

The Undergraduate Research Scholars Program

The Undergraduate Research Scholars Program (URSP) would consist of the following 9-12 credit hour (CH) requirements, organized by the suggested timeline below (*see Q&A section at the end for initial exceptions to this timeline*):

Sophomore Year (Spring, Q4; starting Spring 2024)

1. **1.5-CH “Introduction to Research Scholarship” course:** This course (taught by the URSP director) intends to provide students a very high-level introduction to (i) the academic research process, its purpose, and its value to society, (ii) the types of academic research conducted within each Mendoza department, including overlapping research interests and interdisciplinary research conducted across departments and disciplines, (iii) life as a researcher within each department, including career possibilities, expectations, and flexibilities, and (iv) various opportunities for students to become engaged in research at Mendoza.

The course will dedicate one full session to each Mendoza department, where faculty from the respective department will lead the class discussion related to their department. For each department discussion, the faculty will provide an overview of the main research areas explored in their field, how their own research fits into the broader research agendas in the field, and discussion of some of their own research (which could include more detailed discussion regarding one or two specific papers). Faculty will also provide broader insights into their views of the profession and allow for Q&A with students.

This course will, at least initially, be offered as a 1.5 credit hour discussion-based course with no exams and will be graded as pass/fail. While readings will be required, deliverable written assignments will be limited. We structured the course this way to make access to learning about research less intimidating and more accessible to students, after receiving student feedback. Ideally, this course will incentivize students to be more open to hearing about research to determine if they might be interested before delving in too deep initially in a more advanced research course only to find out that they have little interest or fit.

Junior Year (Fall and/or Spring)

2. **Two 3-CH research courses:** After the introductory course, students interested in continuing in the URSP must choose two courses that are heavily research-based, which will be approved by the director if not already identified as such. Whereas the courses will differ across students, the courses should help students understand / explore (i) research literatures they may be interested in, including key theories, motivations, contributions, tensions, and findings, (ii) topics that could serve as potential research questions examined in the future, and (iii) different types of research methods and data sources that can be used for a thesis.

These research-based courses could be (i) undergraduate courses developed specifically with a research-heavy emphasis (which also will generally be classified as honors courses) in

Mendoza or elsewhere on campus, (ii) Ph.D. courses at Mendoza or elsewhere on campus, or (iii) other appropriate courses, as approved by the URSP director on a case-by-case basis with good reason.

The types of research courses taken can vary widely based on student experience, interest, etc. For example, one student may already be strongly focused on a particular field and want to take two courses within a department, whereas another student may prefer to take courses across two departments. Another student may decide to focus on one topical course and one research methods course, while yet another student may already have sufficient methods training and thus might want to take two topics courses. Students should consult an advisor (typically faculty in the URSP and/or the URSP director) to ensure they are adequately prepared to develop a proper thesis in their senior year.

Through Summer Before Senior Year

After taking the introductory course and the two additional research courses in their junior year, the students should have some potential options for a viable research project. To continue in the URSP, students are asked to develop a research idea that includes a 1–2 page write-up that includes (i) the intended research question, (ii) any theoretical causal mechanisms proposed, (iii) a general sense for its contribution, and (iv) a rough idea of how they might test their idea. They should identify a ‘research advisor’ (i.e., presumably a faculty member who is an expert in the area) willing to *sponsor* this student based on the write-up idea. Faculty sponsorship indicates that the advisor sees potential promise in the idea and is supportive and willing to serve as the advisor for the student as he/she embarks on developing a thesis. The URSP director must then approve the idea before acceptance into the “thesis workshop”.

Senior Year (Fall)

3. **Take 1.5 CH “Thesis Workshop”:** This workshop is for approved URSP students. This workshop gives structure to, and provides guidance on, the process of writing a thesis (and journal article) using the students’ write-ups as the source material for discussions. This workshop is taught and overseen by the URSP director, and will meet throughout the semester in 2.5 hours sessions meeting every other week. Each session will focus on different aspects of a thesis, where the first few sessions focus on front end issues, such as motivation, tension, contribution, and theory. Sessions will include group sharing of ideas and feedback, facilitated by and overseen by the URSP director, who provides both his/her own advice as well as helps to synthesize the group’s guidance.

Students’ advisors are welcome to attend as well, and some additional faculty that want to take part in giving their take on dealing with front end issues are welcome to join. Between each session, students will be asked to address feedback received from the prior session with the help of the advisor. These incremental changes will serve to progress the paper further, and set up new issues to address in later sessions.

In the second part of the workshop, the sessions will focus more on back end issues, such as sampling, coding, construct validity, research design, etc. These session will include participation from experts in coding and research design to help advise students on ways to address their particular problems. Again, group discussion among the students will be encouraged as well, with the hope that synergies can be made in design solutions and generating ideas.

At the end of the workshop, students will present their thesis paper, which should be roughly 15-20 pages, including preliminary tabulated results. The thesis is not expected to be as polished as a paper meant to be submitted to a journal at this point--think more of a "brown bag" in a Phd program. The experience, however, will allow students to work together in an interdisciplinary way to create solutions and engage their critical thinking from a variety of unique perspectives. Advisors are encouraged to attend their students' presentation to both ask questions and help the student process group discussions about the paper.

For the successful passing of this workshop, students will receive the designation as a "research scholar", and this 9-CH sequence can complete the URSP for these students. The designation will likely show up as a minor on the students' transcripts (to be confirmed soon). This workshop will often be the last step for those students that do not want to, or cannot, successfully advance their projects to a more complete thesis.

Senior Year (spring) - OPTIONAL (depending on interest)

4. **Take 3-CH "Independent Study"**: For those students with the most promising theses after having taken the Thesis Workshop, the students can continue working on the thesis and continue meeting regularly with their faculty advisor, with the expectation of a more polished, submission-ready thesis that addresses the concerns raised in their Thesis Workshop presentation.

The length of the thesis is typically expected to be between 25 – 40 pages as appropriate for the contribution and the expectations of the target journal, potentially with additional pages for appendices or material that would be moved to an online supplement, which is similar to a manuscript that could be submitted for publication at a top journal. As at the end of the thesis workshop, these students will be assessed as to the quality of the thesis, with an emphasis on the advisor's opinions on the project, given their proposed expertise in the area.

However, the URSP director should also attend the presentation (and all other students are certainly encouraged to attend). Successful defense of their thesis would qualify the student as a "research scholar *with distinction*" (how this designation would be reported is yet to be determined). This would be a very strong signal of those students that put in the extra work to get their thesis in the best shape to be ready for publication in a journal, as well as signal that they are arguably the most equipped to do academic research. This should be the ultimate goal for those students looking to apply to doctoral programs.

Follow up Q&A

- **Can students take courses in the URSP without being in the program?**
 - Absolutely. Students who just want to take the introductory course or any specific research course are more than welcome to sign up for the course, as long as they have the required prerequisites; however, the only exception to this rule is the thesis workshop, as it requires the previous research courses and a proposal for admittance.
- **Do students have to start the URSP in their sophomore year?**
 - Ideally, students would take the introductory course to (i) learn about the different course offerings in more detail before selecting their path in the program, (ii) gauge their interest in pursuing research further, and (iii) develop relationships with their cohorts at the start of the program. However, particularly in the initial years of the URSP, juniors who are interested in the program could talk with the URSP director to see if there are any viable ways to fulfill the requirements, perhaps by doubling up on courses rather than sequentially taking courses. Each case may be different, so it's best to seek advice from the URSP director about possibilities.
- **What about seniors in the 2024-25 academic year who have already taken a research course and want to undertake a thesis in their senior year?**
 - These students should contact the URSP director to discuss options. The determination will rely heavily on the students' preparedness for such an endeavor and ability to find an advisor.
- **How can a student or faculty member learn more about the program?**
 - Please reach out to the URSP Director, Hal White, at hwhite5@nd.edu