

# CATHERINE J. RANDALL RESEARCH SCHOLARS PROGRAM (MINOR)

The Catherine J. Randall Research Scholars Program is a nationally recognized interdisciplinary, undergraduate research program that pairs exceptional, highly motivated students directly with leading research professors and cutting-edge computational techniques to complete scholarly research projects in diverse fields of study. Regardless of the field that students intend to pursue, the skills they develop in applying research methods, project management and problem-solving techniques will contribute to their success in any academic pursuit or future career.

Founded in 1968 as the Computer-Based Honors Program, the Randall Research Scholars Program (RRSP) was the nation's first interdisciplinary undergraduate research program and has been cited as one of the six most intriguing research programs in the country by the National Institute of Education. After over 50 years of tradition and excellence, the RRSP continues to be an innovative leader in connecting undergraduate students to research opportunities.

Students whose careers will be defined through their research endeavors are accepted into the program during their final year of high school through a highly selective application process. During their freshman year, this cohort of RRSP students complete an intensive series of courses on problem-solving techniques, computational techniques, project management principles, and research fundamentals. These essential skills enable students to quickly learn and adapt to the new knowledge domains and technical environments required for faculty-directed research projects.

Throughout their sophomore to senior years, the RRSP students will select research projects to work on with a faculty member who will serve as the project director. Students are required to present their research to a diverse range of audience members, venues, and media to facilitate knowledge transfer and professional growth. Students will typically work on projects in areas related to their academic discipline; however, they may elect to work in an unrelated field to challenge themselves and broaden their exposure to academic disciplines and research.

**Program Background:** The mission of RRS is to guide students to achieve the highest level of research in terms of quality, depth, and professionalism, and to foster an interdisciplinary community of students who push one another to new heights. Through this experience, students learn how to conduct research employing computing technologies associated with the study of a research phenomenon. The student, in consultation with the Program Director, shall choose a research project and work under the mentorship of a faculty member in a selected field of study. The faculty member will serve as the project director and the student will serve as a research assistant. The student and faculty member will negotiate a contract for the scope of work the student is to accomplish during the specified academic period. The student will participate in the project design, execution, interpretation, and communication of the results of the project. The project director will be responsible for supervision of the student and evaluating the quality, depth, timeliness, and professionalism associated with the student's work process and product.

Through this program, students will develop skills and competencies to conduct and interpret research and will learn to:

- Read critically to pose questions and identify key issues to explore; analyze and explain the logic, line of reasoning, and validity of an argument; and to use theoretical frameworks, appropriate methodologies,

and analytic techniques to systematically explore issues, objects, ideas, or problems.

- Investigate and effectively apply computational techniques to the research process. Students will learn about the foundations of computational techniques as well as technologies used to facilitate the execution of activities at various phases of a research project.
- Think critically in order to identify, compare, and interpret multiple perspectives about an issue and to evaluate objections, implications, and limitations of alternate perspectives.
- Innovate: Students will be able to identify and practice the necessary relationships between creativity, risk, failure, and resiliency. Students will be able to synthesize ideas and formulate a well-reasoned argument using data and information from various sources to develop and support an argument.
- Communicate effectively: Students will be intentional about practicing the skills of speech, writing, and other forms of communication while considering audience, context, and purpose while striving to become engaged participants in the conversations that shape our world.
- Reason and Act ethically: Students will learn how to balance the expression of their own voices, values, and ideas with those that come from listening to others, and learn why this balance is necessary for the advancement of knowledge and society. Students will explore potential implications of their research.

Course-specific student learning outcomes may be found on the published course syllabus.

For more information, contact The University of Alabama Honors College, Randall Research Scholars Program, Box 870169, Tuscaloosa, AL 35487-0169; (205) 348-5500; rrsp.ua.edu.

**Admission to the RRSP:** The RRSP accepts up to 40 first-semester incoming freshman students each year through a competitive selection process. All interested Honors College-eligible incoming freshmen should complete the Randall Research Scholars application. Applicants should be prepared to respond to essay prompts to complete the RRSP application.

The RRSP selection committee will consider each applicant's academic record and extracurricular, service, and leadership achievements along with the application to identify a select group of finalists for program consideration. Selections for program admission are made in the spring semester before the first fall academic semester of the student at UA. For more information visit the RRSP website.

## RRS Advancement Requirements

1. A student must make a minimum grade of B in RRS 101 to advance to RRS 102.
2. A student must make a minimum grade of B+ in RRS 102 to advance to RRS 201.
3. Students must take the RRS 201 seminar before advancing to the RRS 202 or 300-400 level RRS seminars.

## RRS Retention Requirements

1. No student may remain in the Randall Research Scholars Program with a grade at or lower than a B- in any RRSP class.

2. A student receiving a B+ or B in any 200-400 level RRSP class will be put on automatic probation in the program. If a student continues on probation for two consecutive semesters, they will be suspended from the RRSP.
3. For all RRS 200-400 level seminars, a grade of "Incomplete" must be cleared within 12 months of the end of the term in which it was awarded. Otherwise, the grade of "I" will be changed to "F" and the student will be suspended from the RRSP. If an "I" grade remains in place upon graduation, the "I" will automatically compute as an "F" and the RRS minor will not be awarded.
4. RRSP students must maintain a 3.50 overall GPA to remain in good standing in RRS.

#### RRSP Minor Graduation Requirements

To complete the requirements for the Randall Research Scholars minor, students must complete a total of 20 RRS designated course credit hours and maintain an overall GPA of 3.50. Students are required to successfully complete both RRS 101 (4 credit hours) and RRS 102 (4 credit hours) before advancing to the research project seminars. The remaining 12 hours for completion of the minor may be accomplished by taking RRS 201 (3 credit hours), RRS 202 (3 credit hours) and any combination of the remaining RRS research seminars. These research seminars consist of research project work (9 to 12 hours per week) combined with a research methods, project management, and professional development component.

#### Additional Honors Designations

The **Randall Research Scholars** and **University Honors** graduation designations will be granted to RRS students who complete the RRS minor and have the requisite honors GPA. Students must apply for graduation with the Honors College in addition to their official UA graduation application in order to have honors designations displayed on their transcript and official graduation documents. The Honors College graduation application is available to students at no additional cost.

| Randall Research Scholars Program Course List  |                               | Hours |
|--|-------------------------------|-------|
| <b>Freshman Seminars: 8 Hours Required</b>   |                               |       |
| RRS 101  | RRS Freshman 1                | 4     |
| RRS 102  | RRS Freshman 2                | 4     |
| <b>Sophomore Seminars: 6 Hours Required</b>  |                               |       |
| RRS 201  | RRS Sophomore Seminar 1       | 3     |
| RRS 202  | RRS Sophomore Seminar 2       | 3     |
| <b>Junior/Senior Research Seminars: 6 Hours Required - May be any combination of the remaining courses</b> |                               |       |
| RRS 301  | RRS Junior Research Seminar 1 | 3     |
| RRS 302  | RRS Junior Research Seminar 2 | 3     |
| RRS 451  | RRS Senior Research Seminar 1 | 3     |
| RRS 452  | RRS Senior Research Seminar 2 | 3     |
| RRS 425  | RRS Research Project          | 1-6   |