# University Honors Capstone Project Handbook

A resource for faculty-mentors and University Honors students to guide them through the capstone project experience.



University Honors 381 Skye Hall (951) 827-5323 honors@ucr.edu Welcome to University Honors! We are glad to have you, and we are here to help! To follow is an overview of the University Honors capstone project, what it entails, and the support that University Honors provides. If you have any questions, please feel free to email University Honors at <u>honors@ucr.edu</u>.

#### **Goal of the Capstone Project:**

The University Honors capstone project enables an undergraduate student to explore, develop, and complete an original project in collaboration with a faculty-mentor. Through this experience, a University Honors student contributes to the advancement of knowledge, consistent with the role of a research university. Under the direction of the faculty-mentor, each University Honors student will participate in one of three types of University Honors capstone projects. A student may:

- 1.) Conduct **research**, for example, a scientific experiment, a policy analysis, a literature review, an archival project, or case study.
- 2.) Engage in **creative activity**, in which they create an original work. Possibilities include a collection of poetry, novel, musical composition, dance performance, sculpture, painting, film, children's book, or play.
- 3.) Conduct an analysis of meaningful **experiential learning**, for example, a study-abroad experience or internship. The experience should become an example, not the focus, of the project, a lens into wider issues, not simply an exploration of personal growth. This type of project should involve research or creative activity beyond the experience itself, for example, archival information, observational data, literature reviews, and/or interviews. <u>A student choosing this pathway must outline a project with their faculty-mentor prior to the start of the experiential learning activity.</u>

#### **Expectations of the Faculty-Mentor:**

Any full-time faculty member (Assistant Professor, Associate Professor, Full Professor, Assistant Professor of Teaching, Associate Professor of Teaching, Full Professor of Teaching, or Cooperative Extension Specialist) is eligible to serve as a faculty-mentor. The faculty-mentor serves a crucial role in the exploration, development, and completion of a student's capstone project. Students who fulfill this requirement graduate from UCR with University Honors distinction.

Below are suggestions that reflect a positive mentor-mentee relationship:

- 1. Read, and become familiar with, this "University Honors Capstone Project Handbook."
- 2. Mentor no more than three University Honors students during a given academic year.
- 3. Provide quarterly progress reports regarding student research/creative activity/experiential learning to the University Honors Faculty Director, who will serve as the instructor-of-record for a one-unit, letter-graded, independent research course (HNPG198H and HNPG199H, depending on a student's cohort) which the student will enroll in each quarter while completing their capstone project.
- 4. Listen to the student, as they explain their idea for a capstone project, and guide the development of forming the idea into a realistic project.
- 5. Communicate with the student about the methodologies needed to develop the idea. This may include, for example, guiding the student through the process and timeline required for obtaining Institutional Review Board (IRB) approval.
- 6. Introduce the student to other personnel in the applicable research group, establish clear reporting lines between the student and the other personnel, and explain the culture of the research group, if applicable.

- 7. Inform the student of the unpredictable nature of research, creative activity and experiential learning; the need for individual initiative, accountability, and adaptability; the prospect that the project may not achieve expected results, even if the student performs at full capacity; and the process of responding to a failed experiment, a null hypothesis, or unexpected outcomes.
- 8. Inform the student of the expected time commitment for conducting the project and for completing it. Assist the student with developing, and adhering to, a realistic timeline.
- 9. Apply for funding from University Honors, if necessary, to support the student's research/creative activity/experiential learning.
- 10. Establish timelines and expectations for periodic progress reports from the student. Meet with the student at least bi-weekly to monitor progress regarding research/creative activity/experiential learning. This includes providing guidance on the capstone project's content and composition, discipline-specific formatting or parameters, and IRB approval (if applicable).
- 11. Review drafts of and provide feedback on all project components, including the abstract, prospectus, timeline, work-in-progress, and final project, and provide meaningful feedback.
- 12. Assist the student in preparing their required oral presentation, poster presentation, performance, or exhibit of the capstone project. Help the student to identify an appropriate venue to present the capstone project, for example, the Undergraduate Research & Creative Activities Symposium, a discipline-specific conference, the classroom, a lab meeting, or a community. Faculty-mentors are expected to be present during their mentee's oral presentation, poster presentation, performance, or exhibit and are also encouraged to attend Undergraduate Research Symposium (April 21-25, 2025 at the HUB), regardless of whether their student will be participating in the event.
- 13. Complete the University Honors Capstone Project Rubric (appended). Due no later than the end of finals week of the quarter of the capstone project submission, the rubric will be used solely as an evaluation tool for the capstone project. It will not be used as a mechanism for assigning a grade for HNPG 199H.
- 14. Attend the University Honors Cording Ceremony, which will occur near the end of spring quarter.
- 15. Determine whether the completed capstone project should be archived in eScholarship, the open-access repository for UC scholarly works, or request an exception or embargo, by contacting University Honors Faculty Director Dr. Begoña Echeverria, at <u>honorsdirector@ucr.edu</u>, prior to the student's submission of the capstone project to University Honors.
- 16. Contact the mentee's University Honors Counselor, the Administrative Director of University Honors, or the Faculty Director of University Honors with any issues or concerns related to the student and/or their capstone project (https://honors.ucr.edu/people).

## **Expectations of the University Honors Student:**

Completion of the University Honors capstone project involves effort beyond ordinary coursework. The responsibility for developing and completing the project rests with the student, in collaboration with their faculty-mentor. Throughout the capstone project experience, the student must demonstrate initiative, dedication, and determination. They must be willing to invest the time and intellect to produce an original project consistent with the ideals of University Honors.

Each student will be responsible for securing a faculty-mentor by the time they have completed HNPG 149. In consultation with their faculty-mentor, the student should utilize the resources provided in HNPG150 to develop their capstone project. The student should also consult with their designated University Honors Counselor, as needed, for guidance. If a student experiences challenges with their

capstone project that are not being addressed by their faculty-mentor, or if a student is experiencing challenges with their faculty-mentor, it is the student's responsibility to contact their designated University Honors Counselor immediately.

It is important to understand that, consistent with the nature of an open-ended, intellectual activity, not every project in research, creative activity, or experiential learning will lead to clear-cut conclusions or expected results. One of the many roles of the faculty-mentor is to guide the student through the process of handling a failed experiment, a null hypothesis, inconclusive results, or any other obstacle related to the research, creative activity, or experiential learning. "Unsuccessful" research, creative activity, or experiential learning. "Unsuccessful" research, creative activity, or experiential learning into a capstone project, as it still contributes to the student's knowledge of the particular topic.

As indicated above, each University Honors student will participate in one of three general types of University Honors capstone projects: research, creative activity, or experiential learning. Regardless of the type of capstone project a student may pursue, the student should discuss with their faculty-mentor whether their project requires Institutional Review Board (IRB) approval. IRB works within federal regulations to protect the rights and welfare of human subjects involved in research conducted under the auspices of the University of California, Riverside. The student and faculty-mentor should work collaboratively to seek IRB approval, if relevant. However, it is the faculty-mentor's responsibility to submit the IRB application on behalf of the student. Please note that the IRB approval process can take several months, if not more, to complete.

### Support provided by University Honors

University Honors prepares students to conduct research, engage in a creative activity, or participate in experiential learning at a level worthy of University Honors distinction. The outcome of this distinctive work will be the completion of a capstone project. The University Honors team:

- 1. Assists each student as they develop their capstone project by:
  - a. Providing University Honors coursework, University Honors counseling, and University Honors events that provide students with resources and opportunities for interacting with faculty members and selecting a faculty-mentor. A faculty-mentor must be selected by the completion of HNPG 149.
  - b. Requiring students to submit an abstract (Capstone Project Proposal Form), prospectus, and timeline related to their proposed capstone project in the mandatory HNPG 150.
  - c. Exposing each student to the process of discovery in HNPG 150 and how to respond to difficulties during the discovery process.
  - d. Requiring each student to enroll in one unit of HNPG 198H during spring quarter of the year prior to graduation and one unit of HNPG199H each quarter of the year of graduation until the capstone project is completed.
- 2. Trains each student, in HNPG 150, to optimize appropriate research materials and resources, including, but not limited to:
  - a. Navigating databases.
  - b. Accessing Intercampus Library Loans.
  - c. Reviewing special collections.
  - d. Developing bibliographic management tools.
  - e. Utilizing proper source citations based on their discipline-specific style-guide.
  - f. Distinguishing reputable and current academic sources.
  - g. Contacting appropriate scholars as primary resources.
  - h. Identifying, and applying for, research grants, scholarships, and other funding sources.

- 3. Refers each student to the Writing Support Program, in the Academic Resource Center, as needed, to write and review the capstone project.
- 4. Communicates with the faculty-mentor to foster a team effort in assisting the student with the capstone project.

#### **Timeline for the Capstone Project**

The capstone project typically occurs during the student's final two years at UCR. Some students may initiate their projects earlier, in consultation with their faculty-mentor. A capstone project begins with the development of an original creative activity or experiential learning opportunity to explore, or a research question or hypothesis to pursue. University Honors Counselors encourage students (as early as their first year) to consider their general areas of interest and then to think of a specific issue, topic, question, problem, or hypothesis related to that general area of interest. Honors coursework guides students through the capstone project process, through the required courses outlined below:

Year 1, Fall Quarter: HNPG 16/17/18 ("Ignition Seminar"). A small seminar taught by an engaging professor to expose students to interdisciplinary thinking in an effort to help students begin considering ideas for their capstone project.

Year 2, Fall Quarter: HNPG 002W ("Principles of Civic Engagement"). A Writing Across the Curriculum course taught by Honors Faculty Director Begoña Echeverria exploring contemporary issues at the regional, national and international level. Guest Speakers also share opportunities for academic and professional development, internships, community engagement, overseas study, and financial resources.

Year 3, Fall Quarter: HNPG149; Winter Quarter: HNPG 150 ("Research & Creative Activity Across the Disciplines"); Spring Quarter: HNPG 198H. All courses in the third year are overseen by the Honors Faculty Director and Honors Faculty Fellows to provide students with the tools and resources to develop, solidify, and pursue their capstone projects.

Year 4, all quarters: HNPG199H. Students focus on conducting their research, creative activity, or experiential learning and completing their capstone project. Involvement of the faculty-mentor is crucial during this period. The faculty-mentor should be available to meet regularly (at least bi-weekly) with the student; to offer information, support, and guidance throughout the research, creative activity, or experiential learning process and the writing process; to assist the student with overcoming obstacles and challenges; to proactively communicate with the student and their University Honors Counselor regarding any concerns; to offer suggestions pertaining to the format of the content; to review drafts of the project and offer constructive feedback; to generally encourage the student throughout the entire process; and to provide quarterly progress reports to the Faculty Director of University Honors in a timely fashion. A student's capstone project is due no later than 12:00 p.m., on the Thursday of Week 6, of their quarter of graduation.

#### **Capstone Project Submission Process and Formatting**

#### 1. Requirements for written capstone project

For most students, the written capstone project must be a <u>minimum</u> of 4,000 words for the body of the work. This excludes the capstone project title page, abstract, acknowledgments, table of contents, references/works cited, charts, tables, and graphs. Students engaged in a creative activity, especially those in the humanities and fine arts, must provide a minimum of 1,500 words describing the research and/or motivation behind the project, in addition to the original work. Given the variety of research, creative activities, and experiential learning that exist, the student, together with their faculty-mentor, will determine the appropriate content and format of the final project. In general, the format should be

consistent with the discipline-specific style guide. The student will be required to submit their capstone project electronically during their final quarter in HNPG 199H. University Honors will obtain the Faculty Director's signature on behalf of the student. With the faculty-mentor's approval, a student's capstone project will be archived in eScholarship, the University of California's open-access institutional repository. If copyright, publishing, or any other issues arise that prevent the student's work from being archived in eScholarship, the faculty-mentor must request an embargo, in writing, from the University Honors Faculty Director, Dr. Begona Echeverria, at honorsdirector@ucr.edu.

#### 2. Requirements for the oral presentation

The student will also be required to deliver an oral presentation, poster presentation, or exhibition, at least 15 minutes in duration, describing their project, at the Undergraduate Research & Creative Activities Symposium or other appropriate venue, such as, a discipline-specific conference, classroom, lab meeting, research-group meeting, performance space, exhibition gallery, or appropriate community setting. The faculty-mentor, or another UCR faculty member, is required to attend their mentee's oral presentation, poster presentation, or exhibition to evaluate it. The student must obtain from their faculty-mentor an e-mail verifying the faculty-mentor's review and approval of the student's capstone project and oral presentation, poster presentation, or exhibition. The student will then submit their capstone project and their faculty-mentor's approval in HNPG 199H, via eLearn.

### Capstone Projects with Shared Authorship and/or Collaboration with Others

In rare cases, University Honors students work on capstone projects involving shared authorship and/or collaboration with others, including other University Honors students. <u>These options must be approved in advance by the Faculty Director</u>. For such projects, University Honors students will be required to indicate in the "Acknowledgements" section of the capstone project that the project was completed as a group-project, identify their group members, and explain their individual contribution to the project. If a capstone project results in a paper authored by multiple parties for submission to a publication, the University Honors student will be required to complete the items indicated above and submit a project separate from the paper submitted for publication, which highlights their contribution. If the University Honors student is the first-author of a paper submitted for publication, the paper can also be submitted as the capstone project. Students who have questions or concerns about this matter should contact their designated University Honors Counselor.

## The University of California and Capstone Project Copyrights

Per University of California policy, the copyrights to student works are generally retained by students, and not the university, as outlined at <u>http://copyright.universityofcalifornia.edu/ownership/works-created-at-uc.html</u>. University Honors does not own any copyrights to any capstone projects, under any circumstance. Questions about copyrights should be directed to the Office of Scholarly Communications, at <u>https://osc.universityofcalifornia.edu/.</u>

## University of California's Open Access Policy and eScholarship:

The University of California has an Open Access Policy for Senate and non-Senate members, which can be found at <u>https://escholarship.org/ucoapolicies</u>. When made accessible through eScholarship, a student's capstone project is not being "published." It is, however, being deposited into a digital library, making it accessible to the general public. If a student's capstone project has any prior, pending, or potential publication elsewhere, the faculty-mentor and student should contact the publisher and check if there are any rules/conflicts pertaining to submitting the work to an open access platform.

If the student and/or faculty-mentor and/or any other relevant parties do not wish for the student's capstone project to be uploaded to eScholarship upon submission of the capstone project to University Honors, the

faculty-mentor must request an embargo by writing to the University Honors Faculty Director, Dr. Begona Echeverria, at <u>honorsdirector@ucr.edu</u>. An embargo of the capstone project is permitted for up to three years. During the embargo period, a citation of the student's work may appear on eScholarship, but the work will not be accessible until the embargo ends.

Thank you for your commitment to University Honors! We look forward to working with you!

Some Honors capstone projects will require approval from the Office of Research Integrity (ORI), which provides oversight, resources, and education for integrity and compliance issues relating to the conduct of research at the University of California, Riverside. The ORI has oversight and responsibility over the Institutional Review Board (IRB) and Institutional Committees, who review and approve certain types of research. Please review the options below, and select the box next to the option(s) that would apply to your Honors capstone project. Please be sure to speak with your faculty-mentor if you are not sure which of these would apply to your project.

- (1) Institutional Review Board Socio-Behavioral (IRB-SB) reviews research employing the following (further defined here: <u>https://research.ucr.edu/ori/committees/irb.aspx</u>). This is the most common IRB approval for undergraduate research. The PI (Principal Investigator) overseeing the project may or may not have already received approval for this research, pending on the topic of your Honors capstone project (i.e., if you are pursuing your own independent project or are working on an aspect of a project that has already been approved in your PI's lab).
  - a. Surveys / questionnaires
  - b. Interviews
  - c. Focus groups
  - d. Human factors evaluation
  - e. Secondary use of identifiable data
  - f. Research on individual or group characteristics or behavior, including, but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior
  - g. Collection of data from voice, video, digital, or image recordings made for research purposes
- (2) Institutional Review Board Clinical-biomedical (IRB-Clin) reviews research employing clinical or biomedical components (defined further here: <u>https://research.ucr.edu/ori/committees/irb-</u><u>clin.aspx</u>). Generally, research that undergraduates work on with clinical or biomedical components will already have received IRB-Clin approval through the PI, but you should still indicate it on this form.
- (3) Institutional Animal Care and Use Committee (IACUC) oversees approval and oversight of activities involving vertebrates (defined further here: <u>https://research.ucr.edu/ori/committees/iacuc.aspx</u>). Generally, research that undergraduates work on with vertebrates will already have received IACUC approval through the PI, but you should still indicate it on this form.
- (4) Institutional Biosafety Committee (IBC) oversees approval and oversight of activities involving the use, storage and handling of biohazardous materials (defined further here: <u>https://research.ucr.edu/ori/committees/ibc.aspx</u>). Generally, research that undergraduates work on with biohazardous materials will already have received IBC approval through the PI, but you should still indicate it on this form.
- (5) N/A: Please mark this box if none of the above is applicable to your project.

		RESEARCH, CREATIVE, AND/OR EXPERIENTIAL CAPSTONE	1 Unacceptable	2 Needs significant improvement	3 Satisfactory Does an adequate Job of meeting the criteria	4 Good Does a good job of meeting the criteria	<b>5</b> Excellent Goes above & beyond the criteria
%59	tnətroO ənoteqsO	Capstone demonstrates evidence of originality, creativity, and innovation Score should indicate the degree to which each of the 3 markers are demonstrated in comparison to similar types of established works within that genre/discipline, with the consideration that it is an undergraduate capstone project. Capstone demonstrates evidence of superior academic merit Score should indicate the degree to which it is academically rigorous, has a comprehensive literature review, is well-referenced, and other markers applicable to that genre/discipline. The research, creative, and/or experiental question is clearly identified within an academic framework Score should indicate the degree to which goals/objectives/hypothesis are clear & effective and contexts are identified and developed. Methodology/approach appropriate for topic and discipline Score should indicate the degree to which the methodology is comprehensive & well-developed and the topic is clearly contextualixed among sources and materials cited Score should indicate the degree to which the methodology is comprehensive & well-developed and the topic is clearly contextualixed supporting evidence and body of knowledge is thoroughly discussed; evidence is sufficient and well-utilized; contrasting perspectives are discussed; information is evaluated, and synthesized. Conclusions and implications					
%0T	gnitinW	well supported, and the significance of the project is clearly and well stated. There are no grammar, spelling, punctuation, or discipline-specific formatting errors. Organization is clear and effective. Sources and citations are used correctly throughout the content. Language clearly and effectively communicates ideas through clarity, style, diction, and readability, as appropriate to the genre/discipline.					
%S	fanga (component	Oral Presentation Score should be filled as follows: (1) Completed an oral presentation past the deadline in an informal setting (such a classroom, lab meeting, community setting, or other venues as listed in the Honors approved list) - 1 (2) Completed an oral presentation past the deadline in a formal setting (such as a professional meeting, conference, or other venues as listed in the Honors approved list) - 2 (3) Completed an oral presentation on time in an informal venue (such a classroom, lab meeting, community setting, or other venues as listed in the Honors approved list) - 3 (4) Completed an oral presentation on time in a formal venue (such as a professional meeting, community setting, or other venues as listed in the Honors approved list) - 4 (5) Completed an oral presentation on time in a formal venue (such as a professional meeting, conference, or other venues as listed in the Honors approved list) - 4 (5) Completed an oral presentation according to the criteria in (4) and also received a grant or award for his/her presentation at the formal venue - 5					
%0T	Relationship w/capstone project	Student practiced excellent time management in progressing on his/her capstone by setting, reflecting upon and adjusting priorities and timelines (i.e., capstone and progress goals were all completed on time or early). Student was able to work independently as needed. Student was able to work collaboratively as needed. Student was able to work collaboratively as needed. Student was able to identify potential issues, causes, and solutions for his/her capstone project and deal with these items in a professional manner.					
%0Т	Relationship w/ Faculty- mentor	Student worked on attaining mutually agreed upon goals. Student displayed high standards of attendance, punctuality, and professionalism as required for the project. Student responded thoughtfully to feedback and communications. Student actively and consistently communicated with his/her faculty-mentor regarding the issues, resolutions, and progress of his/her capstone project.					
		Timely Submission of Capstone	YES N	Q			

Timely Submission of Capstone Did the student turn in his/her capstone by the capstone deadline of noon on Thursday in week 6 of the quarter they graduate ?

\*NOTE: This rubric is not intended to provide a letter grade for the student's capstone or his/her HNPG199H course. It is an evaluative tool to provide Honors and the student with insight into the quality of their capstone and a means to determine a student's possible nomination for "High Distinction" or "Highest Distinction."

\*SUBMISSION: Faculty-mentors will receive an electronic link to this rubric once an Honors student submits his/her capstone.