



**Graduate School 0900 (GS0900)**  
Essential Research Practices: Responsible Conduct of Research  
Fall 2024  
Zero credit hours

Course Coordinator:

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Instructors:

Name	Title	Email
Todd Leff	Associate Dean, Graduate School	<a href="mailto:tleff@wayne.edu">tleff@wayne.edu</a>
Sokol Todi	Professor of Pharmacology	<a href="mailto:stodi@wayne.edu">stodi@wayne.edu</a>
Stephanie Hawkes	Office of Multicultural Student Engagement	<a href="mailto:gd2711@wayne.edu">gd2711@wayne.edu</a>
Phil Cunningham	Associate Vice President of Research Integrity	<a href="mailto:philc@wayne.edu">philc@wayne.edu</a>
Fred Vultee	Associate Professor of Communication	<a href="mailto:dx4632@wayne.edu">dx4632@wayne.edu</a>

Time/Location:

**This is an online course.** All components will be accessible to registered students and postdocs through the GS0900 course site on Canvas.

Registration:

PhD students can register for the course the same way you would register for any other course at Wayne State. Access the registration portal on Academics and enter Graduate School as the Subject and 0900 as the course number. The full title of the course is *Essential Research Practices: Responsible Conduct of Research*, GS0900, CRN12677).

[Postdoctoral fellows can register here.](#)



## Responsible Conduct of Research (RCR) Training: GS0900

### Course Objectives

This course is required for all PhD students and is recommended for all postdoctoral trainees. It is required for postdoctoral trainees funded by the WSU Office of the Vice President for Research, by the NIH, NSF, and other agencies. Failure to complete the course may compromise a trainee's ability to obtain or maintain external fellowship funding and attainment of candidacy status; it may also compromise a mentor's compliance with funding agencies.

Responsible conduct of research (RCR) training is composed of two components:

- 1: Online modules that provide general information on responsible conduct of research, as well as WSU-specific information and resources related to RCR.
- 2: Discipline-specific instruction delivered by the student's department or program.

A passing grade in the GS0900 course requires the successful completion of component 1.

Discipline-specific training (component 2) is necessary for a comprehensive understanding of RCR principles. The trainee's program, department or advisor is responsible for providing discipline-specific training. This can be done as a formal stand-alone course, a component of a broader introductory or methods course, or in a less formal manner, such as a seminar dedicated to discipline-specific issues of responsible research. The content of this training will vary significantly between programs and must be delivered by experts in that field of study. An example of discipline-specific training would be detailed instruction on proper data acquisition, analysis, and presentation procedures. While highly relevant to most STEM programs, it may have less relevance to doctoral students in the creative arts.

**Learning objectives.** Refer to ability-based outcomes (ABO) descriptions appended to this document.

- Understand proper practices to manage and record research findings. (Ability-Based Outcome (ABO) 1.1).
- Prepare and present research findings in a manner consistent with ethical delivery practices (ABOs 1.1, 1.2, 1.3 and 1.5).
- Identify improper ethical practices in research and understand how to initiate awareness of these practices to the mentor, department and university (ABOs 1.2 and 1.5).
- Apply appropriate ethical judgment when conducting research (ABOs 1.3, 1.5, 1.6).

#### **Recommended Reading:**

An excellent description of RCR principles as they apply to both STEM and humanities research areas are distilled nicely in a [NIH publication: NIH NOT-OD-10-019](#).



## Detailed information for each component of the course

### Canvas modules.

Module	Topic	Presenter	Required/Optional
1	Introduction to RCR at WSU	Todd Leff	Required
2	Implicit bias and inclusion training	Stephanie Hawkes	Required
3	CITI Training units	None	Required
4	Research Misconduct and Conflict of Interest	Phil Cunningham	Required
5	Conflict resolution and mentoring	Sokol Todi	Required
6	Research with human subjects: the <b>IRB</b>	Fred Vultee	Optional
7	Research with animals: the <b>IACUC</b>	Todd Leff	Optional
8	Plans for discipline-specific training	None	Required

### CITI Training Modules

- The 11 RCR Core Topics are on the [CITI website](#), under the heading: “GS0900 RCR Core Topics Course”.
- All 11 modules of the CITI course must be completed to receive a passing grade.
- Instructions for accessing the CITI training and uploading a completion report are provided on the GS0900 Canvas course site in module 3.
- The 11 CITI topics are:
  1. Introduction to RCR
  2. Responsible Authorship
  3. Collaborative Research
  4. Conflicts of Interest
  5. Data Management
  6. Financial Responsibility
  7. Mentoring
  8. Peer Review
  9. Plagiarism
  10. Research Misconduct
  11. Research Ethics

### Discipline Specific RCR Training by Department and Mentor

The third stage of the course should be completed as soon after stage 2 as possible, but stage 3 does not need to be completed before the end of the semester. Each Department/Program is required to provide RCR training as it specifically pertains to the research activities in their specific discipline. The content of this training will vary substantially depending on the field of inquiry and research methods. It can be delivered as a dedicated course or embedded as a component of a general introductory or research methods course. This content delivery should be at least 1 hour in duration. Additionally, it is the responsibility of each mentor to initiate and maintain formal conversations with their trainees, to monitor research conduct and to recommend additional training if necessary. The expectation is that this discussion should be on a one-on-one basis and the initial discussion should last a minimum of 1 hour.

**Assessment:**

**Component 1:** Wayne State-specific training will be assessed by the completion of a brief quiz or survey associated with each module. This includes a short questionnaire about your program's plans for discipline-specific training and an exit survey. **Component 2:** CITI training will be assessed using imbedded quizzes at the end of each module. **Component 3:** Learning will be assessed by the trainee's department/program and mentor.

**Special Learning Needs:**

University policy - (University Policy located at <https://studentdisability.wayne.edu>. If you feel that you may need accommodation based on the impact of a disability, please feel free to contact the course coordinator privately to discuss your specific needs. Additionally, the Office of Educational Accessibility Services (EAS) coordinates reasonable accommodations for students with documented disabilities. The Office is located within the David Adamany Undergraduate Library, phone: 313-577-1851 (Voice) / 577-3365 (TTD)."

**Grading Policy:**

Students who complete the Canvas course will have a "PASS" grade entered on their transcripts. Postdocs who complete the course may request a completion certificate if desired.

**In the Event of Non-completion:**

Students who do not complete all the course assignments will receive an INCOMPLETE 'I', if you receive an incomplete, contact the instructor for guidance. Postdocs who fail to complete the course will be required to retake the course to remain in compliance.

**Federal Grant Agency Requirement Regarding RCR Frequency:**

The National Institutes of Health recommend that instruction must be taken "[at least once during each career stage, and at a frequency of no less than once every four years.](#)" Taking GS0900 every four years satisfies this requirement.



**Ability Based Outcomes – PhD/Postdoc Participants  
The Graduate School  
Wayne State University**

The purpose of this document is to define a set of concise outcomes for students completing their PhD at Wayne State University regardless of their respective program. The outcomes outlined in this document are ability-based outcomes (ABOs). ABOs define what students will be able to do as a result of completing Responsible Conduct of Training associated with completion of their PhD degree at Wayne State University. ABOs do not define the knowledge skills and attitudes that enable students to meet the outcomes. They define what graduates can do as a result of knowledge, skills and attitudes gained through completing RCR training.

The ABOs will be used in conjunction with other content area measures for curricular assessment.

Upon completion of the RCR training, the student will be able to:

1. Demonstrate commitment to a high standard of applying RCR practices.
  - 1.1 Maintain professional competence by in utilizing proper data management and recordkeeping in their respective field.
  - 1.2 Possess the attitudes required to identify and apply research ethical practices.
  - 1.3 Be able to apply moral reasoning in common research practices.
  - 1.4 Utilize effective strategies related to their mentoring (ex. Individual Development Plan) to help advance their academic training.
  - 1.5 Recognize, initiate and advocate change in issues related moral reasoning in resolving conflicts, issues related to peer review (authorship and peer review), and violations of ethical research practices.
  - 1.6 Apply practices of responsible conduct of research specific to the student's field of training.