

Graduate School 0900 (GS0900)

Essential Research Practices: Responsible Conduct of Research

Zero credit hours

Offered in the fall and winter terms

Course Coordinators:

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Instructors:

Faculty from various departments across campus serve as volunteer instructors. The faculty roster varies each term and will be announced in advance of the course.

Time/Location:

Date: A Saturday in September and January – specific dates announced in advance

Time: 8 a.m. – 2 p.m. (breakfast, lunch and refreshments provided)

Location: To be announced

Registration:

PhD students can register for the course at registration.wayne.edu and follow the prompts. When searching for the course, enter **0900** in the course number box. The course will then appear with the course registration number **28964.** Click to add the course and proceed to complete the registration process. Postdoctoral fellows can register by contacting the Wayne State Postdoc office at postdoc@wayne.edu

Responsible Conduct of Research (RCR) Training: GS0900 Course Objectives

This course is required for all PhD students in their first year, it is required for all postdoctoral trainees funded through governmental funds, and it is recommended for all postdoctoral trainees. Failure to complete the course may compromise a trainee's ability to obtain or maintain external fellowship funding and attainment of candidacy status.

GS0900 presents instruction on topics essential to performing Responsible Conduct of Research (RCR) practices. Content for the course is delivered in three stages. **STAGE 1:** Online RCR training using the Collaborative Institutional Training Initiative (CITI) system. **STAGE 2:** A one-day course with presentations on specific RCR core topics (this event). **STAGE 3:** Departmental and/or mentor based RCR instruction in topics specific to the trainee's field of study. Information from all three stages is central for comprehensive student/postdoc RCR training and to the development of the trainee.



Students and postdocs will be able to:

- Understand proper practices to manage and record their research findings. (Ability-Based Outcome (ABO) 1.1).
- Prepare and present their 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).

Full Ability-Based Outcome (ABO) descriptions are appended at the end of this document

Recommended Reading:

An excellent description of RCR principles as they apply to both STEM and humanities research areas is distilled nicely in a National Institutes of Health publication: NIH NOT-OD-10-019 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html).

Detailed information for each stage of the course

STAGE 1: CITI Training.

- The 11 RCR training modules are located under the <u>"GS0900 RCR Core Topics Course"</u> on the CITI Web site: <u>https://www.citiprogram.org/index.cfm?pageID=14</u>.
- All 11 modules should be completed *before* the stage two session, and *must be completed* to receive a passing grade in the course. A passing grade of 80% in the test for each topic is required for migration into Stage 2.

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- The 11 modules 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
- Directions for completing the GS0900 specific CITI training are posted on the course Canvas page under the title CITI Training Registration and Core Topics Completion Protocol.



STAGE 2: Saturday course – Sample Agenda

Time	Lecture Topic
8:00-8:45 a.m.	Registration/ Breakfast
8:45-9 a.m.	Opening remarks and orientation
9-9:45 a.m.	Conflict resolution and mentoring
9:45-10:30 a.m.	Responsible authorship and publication
10:30-10:45 a.m.	Break
10:45-11:30 a.m.	Research misconduct and policies for handling misconduct Break
11:30-12:15 p.m.	Conflict of interest
12:15-12:30 p.m.	Extra discussion time/questions
12:30-1:15 p.m.	Lunch
1:15-2:00 p.m.	Concurrent session #1 for STEM disciplines: data acquisition and laboratory management, sharing and ownership
1:15-2:00 p.m.	Concurrent session #2 for Social and Behavioral Sciences and Humanities disciplines: IRB processes and paperwork

STAGE 3: Field Specific RCR Training by Department and Mentor

The third stage of the course should be completed as soon after stage 2 completion as possible. Each Department is required to provide advanced RCR training to trainees in their program; training should be specific to the department's field of interest. Departments are responsible for the development and monitoring the content and delivery of Stage III training. It is suitable for Departments to utilize preexisting training materials already in place which they already used for trainee RCR instruction. The expectation is that this content delivery should be at least 1 hour in duration.

In addition, each mentor is responsible to initiate and maintain formal conversation with their trainee to further discuss the mentor's expectations of the student and role in their RCR training. Expectation is that this discussion should be on a one on one basis and the initial discussion should last a minimum of 1 hour.

Exemption Program:

Students with Special Circumstances (e.g. **Religious or Cultural Restrictions**) who will not be able to participate in the Saturday course should contact the course directors for an exemption. This will involve viewing the lectures online and taking a quiz. Exempt students are still required to complete stage 3 training within their college/department/mentor.

Recording and Transcribing Lectures:

The lecture material presented in this course will be distributed to the students for further review via Canvas.

Assessment:

Assessment of the content delivery will be divided into three parts. **Stage 1**: assessment of the CITI training content will be the successful completion of the online survey given after each topic. A passing grade of 80% in the test for each topic is required for migration into **Stage 2**: For those who attend the Saturday workshop, an individual survey link will be provided to each attendee to complete no later than a week after



the course has ended. Completion of the survey leads to a passing grade. **Stage 3:** Completion is assessed by the trainee's Department and Mentor.

Special Learning Needs:

University policy - (University Policy located at https://studentdisability.wayne.edu. If you feel that you may need an 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 1600 David Adamany Undergraduate Library, phone: 313-577-1851 (Voice) / 577-3365 (TTD)."

Grading policy:

Students and postdocs who complete Stages 1 and 2 of the course and successfully submit the survey at the end of the Saturday workshop will receive a Satisfactory or "PASS" associated with their transcripts.

In the Event of Course Failure:

Students and postdocs who do not complete **either Stage 1 or 2** the course will be required to complete the missing components in the next subsequent semester, and they will need to take an INCOMPLETE in the course for the current term. Students/Postdocs that PASS the course will receive a certificate of completion for their personal records. If you receive a FAIL grade, you will be required to retake the entire course.



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. IDP) 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.