

# Biostatistics PhD Program

2021-2022 Student Handbook

The James T. Laney School of Graduate Studies  
Emory University



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S C H O O L

## **Program Information**

**James T. Laney School of Graduate Studies:**

<http://gs.emory.edu/index.html>

**Department of Biostatistics and Bioinformatics, Rollins School of Public Health:**

<https://www.sph.emory.edu/departments/bios/index.html>

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# FIELD OF BIOSTATISTICS

Biostatistics is the science that applies statistical theory and methods to the solution of problems in the biological and health sciences. A few examples of research questions which biostatistics can help answer are: What mathematical models can describe transmission and infection probabilities of infectious diseases such as AIDS and influenza? What are the risk factors associated with breast cancer? What preventive steps can people take to reduce the risk of heart disease? How many IV drug users have contracted AIDS in Georgia?

The main areas of effort for biostatisticians include collaborative research and consulting, methodological research, and education. In collaborative research, biostatisticians work on research studies with experts in the biological and health sciences. The biostatisticians' responsibilities include analysis of data and interpretation of results. Equally important, however, is the responsibility to assist in the planning and conduct of the study to ensure consistency with good statistical practice. Methodological research, such as developing mathematical models to describe biological phenomena, is conducted to enhance the existing bodies of knowledge in theoretical and applied biostatistics. Biostatisticians educate others about biostatistics through the teaching of graduate and continuing education courses, seminars, collaborative research and consulting activities.

Students entering graduate programs in biostatistics come from a variety of undergraduate fields. Many have undergraduate degrees in mathematics, applied mathematics or statistics. Others may have majored in the biological or social sciences. While specific requirements vary depending on the particular degree sought by a student, all students are expected to have a strong undergraduate background in mathematics or statistics, and a strong desire to study the theory and application of statistical methods in the biological and health sciences.

Upon enrolling in a biostatistics program, students take courses in statistical methods and theory. The methods courses focus on ways to select and apply statistical techniques that are appropriate for different types of problems. The theory courses provide rigorous instruction in the formal mathematical structure underlying the statistical techniques. Heavy use is made of computers in most biostatistics courses. Required and elective courses from other public health or biomedical fields are also included in the program of study.

Employment prospects for PhD level biostatisticians has been excellent in recent years. Positions as researchers and data analysts are commonly available in industry (e.g., pharmaceutical, consulting), academia (e.g., schools of public health and schools of medicine) and government agencies (e.g., the Centers for Disease Control and Prevention, local or state health departments). The monthly news magazine of the American Statistical Association (ASA), *Amstat News*, contains nationwide listings of career opportunities for biostatisticians.

# AFFILIATED DEPARTMENTS, SCHOOLS, CENTERS AND INSTITUTES

## Department of Biostatistics and Bioinformatics

The Department's mission is to establish the Rollins School of Public Health Department of Biostatistics and Bioinformatics as a recognized leader of biostatistical science in the United States. This includes pursuing excellence in the four core responsibility areas:

**Education:** Educate others about biostatistics through mentoring of and teaching graduate students, inter-disciplinary courses, continuing education courses, and seminars.

**Methodological Research:** Conduct methodological research to enhance the existing bodies of knowledge in theoretical and applied statistics.

**Collaborative Research:** Conduct collaborative research studies that use biostatistical methods with experts in the biological and health sciences in which the statistician makes substantial contributions, from assistance in the planning and conduct of the study to analysis of data and interpretation of results.

**Service:** Provide statistical support for research projects outside the department that are limited in time, nature, and scope. Participate on local and national committees or other "citizenship" responsibilities.

## Department of Human Genetics

Our goal is to bring genetic discoveries to the patient's bedside without delay. We do this by having a unique combination of a full-fledged basic research faculty along with a comprehensive clinical genetics division. In other words, we've got the best and the brightest in the areas of genetic discovery and patient care, working side-by-side. This puts the Department of Human Genetics, which ranks in the top 10 departments in the country, at the forefront of contemporary translational research and training.

## The Rollins School of Public Health

The Rollins School of Public Health at Emory University was created in September, 1990, and is one of the fastest growing public health schools in the US. Currently, there are 1300 students and 180 faculty in six academic departments: Behavioral Sciences and Health Education, Biostatistics and Bioinformatics, Environmental Health, Epidemiology, Health Policy and Management, and Global Health. The School also houses the Women's and Children's Center, the Center for Injury Control, the Center for Public Health Practice, the Institute for Minority Health Research, and the Georgia Center for Cancer Statistics. Research strengths in the School make it the 2nd highest ranked school at Emory in terms of research funding.

## **The Emory School of Medicine**

The Emory School of Medicine is involved in an extensive program of teaching, research, and service. The School strives to offer the best possible learning opportunities in clinical medicine and research programs. Biostatistics faculty have extensive collaborative ties with researchers in the School of Medicine, including faculty at the General Clinical Research Center (GCRC), Winship Cancer Institute, and Departments of Human Genetics, Ophthalmology, Radiation Oncology, Pathology, Cardiology, Neurology, Rehabilitation Medicine and the Vaccine Center.

## **Emory Winship Cancer Institute**

The Emory Winship Cancer Institute is a comprehensive cancer treatment, research and medical training facility recognized nationally and internationally for its capabilities. The Department of Biostatistics and Bioinformatics serves as a collaborative WCI partner in the areas of biostatistical research and informatics. The mission of the Biostatistics Research and Informatics Core (BRIC) is to offer comprehensive, multi-disciplinary resources for the design and conduct of populational, clinical and basic science studies. These include the development of innovative statistical methodology, storage and retrieval of data generated, appropriate statistical analysis, and summarization of the results.

Within this context the Biostatistics Research and Informatics Core coordinates and manages statistical activities in the WCI to ensure that investigators have ready access to statistical consultation and support and provides statistical expertise in the design of experiments and studies, including research proposal development, sample size determination, randomization procedures, and plans for interim reviews and final analysis. In collaboration with the Clinical Translational Review Committee, the BRIC reviews the integrity and statistical soundness of all studies involving human subjects, and interacts with the Clinical Trials and Translational Research Office in the development of protocols and the monitoring and reporting the clinical data.

## **Biostatistics Collaboration Core**

The Biostatistics Collaboration Core (BCC) offers comprehensive statistical consultation and computational services to faculty, staff, and students in the Rollins School of Public Health, the Woodruff Health Sciences Center, and throughout Emory University. Its primary interest is in assuring appropriate use of statistical methodology in all stages of the research process.

## **The Centers for Disease Control and Prevention (CDC)**

The CDC is a branch of the US Department of Health and Human Services that is internationally renowned for its work in public health. Biostatistics faculty have strong collaborative ties with researchers at the CDC, examples of which are given in the Research Activities section of this document. Several of the Department's adjunct faculty hold appointments in various offices and centers at the CDC, including the Epidemiology Program Office, Center for HIV/AIDS, Center for Environmental Health, Center for Infectious Diseases, and Center for Prevention Services.

# THE PHD PROGRAM

The PhD program in biostatistics is designed for individuals with strong quantitative skills and background or interest in the biological, medical, or health sciences. To the extent possible, the curriculum of each student is tailored to his or her background and interests. Students can enter the PhD program with a bachelor's or a master's degree. PhD students may obtain a MS degree by satisfying specific conditions during their studies.

## Transfer of Credits

A limited amount of transfer credits may be applied to a degree program. Graduate work submitted for transfer credit must be related to the student's program at Emory, cannot have counted toward a prior degree, and must have been taken within eight years of the time of admission to the Laney Graduate School. Work done elsewhere after matriculation must be pre -approved by the program or committee supervising the student's program and by the Director of Graduate Study.

Laney Graduate School. The maximum credit that may be transferred is 9 semester hours towards The Dean of the Laney Graduate School must approve all transfer credit requests.

## Ph.D. Curriculum

To satisfy curriculum requirements, students must complete the Laney Graduate School credit hour requirements and the Biostatistics PhD Program coursework requirements.

## PhD Competencies

- B<sub>PHD</sub>1: Conduct independent research in the fields of biostatistics and its application.
- B<sub>PHD</sub>2: Develop and assess new statistical theory as needed.
- B<sub>PHD</sub>3: Develop and assess new statistical methods to address a broad range of complex biomedical or public health problems.
- B<sub>PHD</sub>4: Conduct complex and statistical analyses for a broad range of applications.
- B<sub>PHD</sub>5: Teach statistical theory or methodology at multiple levels.

The appropriate class schedule is determined on a case-by-case basis through a review and a discussion of the student's academic record, academic interests, and previous experience in the biological and health sciences. All PhD students must complete 54 credit hours to be eligible for candidacy.

Course No	Title	Credits
BIOS 508	Biostatistical Methods I	4

BIOS 509	Applied Linear Models	4
BIOS 512	Probability Theory I	4
BIOS 513	Statistical Inference I	4
BIOS 522	Survival Analysis Methods	2
BIOS 701	Public Health Research: Discovery to Practice	2
BIOS 707	Advanced Linear Models	4
BIOS 709	Generalized Linear Models	4
BIOS 710	Probability Theory II	4
BIOS 711	Statistical Inference II	4
BIOS 745R	Biostatistical Consulting	2
BIOS 777	How to Teach Biostatistics	1
BIOS 780R	Advanced PhD Seminar	1
BIOS 799R	Dissertation	VC
BIOS Electives		12
Non-BIOS Electives		6

**Electives:** All students are required to complete 12 credits of elective courses in biostatistics; at least 6 of these credits must be in 700-level courses. Enrollment in the invited speakers seminar series (BIOS 790R) is required for the first two years of coursework in which only 2 credit hours will count toward elective hours. In addition, students are required to complete 6 credits of elective courses (at the 500-level or above) outside of biostatistics; at least 2 of these credit hours must be in epidemiology for students who lack prior training in epidemiology. Students must maintain an average GPA of at least B-.

**BIOS 701:** All students are required to have training in public health. The primary means to obtain this knowledge is through BIOS 701: Public Health Research: Discovery to Practice, which is taken in the Fall and Spring semester of your first year (1 credit hour per semester). Course Description: The field of public health necessitates the translation of research into programs that promote population health. This course focuses on how research in each discipline of public health may be disseminated and put into practice, contributing to the improvement of population health. This course also lays the foundation for students to move beyond disciplinary silos common to doctoral work and enrich their studies through multiple perspectives. To both of these ends, this course prepares students to understand the language and approaches of several disciplines comprising the field of public health (in academia and practice), thereby fostering greater potential for collaboration and improvement in population health.

### **Teaching Assistant Training and Teaching Opportunities Program (TATTO)**

All PhD students in the Biostatistics Program must participate in the Teaching Assistant Training and Teaching Opportunities (TATTO) program. Students participate in this program during their second and third year of studies. The goal is to prepare students for teaching through a two-day course, a teaching assistantship, and a teaching associateship. The requirements for completion of the TATTO program

are as follow:

**Teaching Assistant Training Course (TATT 600).** Students will take a two-day summer teacher training workshop in late summer before the second year in the Ph.D. program. Successful completion of this course is required before a student can receive credit for a teaching assistantship or teaching associateship. The syllabus covers syllabus writing, grading, lecturing, facilitating discussions, the use of writing as a pedagogical tool, the conduct of lab sessions, and the use of new technologies.

**Teaching Assistant (TATT 605) and Teaching Associates (TATT 610)** Ph.D. students are required to be a Teaching Assistant (TATT 605) during their second year and a Teaching Associates (TATT 610) during the third year. This can range from assisting faculty in the teaching of basic biostatistical courses and/or labs to the Ph.D. student teach a course. Responsibilities may include developing and grading homework, holding problem and review sessions, providing individual help to students through office hours. Teaching assignments are made by the Associate Director of Academic Programs and students are notified in June/July for the Fall semester assignments and in November for the Spring semester assignments.

**BIOS 777:** The Course “How to Teach Biostatistics” is a part of the TATTO program and required coursework in the PhD program. Generally, BIOS 777 is taken the fall of the second year, immediately after the two-day seminar. This course introduces the student to basic concepts and ideas related to teaching an introductory-level biostatistics course.

**BIOS 745R:** Biostatistical Consulting, like BIOS 777, is a part of the TATTO program and required coursework in the PhD program. BIOS 745R may be taken during the second or third year of a student’s program.

The final required step of the TATTO program in biostatistics is satisfied through studying and participating in consulting activities. Consulting is a major part of the work of almost every biostatistician. Statistical consulting is viewed as an activity that involves teaching biostatistical concepts and methods to professionals from other biomedical and health-related fields.

In order to satisfy the consulting requirements, the student will enroll in the biostatistical consulting course (BIOS 745R) taught by faculty of the Biostatistics Consulting Center (BCC). The first portion of this course is dedicated to preparing students to act as consultants through discussion of consulting models, interpersonal communications, ethics, types of clients, financial management and related issues. Students are then required to participate in the consulting process, i.e., to meet with researchers to discuss the design and analyses of studies that require biostatistical work. These meetings will be supervised by the course instructor. Students will discuss their consulting experience during class meetings, and will prepare final reports at the conclusion of the course.

**Assistant Instructor:** A student who has successfully completed the four mandatory steps of the TATTO program, and is no longer supported by the Laney Graduate School or by outside sources, is eligible for appointment as Assistant Instructor. An Assistant Instructor is responsible for developing and teaching a whole course, and she/he may apply for and be awarded a Dean’s Teaching Fellowship by the Laney Graduate School. The Dean’s Teaching Fellowship can be found at <http://www.gs.emory.edu/uploads/professional-development/fellowships/DTF.pdf>.



## Jones Program in Ethics (JPE)

All PhD students are required to participate in the Johns Program in Ethics during the program. JPE provides students with a foundational cross-disciplinary introduction to questions that arise from ethics in research, training and careers. There are three elements to the program. Two are required for candidacy and the final step must be achieved prior to graduation.

1. **JPE 600:** A 6 hour core seminar in scholarly integrity, supported by the Laney Graduate School in collaboration with the Emory Center for Ethics. Participation in this seminar will be recorded on the student's transcript.
2. **Program-Based Instruction:** A minimum of 6 hours of program-based ethics material. The disposition of this discussion time is at the program's discretion. These discussions may take place within existing courses, such as methodology or professionalization courses. They may also take the form of faculty-led workshops or journal clubs. The intention of this part of the program is to promote student discussions with their own program faculty, and to integrate explicit attention to ethics into the regular course of graduate education.
3. **JPE 610:** Minimum of 4 workshops. These workshops will be sponsored by the LGS, the Emory Center for Ethics, and will include any other relevant occasional lectures or workshops. Students will register for these sessions individually, and participation will be recorded on the student's transcript. **These workshops can be completed after candidacy.**

## English as a Second Language

In order to enhance international students educational experience, all students for whom English is not their primary language must participate in mandatory English sessions to assess their written and oral skills. Students who do not meet the minimum assessment requirements must participate in oral and written English communication classes directed by the Laney Graduate School.

Required for continuation in the Laney Graduate School, these courses are 3 credit hours and are graded S/U. Courses will appear on official transcripts.

## Qualifying Examinations

The written qualifying examination determines the student's qualifications for advanced study and verifies adequate mastery of concepts in biostatistics. Students who take BIOS 512 and 511 must take the MS Theory exam in the summer following enrollment in these courses. All students must take the PhD Methods Qualifying exams in the summer following enrollment in BIOS 508, 522 and 709. They must also take the PhD Theory Qualifying exam in the summer following enrollment in BIOS 707, 710 and 711.

The qualifying examinations are given annually in June to assure adequate preparation, grading, and notification time before the students return the following Fall. The theory exams are given in one day.

The second year methods exam extends over a period of one week. Students are bound by the honor code to refrain from discussing the examination with anyone during the testing period.

The Qualifying Examination Committee manage all aspects of the examination process. Members select the questions, select the date, time and location of the exams, and administers the exams. Each exam question is reviewed and graded in a blinded manner by two faculty members. The results of the exams are reviewed by the graduate faculty in the Program, and a written letter with exam results is sent to each student by the Department Chair.

### **Assessment of Student Performance**

The first component of assessing a student's performance is the outcome of the stated learning goals stated below:

1. By the completion of the program, graduates will be able to formulate or pose a research question or scholarly project
2. By the completion of the program, graduates will be able to conduct independent research using methods appropriate to the field or discipline
3. By the completion of the program, graduates will be able to communicate the results, findings or new interpretations of their scholarly work.
4. By the completion of the program, graduates will be able to communicate discipline-specific knowledge to students
5. By the completion of the program, graduates will be able to critically evaluate scholarly work and/or research conducted by peers.

The qualifying examination is the second component of the determination of student readiness to continue in the program. The possible outcomes of the exam are a pass, a pass with conditions, and a failure. A pass means that the student has successfully passed the exam and may now continue the process to attain candidacy. A conditional pass indicates that there are one or more areas of weakness that requires additional work to be reviewed by the Examination Committee. A student receiving a failing grade may retake the examination the following year.

A student who fails a qualifying exam the first time is permitted to re-take the exam one time, and must do so the next time that exam is offered (i.e., the following summer). In the event that the MS (1st-year) Theory exam must be re-taken, students will often be advised to delay taking the 710 / 711 theory course sequence for one year until they pass the exam. If a student elects to take the 710 / 711 theory sequence for credit, prior to passing the 1st-year Theory exam, he / she is required to take both Theory exams (MS/1<sup>st</sup> year and PhD/2<sup>nd</sup> year) during the following summer. Continuation in the PhD program is contingent upon passing each of the three qualifying exams (MS Theory, PhD Theory, and PhD Methods) on the first or second attempt.

The third component of the assessment is a broad critique of student performance in the coursework to date in the program. Individual performance in coursework may have an effect on the student's evaluation score in the total assessment.

### **Candidacy**

The Laney Graduate School's policy is that doctoral students making adequate progress toward their degree will be admitted to candidacy by the September 15<sup>th</sup> of their fourth year. Students who do not

meet this deadline will be placed on academic probation, will not be eligible for PDS funds, and may forfeit financial support. These sanctions will be lifted when the student enters candidacy.

### **Eligibility for Candidacy**

To be eligible for candidacy, a student must meet the following requirements:

1. Complete all program requirements for candidacy: coursework and training courses
2. Pass qualifying examinations
3. Complete TATTO 600, TATTO 605, and JPE 600
4. Resolve any Incomplete (I) or In Progress (IP) grades
5. Be in good academic standing with a minimum cumulative 2.70 GPA
6. Earned at least 54 credit hours at the 500 level or above

TATTO 610 and JPE 610 may be completed after entering candidacy.

### **Procedure**

Students enter candidacy by submitting the application to enter candidacy, available on the LGS website. The application requires all program requirements have been met as well as LGS affirming their requirements have been met.

Students are considered “in candidacy” when the Dean has approved the application to enter candidacy.

### **Dissertation**

Each student has to conduct an original research project which must be summarized in a written dissertation. The student will have to present his/her dissertation proposal orally in order to obtain the approval of the dissertation committee to conduct the research.

### **Dissertation Committee**

As the student begins to define a dissertation topic, the student and his/her dissertation advisor are required to sign a form indicating the proposed area of research. The Student/Dissertation Advisor Form is below. Also, under the guidance of the dissertation advisor, a Dissertation Committee will be identified. The Committee should consist of the student’s Dissertation Advisor and three other qualified members in the topic area. It is required that at least one member of the Committee be from outside the Biostatistics PhD Program. At least three members of the Committee must be graduate faculty in the Biostatistics PhD Program. The Laney Graduate School’s policy also dictates that Committee members who are not LGS graduate faculty receive the LGS Dean’s approval to serve. This requires a brief letter from the DGS requesting approval, along with a copy of the proposed Committee member’s CV. The Dissertation Committee will meet with the student to assist him/her in defining the specific focus and refinement of the dissertation topic. The Committee will also assist in determining when the student’s research is complete enough to present the proposed topic. After the dissertation proposal is approved, the student is not allowed to change the members of his/her dissertation committee without the approval of the Director of Graduate Studies and the Dean of the Laney Graduate School.

The Dissertation Student/Advisor Agreement form must be completed by the end of the third year.

## **DISSERTATION STUDENT/ADVISOR AGREEMENT**

Biostatistics PhD Program  
Laney Graduate School  
Emory University

Name \_\_\_\_\_ ID# \_\_\_\_\_

Advisor \_\_\_\_\_  
(Emory faculty member to serve as Dissertation Advisor)

Proposed Dissertation Topic Area

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Advisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

The advisor shall grade the student on an S/U basis each semester for BIOS 795R and BIOS 799R. Either the advisor or the advisee may terminate this agreement at any time if it is determined that positive progress is not being made on the project. The Director of Graduate Studies shall be advised of this determination in writing. Please return this signed form to your ADAP in Room 314.

## **Dissertation Proposal**

Please complete the following steps for the Dissertation Proposal:

1. Identify a dissertation advisor and committee before the end of the third year in the program.
2. Work with their committee to identify an area of dissertation research.
3. Prepare a brief but thorough written review of the relevant literature and proposal for dissertation research. This written review should clearly identify how the proposed research expands or extends the theory and methods described in the literature review, and should outline the goals of the dissertation in a series of detailed specific aims. Preliminary results are encouraged but are not required.
4. Once approved by the dissertation committee, the student will present a proposal thorough overview of the current literature, the specific aims of the proposed dissertation, and a detailed development of proposed work on at least two of the specific aims. This presentation is open to the committee, the graduate faculty, and any other individuals the student requests.
5. A closed oral exam conducted by the committee and members of the graduate faculty will immediately follow the proposal presentation.
6. By March 15<sup>th</sup> of your fourth year, the student must present his/her dissertation proposal and submit the Dissertation Committee Form to LGS for approval. If a student does not meet the March 15<sup>th</sup> deadline, the student will be placed on academic probation, will not be eligible for PDS funds, and may forfeit financial support.

In the event of a change of advisor and topic, students must address steps 3-5 with the new committee and submit a Change of Dissertation Committee form as soon as possible to the Director of Graduate Studies and the Laney Graduate School.

## **Dissertation Research**

When the dissertation is complete, the student must defend it at a public presentation. The Graduate Faculty determines whether the candidate has successfully defended their topic or if there are additional areas that the student must address before the dissertation is submitted to the Dean of the Laney Graduate School. There are several potential models for structuring the dissertation (e.g., a popular “three-paper” model to encourage preparation of work for publication). Students are not bound to a particular model, but are encouraged to discuss the structure of the presentation with their dissertation advisor and ensure that it is approved by the committee.

During the dissertation research process, the student will enroll in BIOS 799R up to 9 credits per semester to maintain full-time academic status. The dissertation advisor is responsible for assigning an interim grade of either S ("satisfactory") or U ("unsatisfactory") each semester of BIOS 799R, until the determination of a final S/U grade for the dissertation. If the above efforts do not result in satisfactory progress on the dissertation research, then the dissertation advisor may assign an interim grade of U in BIOS 799R, which would result in academic probation.

## **Dissertation Completion Time**

Students are expected to complete their dissertations and apply for their degrees within six years.

If a student has not completed the degree at the end of the seventh year, the program may grant a one-year extension. The program must submit notice of this extension to the Dean, no later than August 1 of the seventh year (before the eighth year). The notice must contain a completion timeline signed by both

the student and the dissertation committee chair or co-chairs. Students who enroll for this extension year will be responsible for some tuition.

If a student has not completed the degree at the end of the eighth year, the student may continue work for at most one additional academic year and only with approval from the Dean. To obtain approval, the program must submit a request to the Dean no later than August 1 of the eighth year (before the ninth year). The request must (a) outline the reasons the student has not completed, (b) consider whether the student needs to repeat any part of the qualifications for candidacy or obtain approval of a new dissertation prospectus, and (c) present a detailed completion timeline signed by both the student and the dissertation committee chair or co-chairs. Students who enroll for this extension year will be responsible for some tuition.

### **Registration and Awarding of Degrees**

Students must be registered in the semester in which they receive their degrees.

### **Application for Degree**

Students must make formal application for a degree to be awarded in a particular semester (spring, summer, or fall). Students pick up application forms in the Laney Graduate School office or online and return them to the Laney Graduate School by the deadline, which is usually within the first month of the semester. Applications for degree received after the deadline are subject to a \$25.00 processing fee. Applications for degree are valid only for the semester in which they are filed. If you apply for the degree and do not complete all requirements, you must apply again and register for the semesters in which the degree will be conferred.

Although students may specify how their names appear on their diplomas, the names in the commencement program will appear as they are in the Registrar's data base. If there is a difference in the way a student's name is listed in the Registrar's data base and the name the student wishes in the program, the student should contact the Registrar.

### **Degree Clearance Forms (Completion of Requirements Report)**

This form certifies that the student has met all requirements for the degree and submitted to the Laney Graduate School. Deadlines for receipt of this form in the Laney Graduate School office are in the academic calendar.

### **Survey of Earned Doctorates Form**

A PhD candidate must complete a Survey of Earned Doctorates Form and submit to the Laney Graduate School.

## **Tuition, Stipends, & Fellowships**

### **Laney Graduate School Tuition and Stipends**

All doctoral students accepted to the Biostatistics PhD Program at Emory University are offered tuition and stipend awards by the university, or have individual fellowships from outside funding sources. LGS requires students in receipt of an external fellowship use these resources in lieu of university funding.

LGS support is renewable for up to two additional years, conditional upon satisfactory academic progress. Students receive stipend checks on a 12-month disbursement schedule on the last business day of each month.

Students receiving stipends must be registered as full-time students (9 credit hours/semester) during the period that they are receiving their stipend. Hence, students must be registered as full-time students in the fall, spring, and summer sessions. During the summer, students will register for 9 credit hours of BIOS 795R to maintain their full-time student status.

### **Fellowships**

The Laney Graduate School offers special fellowships for exceptionally qualified applicants. These fellowships offer additional financial support by supplementing the base stipend or provide stipend support at a higher level. Stipends are renewed annually contingent upon satisfactory academic performance.

### **Student Fees**

Students are responsible for the University enrollment, computing, mental health and counseling, athletic and recreation and activity fees. In 2019-2020, these fees are estimated to be \$414 for both semesters and \$235 during the summer term. In addition, all new degree students are required to pay a one-time transcript fee.

### **MS Degree in Biostatistics**

Students may obtain a MS degree in Biostatistics through admission to candidacy for the PhD degree. Students may apply for this degree in the semester after obtaining candidacy.

### **Grievance Policy**

Students who have a grievance related to some aspect in the Biostatistics PhD program should report it to the Director of Graduate Studies. The student should describe the grievance and relevant details in a letter addressed to the DGS, who will try, if possible, to resolve the grievance in conversation with the student and relevant parties. If this is not successful, the Director will appoint a committee of three Biostatistics faculty members (or faculty members outside the Biostatistics if the situation warrants) or use an existing standing committee, who will review the grievance and propose an appropriate response. If it is impossible to resolve the grievance within this committee or within the framework of the Biostatistics administrative structure, the Director will forward the grievance to the Office of the Senior Associate Dean of the Laney Graduate School. From this point forward, the grievance will be handled according to the Grievance Procedure outlined in the Laney Graduate School Handbook. If the issue is with the Director, the student should go directly to the Senior Associate Dean of the Laney Graduate School.

### **Content Notes**

Refer to the Laney Graduate School website for at [gs/emory.edu](http://gs/emory.edu) for a complete overview of the LGS Student Handbook, academics, funding and professional development information.