Graduation with Honors in Statistics

Every graduate of the College of Liberal Arts and Sciences with an upper-division grade-point average (GPA) of 3.50 or better receives at least a cum laude (honors) designation on his or her diploma; students not meeting this GPA criterion are ineligible for honors designations. ("Upper-division GPA" is defined as the the GPA computed from all non-S/U courses taken at UF starting with the first semester in which the student enrolls after he/she has completed 60 hours. The courses themselves may be at any level.)

To be eligible for the designation *magna cum laude* (high honors), statistics majors must write a thesis *in addition to meeting the GPA criterion of 3.50 or better.* To be eligible for the designation *summa cum laude* (highest honors), statistics majors must write a thesis *and earn a GPA of 3.75 or better if earning a Bachelor of Arts degree, or earn a GPA of 3.50 or better if earning a Bachelor of Science degree.* The Undergraduate Coordinator will make the final decision on the honors designation in consultation with the student's thesis supervisor and the Undergraduate Program Committee.

1 GENERAL THESIS GUIDELINES

The thesis must be neatly typed and formatted. The Graduate School's thesis style is recommended as a target for the quality of the format. The thesis should be grammatically correct and without spelling errors. The thesis must be mathematically correct, and must represent independent work by the student. Mathematical results need not be original, but the sources for unoriginal results must be clearly referenced. An abstract is required and it should begin with a definitive statement of the problem or project treated by the thesis. The purpose, scope, limits, and significance of the thesis should be clearly delineated, and the research methods, design, major findings, and conclusions should be described as concisely as possible.

Subject to the approval of the Undergraduate Coordinator, an article authored solely by the student may be submitted as the thesis if the article has been accepted by a standard research journal aimed at experts in the field of statistics. In all other cases, the thesis should be written at a level understandable to the student's peers, i.e., to a strong senior student majoring in statistics. The thesis must be reviewed by the student's thesis supervisor for organization, content, grammar, and spelling before the initial submission. The student must adhere at all times to the University's Student Conduct and Honor Code

It is not permissible to submit the same thesis to multiple departments.

Past Honor's Theses can be located at the UF Undergraduate Honors Theses Collection.

Remark: Students who begin working with a faculty mentor early enough in their academic careers are encouraged to apply for the Undergraduate Scholars Program (USP). The USP application deadline is usually in February, and only students who will graduate no earlier than May of the following calendar year are eligible to enter the program. A single research project may be used to satisfy the requirements of both the honors thesis and the USP.

1.1 LENGTH OF THESIS

It is up to the student's supervisor to determine an appropriate length for the thesis. Typical theses range in length from 15 to 30 pages. A theses may be shorter than this if it represents significant new research that is presentable in a shorter format. Expository theses may be longer. The length of the abstract should be 100-200 words.

1.2 TIMELINE AND SUBMISSION PROCESS

It is highly recommended that the student begin work on their thesis at least one semester prior to their final/graduating semester.

The student must agree to adhere to the following deadlines and procedures:

1. The Undergraduate Coordinator of the department in which the thesis is to be submitted shall be notified in writing (or email) of the intent to submit a thesis **between the first day of classes and no later than the last day of add/drop** of the graduating semester. Attached must be an abstract of the work to be submitted.

2. An Honors Thesis Submission Form must be submitted according to the instructions and deadlines found herein and UF Libraries Honors Theses.

3. A copy of the thesis, accepted by the supervisor as a final draft, must be submitted to the Undergraduate Coordinator no later than

   - March 30th for spring semester graduates,
   - July 6th for summer graduates, and
   - November 16th for fall semester graduates.

4. The Undergraduate Program Committee will then review the thesis and provide the student with a list of required and/or recommended revisions (if any). The student must complete all revisions and submit the revised thesis no later than

   - April 13th for spring semester graduates,
   - July 20th for summer graduates, and
   - November 30th for fall semester graduates.

5. A final version of the thesis must be submitted to the UF Library no later than

   - May 4th for spring semester graduates,
   - August 10th for summer graduates, and
   - December 21st for fall semester graduates

2 THESIS GUIDELINES FOR THE DESIGNATION *Magna Cum Laude*

In order to earn the magna cum laude designation, an undergraduate thesis need not be a standard research journal-style statistics paper, or work that could be rewritten as such a paper. Listed below are some acceptable general categories into which the thesis may fall. Other categories are possible, but the supervisor should confer with the Undergraduate Coordinator (who, in turn, may wish to confer with the Undergraduate Program Committee) before directing the student into a category not listed below. Among the categories into which the thesis may fall are:

- Proof. The student should independently arrive at and write up the proof of a theorem. The result need not be entirely original, but the work is expected to be beyond normal course work. For example, the student might fill in the gaps of a proof in the literature.

- Applied-statistics model. The student should provide more than a routine solution of a system of equations intended to model a real-world problem. There should also be an argument for the appropriateness of the model to the problem and some analysis of the role of the problem's parameters.

- Data analysis. The student should demonstrate more than an elementary application of statistical methods. The analysis should be nontrivial and the application realistic and interesting.

- Computer program. The student should correctly code a problem or provide a working script and argue for the correctness of the code. If the program is a computer simulation intended to model a real-world problem, then there should be an analysis of the behavior of the code for an interesting and broad variety of parameter values.

- History of statistics. Preferably, the student should read a paper or papers of historical interest in the literature of statistics or a closely related field. The student's writing should show a clear understanding of the basic problem being addressed, the author's approach, the methods available to the author, the impact at the time of the writing and in the present, and possibly how the problem would be approached today.

3 THESIS GUIDELINES FOR THE DESIGNATION *Summa Cum Laude*

The thesis should display originality in the solution of an acknowledged open scientific or mathematical problem, provide a proof of a new result, or provide a new proof of a known result. The quality of the work should be exceptional for an undergraduate and should carry the possibility of being published in a peer-reviewed journal, i.e., one refereed by statisticians, although the thesis itself need not be written in journal-ready form.