Essential Research Practices: Responsible Conduct of Research
<u>Zero</u> credit hours

<u>Course Coordinator/Instructor</u>:

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Eugene Applebaum Building, Room 3138

<u>Instructors</u>:

WSU Faculty:

Lecture/discussion section leaders are faculty members drawn from across campus including STEM and humanities departments.

WSU Postdoctoral Scholars:

Postdoctoral Scholars direct the breakout sections of the class by moderating the discussion of case studies in the afternoon.

<u>Time/Location</u>:

Date: Saturday (either the second Saturday of Sept or third Saturday of January)

Time: 8:00 a.m. – 12:15 p.m.   General Lectures Bld, <u>Room 150</u>
                                                                      5045 Anthony Wayne Ave

        1:30 – 4:00 p.m.   Manoogian Hall, Rooms – <u>243, 253, 256,</u>
                                                                      <u>259, 262-3, 266, 269, 275, 279-80, 288-9,</u>
                                                                      <u>293, 297 (room assignments will be provided in advance)</u>
                                                                      906 W. Warren Ave

All course materials are located on the GS0900 Blackboard site
Course Objectives and Corresponding Ability-Based Outcomes (ABOs):

This course is required for all PhD students in their first year, and it is suggested for all postdoctoral scholars. Students and postdocs are allowed to take this course in either the Fall or Winter term, however failure of PhD students to complete the entire course within the first year of your program will result in a hold on your candidacy status.

This course presents both general and directed instruction/discussion on topics essential to performing Responsible Conduct of Research (RCR) practices. Content is delivered in four stages. STAGE 1: Completion of 11 elective modules within the Collaborative Institutional Training Initiative (CITI) RCR Core Topics online course. STAGE 2: A lecture and interactive based workshop to promote training and discussion in core RCR topics. STAGE 3: A Departmental and/or Mentor based RCR instruction in topics specific to the department's and mentor's field of study. Information from all three stages is central for comprehensive student/postdoc RCR

training and to the development of the student. STAGE 4: Completion of the summary essay on general and field specific RCR topics. Specific learning objectives for the course and the ABOs they address are as follows.

The students/postdocs will be able to:

- Understand and utilize proper practices in managing and recording their research product. (ABO 1.1).
- Correlate and present research product 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).
- Initiate and utilize strategies of mentoring that keeps an open course of communication between mentor and student for continued development of the student. (ABOs 1.4 and 1.6).
- Apply ethical practices specific to the field of focus in all current and future conditions (ABO 1.6).

Recommended Textbooks (none required):

The course adheres to the basic principles of RCR instruction described in NIH NOT-OD-10-019 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html). The subject matter includes all recommended focus areas as well as issues relating to public perceptions of research and practical skills such as approaching difficult conversations. For postdoctoral scholars, the context is tailored in relation to the Core Competencies for Postdoctoral Training Requirements as developed by the National Postdoctoral Association. Electronic content for the course will be provided and available online at the Blackboard Web site for recommended reading material; there is no textbook for this course.

Detailed Schedule for 4 Stages within the Course:

STAGE 1: CITI Training. (**Must be Completed by before workshop)**
        Students must complete and pass with an 80% competency all of the 11 elective modules outlined within the CITI Training "GS0900 RCR Core Topics Course" available at the CITI Web site: https://www.citiprogram.org/index.cfm?pageID=14. DIRECTIONS for completing the GS0900 specific CITI training modules required for this course are posted on the course Blackboard page under the title of "CITI Training Registration and Core Topics Completion Protocol" within the Content dropbox.

Progression to STAGE 2 of this course is contingent on successful completion of EACH of these 11 CITI training modules, which include the topics listed below. *If you are looking at the CITI course and it is not listed as GS0900 RCR Core Topics course, or you do not see the following 11 modules, you are likely taking the wrong course and will be required to retake your CITI training before being allowed to attend the workshop:*

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Introduction to RCR
Authorship
Collaborative Research
Conflicts of Interest
Data Management
Financial Responsibility
Mentoring
Peer Review
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Plagiarism
Research Misconduct
Research Ethics
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Proof of completion of the required CITI course will be required for registration to attend the STAGE 2 workshop. Please have a hardcopy of your CITI module completion statement at the time of workshop registration.

STAGE 2: Saturday Interactive Workshop (**Workshop will take place on <u>Saturday</u>**)

Students must arrive on 30 minutes before the workshop and participate in the entire Saturday program. On time attendance is required to receive credit for attending workshop. As stated above, you will need to bring a hardcopy verification that you did in fact successfully complete all CITI training modules. If you do not bring this verification, you will not be allowed to attend the Saturday Workshop.

Time	Lecture Topic
8:00 — 8:15 am	Introduction
8:15 — 8:45 am	Mentoring and the IDP
8:45 — 9:15 am	Conflict Resolution
9:15 — 9:45 am	Effective Communication Strategies
9:45 — 10:15 am	Data Management and Recordkeeping
10:15 — 10:30 am	Break
10:30 – 11:00 am	Reporting Research Misconduct & Whistleblower Protection
11:00 — 11:30 am	Peer Review Process
11:30 — 12:00 am	Authorship and Plagiarism
12:00 — 12:30 pm	Conflict of Interest
12:30 — 1:30 pm	Break for Lunch (**Lunch will be provided**)
1:30 – 4:00 pm	Break Out Sessions on Core Topics *(Led by Postdoctoral Scholars)*
3:00 – 4:00 pm	Group Discussion in Break Out Sessions on Core Topics *(Led by Postdoctoral Scholars)*

STAGE 3: Field Specific RCR Training by Department and Mentor (**Must be completed by <u>two weeks before the semester ends</u>)**

Progression to the third stage of the course is contingent on successful completion of both Stage 1 and Stage 2 requirements or by approval of the course director. Each Department is required to provide advanced RCR training to the student specific to the department's field of interest. Departments are responsible for the development and monitoring content and delivery of Stage III training, and it is suitable to utilize preexisting training materials already in place and used by the department for student RCR instruction. The expectation is this content delivery will be at least 1 hour.

In addition, each mentor is responsible to initiate a formal conversation with the student 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 (although it is at the mentor's discursion) and the discussion should last a minimum of 1 hour.

STAGE 4: ESSAY REQUIREMENT for PASS/FAIL GRADE (**Essay must be submitted by <u>one week before</u>**

Once all three stages of the course have been completed, the student/postdoc will be required to complete a formal 2 full page ESSAY (single spaced, 12-point font, 0.75 inch margins) on the topic that summarizes their formal understanding of general and field specific RCR practices. The essay should include a description of how they plan to utilize and self-monitor RCR practices in their future studies at Wayne State and beyond. Submission of this 2-full page essay should be completed via upload on the Blackboard page specific to the GS0900 course. **The essay will be judged based on: subject content, appropriate citations, professionalism in writing, completing the SafeAssign plagiarism verification with a 20% score or lower, and following the guidelines listed above for essay specifics.** Once the ESSAY has been evaluated, the student/postdoc will receive a PASS or FAIL grade for the course, and this grade will be based on all three stages of the course as well as content in the essay.

Attendance:

Attendance is mandatory for Stage 2. Failure to arrive **on time** for stage 2, or to complete any of the four stages in the class may result in either a failing grade in the class (and a required retake) or an incomplete grade given for the course. Failure to complete the entire course by the candidacy exam will result in a stoppage of the student to attain their candidacy status.

Exemption Program:

Students with Special Circumstances (with a **Religious or Cultural Restriction only**) who will not be able to participate in the Saturday workshop will be allowed to complete an alternate workshop on scheduled at a later date (3:00 pm in room 3138 of Eugene Applebaum Building). The alternative workshop will involve viewing the Stage 2 workshop lectures online, writing a summary of the individual lecture's content, and finally participating in a comprehensive small group discussion involving case studies covering situations that violate RCR principles. Students exempt from the Saturday course must complete their GS0900 CITI training modules by the date listed above, as indicated above, and provide Dr. Stemmler an electronic verification of CITI course completion by this date. Exempt students are required to complete stage 3 training within their college/department/mentor. Finally, exempt students must submit their overall summative essay that covers the three general questions posted in the essay requirement document on Blackboard by the date listed above.

Classroom Behavior:

Students should make every effort at be on time to class. Excessive late attendance to the class in Stage 2 could result in the student being required to retake the workshop. Students should also pay attention during class and attend the entire set of lectures. The instructor reserves the right to ask students to leave if they are creating a disturbance. Multiple disturbances could result in a requirement to retake the course.

Recording and Transcribing Lectures:

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

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. Stage 2 and 3: following both stages, including workshop and department/mentor discussions, the student will be asked to summarize how they will implement RCR practices in their academic training and beyond in an essay format. Format for the essay with specific assessment questions will be posted online and a completed Essay must be posted on Blackboard class

page by **the posted deadline for that semester's course** to receive a passing grade.

Special Learning Needs:

University policy - (University Policy located at http://www.bulletins.wayne.edu/fib/fibd.html): "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 in the 1600 David Adamany Undergraduate Library, phone: 313-577-1851 (Voice) / 577-3365 (TTD)."

Grading policy:

Students who complete all three stages of the course and successfully submit an assessment essay on Blackboard will receive a grade of "PASS" associated with their transcripts.

In the Event of Course Failure:

Students who do not complete **all three Stages** of 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 require 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.