each area of emphasis. Each area of emphasis has additional specific requirements.

Students who can prove mastery of content taught in a required class may be exempt from such a class at the discretion of the Department of Epidemiology and Biostatistics. Such students must replace exempted courses with qualified electives so as to maintain the total number of course credit hours required for each component of the degree.
Coursework
To complete the Ph.D. the student will complete the following courses. The courses are divided into those that are required to be taken by students of any concentration, courses that are specific to concentrations, and electives.

Required by all concentrations:
- BIOS 8010 3 Regression and ANOVA
- BIOS 8020 3 Linear and Generalized Linear Models
- BIOS 8030 3 Longitudinal Data Analysis
- EPID 8010 3 Cohort Study Design
- EPID 8020 3 Case-Control Study Design
- EPID/BIOS 9100 2x1 Graduate Seminar
- EPID XXXX 1 Ethics Seminar
- GRSC 7770 3 Teaching Assistantship required class
- EPID/BIOS 9000 >=12 PhD level research
- EPID/BIOS 9300 >=3 PhD thesis writing

Required for BIOS (18 credits):
- STAT 6810 3 Probability Distributions
- STAT 6820 3 Statistical Inference
- BIOS 8040 3 Advanced Biostatistical Methods
- BIOS 8200 3 Biostatistical consulting project
- BIOS 8310 3 Advanced Biostatistical Inference
- BIOS 8320 3 Asymptotic Biostatistical Inference

Required for EPID (12 credits):
- EPID 8500 3 Infectious Disease Epidemiology
- EPID 8400 3 Chronic Epidemiology
- EPID 8040 3 Clinical trials
- EPID 8050 3 Integrated Research Design

Required for DAM (12 credits):
- BIOS 7400 3 Introduction to SAS and Data Management
- EPID 7500 3 Intro Coding in R for Pub Hlth
- BIOS 8200 2 Biostatistical consulting project
- EPID/BIOS 8060 3 Modern Applied Data Analysis

Electives (9 credits):
- Any EPID or BIOS class or any class within the college of public health at the 7000/8000 level.
- Students are allowed to take classes outside the department/college. In general, classes that are related to the student’s program of study and research are permitted. For any class outside our college, it is recommended that students discuss the class they want to take with their advisor or program director to obtain permission.
Grade Average
To be eligible for graduation, students must comply with graduate school rules. Specifically, a student must maintain a 3.0 (B) average on the graduate transcript and a 3.0 (B) average on the program of study. Further information, including which courses count towards computation of the GPA, can be found on the graduate school website.

Selecting A Major Professor/Advisor
Around the end of their first year, a student should have identified a member of the departmental faculty, who also needs to have appointment as graduate faculty, with whom the student plans on doing their thesis research work. This will be the student’s major professor/advisor. While a student can choose any faculty from the department as their advisor, it is generally expected that the research focus of the advisor will be in the area of the student’s chosen area of emphasis. The student’s Major Professor serves to advise and mentor the student throughout the program.

Doctoral Advisory Committee
As soon as possible, and definitely before planning to take the comprehensive exam, a student, together with their advisor should select members for the advisory/dissertation committee. The following rules apply to the committee:

- The committee must consist of at least four members (including the advisor, who is the committee chair).
- At least three members must be from the Department of Epidemiology and Biostatistics.
- At least one member’s primary affiliation must be from outside of the Department and can be from outside UGA.
- No more than one committee member can be a non-UGA faculty, who holds a terminal degree in their field of study. This person must be nominated by the Graduate Coordinator and approved by the Dean of the Graduate School. The person’s vita and a letter of justification must be sent to the Dean.
- If a student decides to have two main co-advisors, they count as one committee member.

The advisory committee, in consultation with the student, is charged with planning the student’s program of study. It is also charged with approving the program of study, administering the comprehensive exam, approving the dissertation proposal, approving the completed dissertation, and approving the student’s defense of his or her research. The committee should advise the student of required research skills and other requirements.

Once the student has settled on the committee members, the student should file the Doctoral Advisory Committee form with the Graduate Coordinator who will forward it to the Graduate School.
Changing Major Professor or Committee Members

It is possible for a student to change their major professor and/or members of their advisory committee. To do so, the student needs to file a revised Doctoral Advisory Committee form with the GC. The GC will consult with all involved parties (previous and new committee members), and if the GC considers the request for a change appropriate, will forward it to the graduate school. The persons on file with the graduate school as being the student’s committee must match those individuals who sign other forms, such as comprehensive exam, admission to candidacy and dissertation. Therefore students should always ensure the information regarding their committee is up-to-date with the GC and the graduate school.

Program of Study

A preliminary program of study, developed by the major professor and the doctoral student and approved by a majority of the advisory committee, will be submitted to the graduate coordinator by the end of the student’s first year of residence. The signed Preliminary Doctoral Program of Study (PDPS) must be submitted to the Graduate Coordinator. The program of study should consist of 16 or more hours of 8000- and 9000-level courses in addition to research, dissertation writing, and directed study. No grade below C will be accepted on the program of study.

A final program of study will be submitted to the Graduate School prior to notification of the comprehensive examination. This program of study must be submitted on the proper form for approval by the advisory committee, the graduate coordinator, and the dean of the Graduate School. The final program of study must show all graduate courses relevant to the doctoral program and not just courses satisfying the minimum degree requirement. Courses from the master’s degree and courses taken at other universities should be listed in the “Relevant Master’s or Other Graduate Degree Courses” section of the program of study form. The program of study must carry a minimum of 30 hours of coursework, three hours of which must be dissertation writing (9300).

Exams

Qualifying exam

After the 1st year, students are expected to take a written, in-class exam which covers the core general areas of study. Students failing the exam are allowed to re-take it once. Passing the qualifying exam is a pre-requisite for being allowed to continue in the program and take the comprehensive exam.

Comprehensive exam

The comprehensive exam is administered by the student’s advisory committee and is usually taken at the end of the second year in the program. The qualifying exam consists of a written, take-home portion, followed by a public, oral examination by the student’s committee. Questions for the written exam will be posed by the advisory committee and other members of the department faculty. The oral comprehensive examination is open to all members of the faculty and shall be announced by the Graduate School. It is the student’s responsibility to inform
the graduate coordinator at least three weeks before the date of the scheduled examination date and location.

See the graduate school for more details.

Students are allowed to retake either exam once. If the student fails a part of the examination more than once, the department will drop the student from the PhD program.

Each member of the advisory committee will cast a written vote of pass or fail on the written and oral parts of the examination. To pass each part of the examination, the agreement of the advisory committee is achieved with no more than one dissenting vote. An abstention is not an appropriate vote for the comprehensive examination. The results of both examinations will be reported to the Graduate School within two weeks following the oral examination.

**Dissertation Proposal Defense**

In consultation with their advisor and committee, a student will identify an area of research and prepare a written proposal. This proposal will include research goals and aims, background and rationale, literature review, detailed description of methods proposed, and an analytic strategy. **The student will present and defend their proposal to the advisory committee and the public. No forms regarding the proposal need to be submitted to the graduate school. The writing and public defense of the proposal is a department-internal requirement.** Approval of the dissertation proposal signifies that members of the advisory committee believe that it proposes a satisfactory research study.

The proposal defense is separate from and may not take the place of the comprehensive oral examination. If needed and if the student is ready, the comprehensive oral exam and the proposal defense can be scheduled at the same day, and proposal defense may follow the comprehensive oral exam, provided the student passed the oral exam.

In general, students should take and pass their comprehensive exam, even if they have not fully identified their research topic and thus will do their proposal defense at a later time. The proposal presentation and defense should follow the successful passing of the comprehensive exam within a reasonable amount of time, ideally within a semester.

**Admission to Candidacy**

The student is responsible for initiating an application for admission to candidacy to be filed with the graduate school. This should be done as soon as the student has completed all requirements for admission to candidacy, and at least one full semester before the date of graduation. Students should check the admission to candidacy form on the graduate school website and make sure they meet all requirements.
Dissertation Research

Once the student has been admitted to candidacy, the student should complete the research described in the proposal under the supervision of their advisor. The advisor is responsible for mentoring the student through the steps and procedures of the research project. Other members of the Dissertation Committee should be engaged by the student as the need arises. The student should arrange to communicate regularly with all members of the committee.

After admission to candidacy, students must take at least ten credit hours of dissertation research AND at least three credit hours of Dissertation Writing in the semester of graduation. A student must register for a minimum of three hours of credit in any semester when using University facilities, and/or faculty or staff time. NOTE: It is likely that substantially more than ten hours of Dissertation Research will be needed to complete the research project.

Dissertation Writing

After the student has completed the proposed research project, the student must write and submit the Ph.D. dissertation to their advisor for approval. Students are expected to write a dissertation that represents a significant contribution of new knowledge to the field. Specific dissertation requirements may be dictated by the Dissertation Committee and the graduate school, including format and content. Whether the dissertation is formatted as a single document or multiple journal-style manuscripts will be left to the discretion of the Dissertation Committee, subject to the rules of the graduate school. At least a portion of the dissertation must be suitable for publication.

When the Major Professor is satisfied with the completed dissertation, the student should distribute copies of the dissertation to the remaining members of the Dissertation Committee. The committee members must have three weeks to read and evaluate the completed dissertation. The dissertation must be of sufficient scope and depth to meet the expectations of the Dissertation Committee members. With agreement of the committee, the student should schedule the final oral defense of the dissertation.

Dissertation Final Defense

Once the committee deems the student ready to defend, a date and time for the oral defense should be set. The student must register for at least three credits of EPID or BIOS 9300 in the semester of the final defense, according to University procedures. The student must notify the graduate coordinator at least three weeks prior to the defense date; the graduate coordinator will inform the graduate school. Subsequently, the Graduate School will announce the time and place of the defense of the dissertation to the University community. Failure to adhere to this timeline imposed by the graduate school might lead to the need to postpone a scheduled defense data.

The student must give an oral presentation that summarizes the major findings of the research project and respond to questions from the public audience and the committee members. The defense of the dissertation will be chaired by the student’s Research Advisor and attended by all
members of the Dissertation Committee simultaneously for the entire examination period. Attendance of committee members through video conference is permissible. The public portion of the defense is open to all members of the University community.

To pass the dissertation defense, the Research Advisor must approve the defense and other committee members must agree to pass the student. One dissenting vote in the committee is allowed, as long as the dissenting vote is not cast by the Research Advisor. The committee will indicate approval in writing with signatures on all appropriate forms provided by the University.

**Students should ensure the needed form for dissertation defense approval is available for signing by the committee the day of the defense.**

Once the written dissertation has been approved by the Dissertation Committee, the dissertation must be submitted to the Graduate School for final approval no later than two weeks prior to graduation. Dissertations which are not submitted by this deadline must be defended again and approved by the advisory committee before they will be considered by the Graduate School for final approval.

**Dissertation Submission**

Once the student has successfully defended their dissertation and made any changes requested by the committee, a complete formatted copy of the dissertation must be electronically submitted to the Graduate School for a format check no later than four weeks prior to graduation.

The Graduate School must receive the Final Defense Approval form and an electronic submission of the corrected dissertation no later than two weeks prior to graduation. This official copy of the dissertation will be electronically submitted by the Graduate School to the main library for archiving.

A graduate student may not submit a dissertation to the Graduate School for format checking or the dean’s approval between the last day of classes and late registration of the following term.

**Graduation**

An application for graduation must be filed with the Graduate School no later than Friday of the second full week (the first full week for summer) of classes in the semester of the anticipated graduation date. Application forms may be obtained from the graduate school website.

All requirements for the degree must be completed and reported to the Graduate School no later than one week prior to graduation. A student must enroll for a minimum of three hours of credit the semester in which graduation requirements are completed unless additional stipulations are required by other units of the university.

In the course of completing the requirements for the doctoral degree in Epidemiology and Biostatistics, the student will fulfill the requirements as stipulated by the Graduate School.

http://www.uga.edu/gradschool/academics/PhD_req.html
**Sample Program of Study**

To assist in planning, an example timeline is provided below. Most students will follow this plan closely. Any needed or wanted deviations should be discussed with the GC, PD and/or major professor as soon as possible. The following sample program applies to students who fulfill the prerequisites outlined above. If students need to take remedial classes, those should be taken in year 1.

The example plan of study assumes a student makes good progress on all aspects of their program of study. It is understood that the Ph.D. degree will be granted in recognition of proficiency in research, breadth and soundness of scholarship, and thorough knowledge of Epidemiology & Biostatistics, as assessed by the faculty of the Department and not upon completion of any definite amount of work prescribed in advance, or any specific duration. Variation among students regarding the degree duration, especially concerning the thesis research, should be expected.

Full time students (12+ credits) are encouraged to sign up for the maximum of 18 credits each semester. Any credits beyond those taken by classes can be filled with research credits under the mentorship of some faculty (which usually will be, but does not (only) need to be the students' main advisor).

<table>
<thead>
<tr>
<th>Time</th>
<th>BIOS</th>
<th>EPID</th>
<th>DAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Fall</td>
<td>BIOS 8010, EPID 8010, STAT 6810, GRSC 7770, EPID 9100</td>
<td>BIOS 8010, EPID 8010, EPID 8500, GRSC 7770, EPID 9100</td>
<td>BIOS 8010, EPID 8010, EPID 7500, GRSC 7770, EPID 9100</td>
</tr>
<tr>
<td>Year 1 Spring</td>
<td>BIOS 8020, EPID 8020, STAT 6820, EPID 9100, Ethics</td>
<td>BIOS 8020, EPID 8020, EPID 8040, EPID 8400, EPID 9100, Ethics</td>
<td>BIOS 8020, EPID 8020, EPID 7400, EPID 9100, Ethics</td>
</tr>
<tr>
<td>Year 1 Summer</td>
<td>During summer, all students take the qualifying, written in-class exam that covers core content up to and including EPID/BIOS 8010/8020. Successful completion of this exam is required before students can take the comprehensive exam and advance to candidacy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 Fall</td>
<td>BIOS 8030, BIOS 8200, BIOS 8040, electives, research</td>
<td>BIOS 8030, EPID 8050, electives, research</td>
<td>BIOS 8030, BIOS 8200, EPID/BIOS 8060, electives, research</td>
</tr>
<tr>
<td>Year 2 Spring</td>
<td>concentration courses, electives, research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 Summer</td>
<td>Take Comprehensive Exam. The comprehensive exam is administered by the student’s committee. Students need to have formed a committee and submitted the “Doctoral Advisory Committee” and “Final Program of Study” forms. Proposal defense should follow successful completion of comprehensive exam as soon as the student is ready. EPID/BIOS 9000 (research) as applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yr 3 Fall</td>
<td>EPID/BIOS 9000, further electives</td>
<td></td>
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</tbody>
</table>
By the end of the 3rd year, students should have fulfilled all requirements need to be admitted to candidacy, including having passed their qualifying exam, defended their thesis proposal, and submitted the ‘admission to candidacy” form.

<table>
<thead>
<tr>
<th>Year</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yr 3 Spring</td>
<td>EPID/BIOS 9000, further electives</td>
</tr>
<tr>
<td>Yr 3 Summer</td>
<td>EPID/BIOS 9000 as applicable</td>
</tr>
<tr>
<td>Yr 4 Fall</td>
<td>EPID/BIOS 9000, further electives</td>
</tr>
<tr>
<td>Yr 4 Spring</td>
<td>EPID/BIOS 9000, EPID/BIOS 9300</td>
</tr>
</tbody>
</table>

In general, by the end of the 4th year the student should have finished their dissertation, passed their PhD defense, and submitted all forms and documents required for graduation to the GC and graduate school.

**Non-standard Courses**

Under certain circumstances, students might want or need to deviate from the usual required and elective courses. This requires prior approval of the GC/PD and major professor. Any course replacing one of the required courses needs to be an advanced graduate level course and the total minimum number of credits needs to be maintained.