

UNIVERSITY HONORS PROGRAM

Capstone Overview for Mentors

Thank you for agreeing to serve as a mentor to a University Honors Program student's senior Capstone project. The Capstone mentor is a central figure in the Capstone process and the student-mentor relationship has a significant impact on students' undergraduate experiences and long-term plans. Faculty who have taken on this invaluable role in the past have appreciated the opportunity to work closely with an enthusiastic, dedicated, and talented student, and it is important to us that this be a positive experience for you, as well as for the student. The Capstone project is a central component of the Honors curriculum and for many students it is also one of the most rewarding and influential experiences of their undergraduate careers. The mentor-student relationship is one of the most important factors in the success of this process.

The information in this packet is intended to let you know more about the mentor's responsibilities and the Capstone process. If you have additional questions, please contact the UHP main office and any of our staff will be happy to assist you.

Background

The goal of the Capstone project is to engage Honors students in a hands-on, participatory learning experience that allows them to see a scholarly project from inception through public defense. The Capstone can range widely from a traditional research project, a creative work, or a service-oriented exercise with a clear scholarly component. The projects may be within any discipline or interdisciplinary but must be connected to the student's major or minor field of study unless approved in advance by the UHP staff. Combining the UHP capstone with another senior project requirement ("modified senior project") is allowed, though the UHP student's modification must be clearly articulated in the Capstone prospectus. Team projects are also acceptable, but each UHP student's role must be clearly defined and go above and beyond the other, non-UHP group members.

Capstone projects can inspire considerable anxiety and trepidation in students, but upon completion, many see their projects as high points of their undergraduate experience. Because Capstone projects are not widely required on this campus, students may express concern and uncertainty at the outset about the project and their ability to complete it; a major part of the mentor role is helping students realize their own capabilities and learn to manage their concerns in a healthy, productive way.

The mentor role

The National Collegiate Honors Council (NCHC) is a professional association of undergraduate honors programs. NCHC created the following guidelines to assist Capstone mentors with the Honors Capstone experience.

Be helpful

When students come to you as a potential Capstone mentor, some will have good ideas that are too broad, like, "I want to study crime." Some will have focused ideas that would be great for a Master's thesis or a Doctoral dissertation, but not achievable as an undergraduate thesis or project. Some students will have an area of interest, but no topic or idea how to approach the area. And some students will have no real idea at all. Maybe they took an interesting course and decided to approach that instructor. At this stage, students need a lot of help transforming a vague interest into a doable project. They need help to fashion testable hypotheses or working questions with a realistic research plan or project schedule. They need advice and guidance with their review of the literature and their drafts. Work closely with them and help them turn their ideas into an excellent undergraduate thesis.

Be proactive

Students are most likely to do their Capstone work when they have regularly-scheduled appointments with their faculty mentors. Busy students put off work that doesn't have a definite due date, but students who are given specific tasks to accomplish at regularly-scheduled meetings will almost certainly complete their theses on time. It's important for a mentor to be proactive: make regular appointments, once a week or once every two weeks, depending on their progress. Students should never leave their mentor's office without scheduling another appointment. If a student doesn't show up for an appointment, he or she should call the mentor and reschedule. If they show up unprepared, the mentor should reschedule and take whatever steps necessary to ensure that they're prepared next time.

Be demanding

It's tempting to let students slide, especially when they're bright and the faculty member is overloaded. "I know I said I'd have a hypothesis for you today, but I've been real busy. I'll get my thesis done before I graduate." Mentors should be reasonable, but also demanding. Insist on regular appointments. Insist that the student do the work that was agreed upon. And insist that the work be high quality. Do not settle for sloppy, incomplete, or badly-written work. At the same time, mentors should remember that these are not graduate students, and this is not a Master's thesis. What faculty should expect is undergraduate work of the highest quality, and our students rely on us for help to achieve that.

Be collaborative

Students should be told right from the start that an Honors Capstone project is a collaboration between the student and the mentor. They should know that they cannot simply hand something to an advisor and say, "Here it is. Grade me." But it is important to recognize that this is the model they're used to: The professor gives an assignment, the student does the work and hands it in, and the professor delivers a grade. It is part of the thesis mentor's job to show students a collaborative model and to work closely with them at every stage of the process. If an Honors student has more than one mentor, his or her project should be a collaborative process between advisors. For the sake of clarity, fairness, thoroughness, and consistency, advisors should consult each other on a regular basis to compare notes and to monitor progress.

Be supportive

A Capstone project is a long process. It's easy for students to give up or to believe they don't have what it takes. That's when mentors take on the role of 'pep-talk-giver.' Reassure them that everyone who's ever done this kind of work has felt the same things, that they are smart enough,

that they can see it through to the end. If we want them to do a good job, sometimes we have to help revive their flagging energy and outlook.

Stages in the Capstone process

Beginning

The Capstone mentor's first official role involves shaping and approving a student's Capstone prospectus, which all students are required to submit at the start of their project. Students may not be familiar with the norms of research proposals so your direction and mentoring will be greatly appreciated. The prospectus should be no longer than two pages and general guidelines are available on the UHP website.

It is helpful to the student if you, as mentor, establish your expectations for regular meetings, progress reports, and delivery dates during this stage of the process. As you might expect, keeping a long-term time frame in mind is a new experience for many students, any assistance you can provide in terms of keeping them on pace will be helpful. Although it is rare, occasionally students put the work off until too late, only to discover their calculations on timing are seriously in error.

The approved Capstone prospectus becomes part of the student's file. Deviation from the prospectus is allowed, however major changes, such as choosing a different topic, require the student to submit new documentation to the UHP.

Middle

Although UHP students have a long "focal length" they are also likely inexperienced with producing a scholarly product that requires a sustained effort. Regular meetings and progress schedules are highly recommended.

Recognizing that there are many pathways to successful completion of the Capstone project, you may find it helpful to consider the following progress indicators:

1. Literature research. Students should conduct extensive literature review necessary to provide the context for their project.
2. Methods. Students should successfully master the methods necessary to complete the project. All research compliance issues should be resolved. Access to data sets, field plots, recording facilities, equipment, etc...should be resolved.
3. Data collection. For those project that require data collection (e.g. experiments, interviews, etc...), students should finish in plenty of time for data analysis and writing of the results.
4. Results/analysis. Almost all projects will require a significant write up of the process or analysis of the data.

End

All students are required to make a public presentation or defense of their work in a venue appropriate to the project and discipline. Typically, this will take the form of a poster presentation at the Undergraduate Research Symposium or a regional/national disciplinary conference. Please note that the UHP has limited funds available to help support student travel to present their work at academic conferences. Students are required to inform the UHP in advance of their scheduled public presentation.

Frequently Asked Questions

How do research credits work?

Students are required to complete a minimum of 6 credit hours (or equivalent) toward their Capstone. A minimum of three credit hours must be on the student's transcript, although the Capstone prospectus should reflect effort equivalent to a full 6 credit hours. All research should be graded (A-F) unless the mentor has communicated directly with the UHP of their preference to grade the experience as S/U.

The UHP assumes that for one credit, a student should expect to spend a total of 3 hours per week on the project. Therefore, if 3 credit hours are on the student's transcript, the prospectus must clearly how the additional 3 credit hours of effort will be achieved.

The UHP prefers that students register for undergraduate research credit hours in their home department so that the department will receive credit for the student credit hours generated, and so that student's transcript will show the discipline of their work.

How should I assign a grade?

You should expect to grade the effort at the end of each term. All research should be graded (A-F) unless the mentor has communicated directly with the UHP of their preference to grade the experience as S/U.

In assigning a grade, you can consider the level of effort, the quality of the work, the initiative or originality, progress, and other factors that are relevant to the completion of the thesis.

Who can serve as a mentor?

All tenure-track NC State faculty (assistant professors, associate professors, and professors) and senior instructors at NCSU are eligible to serve as a faculty mentor.

People holding other types of positions may also serve as a co-mentor. The co-mentor's name, contact information, and resume should be included as an addendum to the Capstone prospectus.

The faculty member will be responsible for the final evaluation and grade of the project.

What is my time commitment?

It is difficult to give a precise answer to this question, as it will always depend on the nature of the project, your mentorship style, and the needs of the student. You and your student may choose to meet weekly, or more or less frequently depending on the stage of the project and your needs. Regardless of the project, there should be sustained mentor-student contact throughout the duration of the Capstone project.

How does a student turn a senior project into an Honors Capstone project?

For the purposes of the UHP, a senior design project may be modified to meet the requirements of the UHP Capstone project. **It is the modification (not the senior project as assigned) that represents the student's UHP Capstone project.** In all cases, the modification must:

- a) be designed exclusively by or include substantial input from the student;
- b) involve considerable extra effort (e.g. for 3-credit senior design projects, this effort must be roughly equivalent to a 3-credit course);
- c) be independent (i.e. be "owned" solely by the UHP student or a group of UHP students)