

Student Responsibilities for Capstone Independent Research Project

There are three key components of every capstone project: individuality, creativity and rigor. Embedded in your project should be systematic collection and analysis of data and thoughtful reflection applied to process. Every capstone must meet the three objectives of improving the student's:

- ✓ Understanding and application of the scientific process,
- ✓ Skills in the analysis and interpretation of relevant scientific information, and
- ✓ Proficiency in communicating scientific information.

Process

- **Conduct preliminary literature review/needs assessment.** Define gaps. Justify need for research. (Begin by the time you have completed 20 hours of coursework.)
- **Propose topic of research to Director of the Program.** Define scope, timetable, and potential outcomes. Discuss possible faculty members who may be available to serve as Research Director or on your committee.
- **Seek a Research Director** (someone with like interests, expertise in field of interest, availability). Provide introductory information about yourself, goals, and project in a short email and ask for an opportunity to discuss the project further with them. Set up introductory appointment. Go to meeting prepared to explain your project ideas. Be open to suggestions for ways to improve or alter your study.
- **Develop capstone proposal** in accordance with recommendations of Research Director (Note: Project proposal should be reviewed/approved by the time you have completed 24 hours of coursework. Students will not be allowed to register for capstone credit until their proposal has been approved by the Research Director **and** the Director of the Online Program.)
- **Seek a third committee member.** In conjunction with your Research Director or Academic Advisor, identify other faculty members who may serve as the third committee member. Follow the same guidelines to approach at least one of them as you did for seeking a Research Director.
- **Develop and keep current a project timeline.** Set reasonable goals (overarching and immediate) and meet them.
- **Personally conduct the research and complete the analysis.**
- **Communicate the results** of your research through your Final Paper and in accordance with the NRES and Graduate College guidelines. Allow ample time for multiple revisions based on recommendations from your committee.
- **Conduct oral presentation** on capstone project (in person or virtually).
- **Meet Graduate College deadlines** for depositing approved capstone paper (consistent with the semester you intend to graduate).

Communication

- **Consultation with Academic Advisor, Research Director, and committee members**
 - At mutually agreed upon intervals
 - Be open to advice and constructive criticism
 - Be pro-active when additional questions/concerns come up
 - Send copies of important items/agenda to discuss
 - Send post-conference summary and follow-up agreements
- **Be patient.** Allow for adequate response time between when you submit a draft and when you expect an answer. (For lengthy documents, it may take two or more weeks to receive feedback).
- **Strict adherence to scientific ethics** and regard for copyright policies and intellectual property.

Resources

Degree

- **Milestones and Procedures for Non-Thesis Students** found in the latest edition of the **NRES Graduate Student Handbook**:
<http://nres.illinois.edu/graduate/handbook>
- **Final Steps Document:**
 - **Independent Research :**
[https://nres.illinois.edu/sites/nres.illinois.edu/files/Steps to Completing the Capstone Individual Research Project.pdf](https://nres.illinois.edu/sites/nres.illinois.edu/files/Steps%20to%20Completing%20the%20Capstone%20Individual%20Research%20Project.pdf)
 - **Internship:**
[http://nres.illinois.edu/sites/nres.illinois.edu/files/Steps to Completing the Capstone Internship Project.pdf](http://nres.illinois.edu/sites/nres.illinois.edu/files/Steps%20to%20Completing%20the%20Capstone%20Internship%20Project.pdf)
- **Flow Charts for Project:**
 - **Independent Research:**
[http://nres.illinois.edu/sites/nres.illinois.edu/files/1-page Flowchart 501-503.pdf](http://nres.illinois.edu/sites/nres.illinois.edu/files/1-page%20Flowchart%20501-503.pdf)
 - **Internship:**
[http://nres.illinois.edu/sites/nres.illinois.edu/files/1-page Flowchart 505.pdf](http://nres.illinois.edu/sites/nres.illinois.edu/files/1-page%20Flowchart%20505.pdf)
- **Goal Setting and Accomplishments – Compass 2 g Open Learning Site:**
https://compass2g.illinois.edu/webapps/blackboard/content/listContentEditable.jsp?contentid=1098279_1&courseid=13661_1
- **List of Faculty Available to Serve as Research Directors:**
https://uofi.app.box.com/files/0/f/2717195584/1/f_29279542081

Research

- **Improve Your Research Strategies:**
<http://guides.library.illinois.edu/researchstrategiesh>
- **Graduate Research Funds:**
<http://nres.illinois.edu/graduate/funding-your-research>
- **Illinois Review Board:**
<http://irb.illinois.edu>
- **Illinois Institute of Animal Care and Use Committee (IACUC):**
<http://research.illinois.edu/regulatory-compliance-safety/iacuc>
- **Remote Desktop:**
<https://acf-s.aces.illinois.edu/remote/>
- **A Beginner's Guide to Data Management:**
<http://guides.library.illinois.edu/introdata>
- **Sample Research Projects:**
<http://nres.illinois.edu/online-program/sample-individual-research-projects>
- **Statistical Analysis Assistance:**
<https://publish.illinois.edu/statcomuiuc/>

Writing

- **Guidelines for Writing the Research Proposal:**
<http://nres.illinois.edu/online-program/research-proposal>
- **Graduate College Guidelines for Final Paper:**
<http://www.grad.illinois.edu/thesis/format>
- **Avoiding Plagiarism:**
<http://www.library.illinois.edu/ugl/howdoi/plagiarism.html>
- **Citation Guidelines:**
http://writing.wisc.edu/Handbook/DocAPARefereces_Journal.html
- **Citation Management Software:**
<http://guides.library.illinois.edu/citationmgmtoverview>
- **Grammar Review Software:**
<http://grammarly.com/edu/signup>
Enter your name, email (netid@illinois.edu), and preferred password. Click "Sign up".
Check your email (Inbox and Spam) for an activation email. Your account is now set up.

Skills Workshops

- **Database Tutorials:**
https://www.uillinois.edu/cio/resources_and_tools/lynda.com/
- **Savvy Researcher Workshops and Lib Guides:**
<http://guides.library.illinois.edu/>

