

## Course Syllabus – RES 350

### Course Information

Course Number: RES 350 FA21  
Course Name: Ethics in Science  
Term: Fall 2021  
Start Date: 08/09/2021  
End Date: 08/30/2021  
Credits: 0

### Meeting Days / Times

First Monday and Tuesday, 08/09 and 08/10, 9:00-11:00am PT / 12:00-2:00pm ET  
Monday, Tuesday, Wednesday, Thursday, Friday, 08/23-27, 9:00-11:00am PT / 12:00-2:00pm ET  
Last Monday, 08/30, 9:00-11:00am PT / 12:00-2:00pm ET  
(See Calendar in Canvas for the most up-to-date schedule.)

### Location

Online via Zoom. Click [here](#) to join the class.

### Course Managers

Role	Last Name	First Name	Email Address
Course Director	Li	Xinrui	<a href="mailto:xli@scripps.edu">xli@scripps.edu</a>

### Course Description

The purpose of this course is to engage researchers in reading, considering, and discussing the responsible conduct of science. The course is designed as an option for meeting current NIH and NSF requirements for training in the responsible conduct of research.

### Program Learning Outcomes

By the end of the program, students will have accomplished these objectives:

PLO1: Original Research – graduate students are expected to develop the skills critical for generating high-quality research output. This would include absorbing, recalling, and contextualizing scientific knowledge, evaluating scientific information and data, creating testable hypotheses and investigating hypotheses, mastering scientific tools and techniques, displaying ethical behavior, and receiving and giving feedback.

PLO2: Communication – graduate students are expected to demonstrate the oral, written, and media skills to effectively communicate the impact of a study or a body of work to the greater

scientific community and to the public at large using a number of methods.

PLO3: Critical Thinking – graduate students are expected to develop a self-directed process to analyze information, form opinions or judgments, and use this process to improve the quality of their scientific thoughts, navigate problems, and make informed decisions.

PLO4: Intellectual Curiosity – graduate students are expected to acquire the capacity to build their intellectual curiosity and demonstrate problem solving approaches that serve their professional growth and ability to impact a field.

PLO5: Career and Professional Development – graduate students are expected to develop a variety of transferable skillsets throughout their graduate experience, including management and leadership, inclusiveness, resilience, scientific rigor, collaboration, accountability, time management, teamwork, networking, and career planning.

### **Course Learning Outcomes**

By the end of this course, students will be able to:

CLO1: Know rules, issues, options, and resources for research ethics.

CLO2: Understand the purpose and value of ethical decision-making.

CLO3: Have a positive disposition toward research ethics.

### **Background Preparation (Prerequisites)**

N/A

### **Course Materials**

Baseline information for each topic can be found at [research-ethics.org](http://research-ethics.org).

### **Expectations and Logistics**

Course topics will be covered by a combination of lectures, student presentations, readings accessible online, and discussion in class.

The first session of the course will consist largely of lecture, but will also include opportunities for questions and some discussion. The remaining sessions of the course will be structured around student presentations of assigned topics. The course will include some readings and homework assignments to identify current events relevant to the course topics.

### **Course Requirements**

Attendance, participation in discussions and completion of assignments will be the basis for credit. The grading option is pass/fail.

## Attendance Statement

Attendance to all lectures is mandatory. The progression of lectures requires consistent attendance, as the course is designed to build on fundamental principles taught in previous lectures. Students are responsible for their own work and must have permission from the instructor if they must miss a class.

## Scientific and Professional Ethics

The work you do in this course must be your own. Feel free to build on, react to, criticize, and analyze the ideas of others but, when you do, make it known whose ideas you are working with. You must explicitly acknowledge when your work builds on someone else's ideas, including ideas of classmates, professors, and authors you read. If you ever have questions about drawing the line between others' work and your own, ask the course professor who will give you clear guidance. Exams must be completed independently. Any collaboration on answers to exams, unless expressly permitted, may result in an automatic failing grade and possible expulsion from the Graduate Program.

## Technology Requirements and Support

For issues related to Canvas, please contact the Graduate Office by email at: [gradprgm@scripps.edu](mailto:gradprgm@scripps.edu) or by phone at: 858-784-8469.

## Course Grading

Grading is in accordance with the academic policies of the Skaggs Graduate School.

Grade Point	Letter Grade	
4.00	A	Outstanding achievement. Student performance demonstrates full command of the course subject matter and evinces a high level of originality and/or creativity that far surpasses course expectations.
3.67	A-	Excellent achievement. Student performance demonstrates thorough knowledge of the course subject matter and exceeds course expectations by completing all requirements in a superior manner.
3.33	B+	Very good work. Student performance demonstrates above-average comprehension of the course subject matter and exceeds course expectations on all tasks as defined in the course syllabus. There is notable insight and originality.
3.00	B	Satisfactory work. Student performance meets designated course expectations and demonstrates understanding of the course subject matter at an acceptable level.

2.67	B-	Marginal work. Student performance demonstrates incomplete understanding of course subject matter. There is limited perception and originality.
2.33	C+	Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course subject matter. There is severely limited or no perception or originality. Course will not count toward degree.
2.00	C	Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course subject matter. There is severely limited or no perception or originality. Course will not count toward degree.
0.00	I	Incomplete is assigned when work is of passing quality but is incomplete for a pre-approved reason. Once an incomplete grade is assigned, it remains on student's permanent record until a grade is awarded.
0.00	P	Satisfactory work. Student performance demonstrated complete and adequate understanding of course subject matter. Course will count toward degree.
0.00	F	Unacceptable work/Failure. Student performance is unacceptably low level of knowledge and understanding of course subject matter. Course will not count toward degree. Student may continue in program only with permission of the Dean.
0.00	W	Withdrew from the course with Dean's permission beyond the second week of the term.

- All courses will be recorded and maintained in the student's permanent academic record; only courses that apply towards the degree will appear on the academic transcript. Non-credit or audited courses will not appear on the transcript.
- 4 core courses taken for a letter grade (pass = B- or higher for a core course)
- 2 elective courses taken pass/fail (pass = A, B, C for an elective)

Because students are encouraged to take electives outside their area of expertise, a "C" letter grade is passing.