

Burnett School of Biomedical Sciences Honors Undergraduate Thesis (HUT) Guidelines for Meta-Analysis Projects

A meta-analysis evaluates several studies on a single topic to reach a new conclusion from the aggregate data. It applies statistical methods to a collection of studies in order to provide new insights on the research topic. A meta-analysis is distinct from a literature review, which does not answer novel questions and, thus, does not meet the criterion for a HUT project.

Acceptance/Registration for an Honors-in-the-Major (HIM) Meta-Analysis Project

To be accepted and register for a meta-analysis HIM project, students must:

1. Be accepted to the HUT program by the Burnett Honors College
2. Read the BSBS HUT FAQ to become familiar with BSBS-specific issues related to the HUT program
3. Identify a Thesis chair
 - Although the HUT can be completed in two semesters, many HUT projects take three or more semesters to complete. For this reason, many faculty members will only support meta-analysis projects for students who have at least three regular semesters left before graduation (i.e., Fall, Spring, and Summer C).
 - Students are strongly encouraged to take MCB 3903 Explorations in Biomedical Science, BSC 3403 Quantitative Biological Methods, and/or STA 4173 Biostatistical Methods before starting a meta-analysis project. These classes will provide foundational knowledge in the scientific method that will be directly applicable to the HUT.
 - To qualify as an HIM project, the Thesis chair or co-chair must be a BSBS faculty member.
 - If there is a BSBS co-chair, that person will sign or co-sign all HUT paperwork.
 - All materials submitted to the Thesis chair must also be submitted to the co-chair.
4. Submit a written summary of the research topic and objectives to the potential Thesis chair
 - BSBS faculty will not identify a research topic or design a study for prospective HUT students. The role of the Thesis chair and committee for meta-analysis projects is to guide the student through the execution of a project that was designed by the student.
 - Based on the quality of the summary, faculty may ask for a revised research plan or decline to support the proposed project.

Execution of the HIM project

The HUT requires completion of MCB 4903H Honors Directed Readings I and MCB 4970H Honors Undergraduate Thesis I. If extra time is required to work on the thesis, students can also enroll in Honors Directed Readings II (MCB 4904H) and/or Honors Undergraduate Thesis II (MCB 4970H). Students can also work on the project when they are not enrolled in a HUT class.

To complete Directed Readings I, students must:

- Form a Thesis Committee and complete the committee member information form.
 - The form must be submitted to the Honors College by the 6th Friday of the term.
- Write a Thesis Proposal that is reviewed and approved by the Thesis Committee.
 - The committee should receive the proposal at least 3 weeks before the last day of classes.
 - The proposal and signed cover page must be submitted to the Honors College.
Check with the Honors College for the submission deadline.
 - If the committee does not approve the proposal, the student will either withdraw from the program or, at the discretion of the committee, enroll in Directed Readings II.
- Attend and participate in at least one HUT-approved support workshop.
- Complete mentor-specific requirements as outlined in the HUT syllabus for the student.
 - These may include completion of the OUR Research Roadmap, CITI training, or modules related to literature searches, technical writing, statistical analysis, etc.

To complete Thesis I, students must:

- Attend and participate in at least one HUT-approved support workshop.
- Complete mentor-specific requirements as outlined in the HUT syllabus for the student.
- Complete the project, write the thesis, and hold an oral defense of the thesis.
 - The thesis should be submitted to the committee at least 2 weeks before the defense.
Committee members may ask for revisions to the final thesis.
 - A format review must be completed by the Honors College Thesis Editor.
 - A notice of defense should be submitted to the Honors College 1 week before the defense.
 - Submit the Thesis approval form to the Honors College.
 - Submit the final thesis to the UCF library.

Failure to meet the milestones for the Directed Readings or Thesis courses may impact the HUT grade and completion of the HUT program.