

## COURSE SYLLABUS

### BSE 5111 Scientific Integrity in Research (1 credit hour)

**Semester:** Fall 2018  
**Class Hours:** 10:00am-11:50am, Wednesdays  
**Class Location:** CHB 320

**Coordinator:** Dee Terrell PhD  
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**Office Hours:** By appointment

#### Course Description

This course is designed to provide training to M.S. and Ph.D. students in the responsible conduct of research and scientific integrity. The class will cover issues related to: 1) acquisition, management, sharing, and ownership of data; 2) conflict of interest and commitment; 3) human subjects' protection; 4) research misconduct; 5) publication practices and responsible authorship; 6) peer review; and 7) collaborative science. The course is to be completed prior to initiation of thesis or dissertation research.

#### Prerequisites

None

#### Learning Objectives

At the conclusion of this course the student should be able to:

1. Identify and explain the rationale for ethical practices regarding data acquisition, management, sharing, and ownership
2. Define and identify "conflict of interest" and "research misconduct"
3. Describe the history and goals of human subjects protection
4. Explain responsible publication practices, authorship, and peer review
5. Understand ethical roles as public health professionals in collaborative research

#### Syllabus Modifications

The instructor reserves the right to modify the syllabus in any way during the course of the semester.

**Student evaluations of the course**

There will be an end of course student evaluation on October 10, 2018. Students will complete the evaluations in class using the Desire-2-Learn system.

**Information for students regarding the Core Competency Model**

The Council on Education for Public Health (CEPH) has stated in its Accreditation Criteria: For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of degree programs. Competencies define what a successful learner should know and be able to do upon completion of a particular program or course of study. These statements describe in measurable terms the knowledge, skills and abilities a successful graduate will demonstrate at the conclusion of the program. The relationship between competencies and learning objectives (the incremental learning experiences at the course and experiential levels that lead to the development of the competencies) should be explicit and aligned with the school’s mission, goals and objectives. Given that competencies define the nature and content of a program and establish explicit student expectations, they should be widely available to students and prospective students, for example, on the school’s website, syllabi and/or in student handbooks. Competencies should guide the curriculum planning process and should be the primary measure against which student achievement is measured.

The following table includes a listing of the competencies that are addressed in this course. The course content that covers each identified competency and the method of evaluation are listed. All students are expected to demonstrate these competencies after completing this course.

Competency		Lecture Week	Evaluation of Student Mastery of Competency		
			Discussion	Quizzes	Primary/ Reinforce
Prof Ethics	Demonstrate responsible conduct of research practices related to data acquisition and sharing, collaborative research, ethical research with human subjects, disclosure and management of conflicts of interest, avoidance of research misconduct, and responsible publication and authorship practices	1-8	Literature examples	Weekly quizzes	P: Wk 1-8

## Conduct of the Course

1. Format: The instructional methods of this course include seminars and in-class discussions. Completion of the Scientific Integrity in Research course requirement also includes **three outside of class components**: 1) completion of online CITI web-based course 'Responsible Conduct of Research', 2) completion of online CITI web-based course 'Protection of Human Research Subjects', and 3) Completion of AALAS Learning Library 'Working with the IACUC'. **Certificates of completion for each of these components must be presented to the course instructor before you will receive credit for the course.**
2. Class attendance: Students are required to attend 8 two-hour discussions covering 16 topics in BSE 5111 'Scientific Integrity in Research'. Please notify the instructor of any necessary absences due to scheduling conflicts or exceptional circumstances that prevent your attendance prior to the missed class period. **For each absence, students must independently write a 2-page report on the topic of the missed class session and submit the paper at the beginning of the next class period.** Failure to submit a 2-page report by the stated deadline will result in a failing course grade. Students are also responsible for completing all quizzes on time, regardless of absences. **You must attend 12 out of the 16 topic sessions to pass the course.**
3. Assigned reading: Students are responsible for completing any assigned reading and should be prepared to discuss this material in class/seminar. Copies of the slides or reading materials (outside of your textbook) will be provided on D2L at <https://learn.ouhsc.edu>
4. Quizzes: Online quizzes will be administered via D2L when indicated on the syllabus. Each quiz will address the required reading material that will be discussed in the upcoming sessions. The quiz will become available at the end of the Wednesday class period and must be completed by 9 am Wednesday morning prior to class. No exceptions to quiz deadlines will be made. To pass the course you must pass 70% of the overall quiz questions. Quizzes are open book/open notes, but students may not use friends or classmates to help them complete the quiz. **Quizzes are timed and you have 30 minutes to complete them; therefore, it is expected that you read the required material prior to beginning the quiz.**

Collaboration with colleagues, including other students, is an important aspect of professional education and development. Students are expected to engage in class/seminar discussions.
5. Students will pick 2 topics that are related to their research careers and submit a paper. The paper should be **2-3 pages and include at least 3 references (published journal articles or textbook not a website)**. Papers are due by the last class period (October 10) but can be submitted at any time during the course of the semester. **You must receive a grade of a C or better on each paper in order to pass the class.**
6. The course will follow all applicable OUHSC policies and procedures, including those that govern acts of academic misconduct.

## Method of Evaluation and Grading

The class will be pass/fail. You must enroll in BSE 5111 and complete **all** aspects of the Scientific Integrity in Research requirement to successfully pass the class. Students are expected to attend all sessions and participate in seminar discussions. To pass the course you must pass 70% of the overall quiz questions and attend 12/16 topic sessions. **For each absence, students must independently write a 2-page report on the topic of the missed class session and submit the paper at the beginning of the next class period.** Failure to submit a 2-page report by the stated deadline will result in a failing course grade. **You must receive a grade of a C or better on two (2-3 page) papers on covered topics of your choice in order to pass the class.**

**Course Materials** Required Textbook: Macrina, Francis L. *Scientific Integrity* 4<sup>th</sup> edition, 2014. ASM Press: [www.asmpress.org](http://www.asmpress.org). Companion web site: [www.scientificintegrity.net](http://www.scientificintegrity.net)

## Instructions for Completing Outside of Class Requirements

(Certificates of completion for each of these three components must be presented to me before you will receive credit for the course.)

### 1) CITI web-based course 'Responsible Conduct of Research'

#### Instructions for CITI Web-Based Course New User:

- Go to [www.CITIProgram.org](http://www.CITIProgram.org)
- Participating Institution: Select from the drop down menu "**Graduate College of the University of Oklahoma Health Sciences Center**"
- Complete the requested registration information.
- Select Biomedical Responsible Conduct of Research, Basic Course

#### Instructions for Previously Registered User of CITI:

- If you already have a CITI user name and password, login into [www.CITIProgram.org](http://www.CITIProgram.org) and insert your username and password
- At the Main Menu page, select "**Affiliate with another institution**"; select "**Graduate College of the University of Oklahoma Health Sciences Center**"
- Complete the requested registration information
- Select Biomedical Responsible Conduct of Research, Basic Course

### 2) CITI web-based course 'Protection of Human Research Subjects'

#### Instructions:

- Go to [www.CITIProgram.org](http://www.CITIProgram.org)
- Participating Institution: Select from the drop down menu "**University of Oklahoma Health Sciences Center**"
- Complete the requested registration information
- Select Biomedical Research Investigators and Key Personnel Course

### 3) AALAS Learning Library online course 'Working with the IACUC'

Instructions for creating a new account can be found here:

<https://acup.ouhsc.edu/training.html>

Then click on 'new user' and the instructors for creating an account will open in a pdf document.

You must pass with an 80%

#### To view certificate

- After you pass the exam click on 'View Transcript'
- Click on the down arrow next to 'Working with the IACUC'
- Click 'Download Exam Certificate' save the file and print off or email a copy to me

## BSE 5111 Scientific Integrity in Research Course Outline-Fall 2018

<b>Date</b>	<b>Presenter</b>	<b>Topic</b>	<b>Required Readings</b>
Aug 22	Dee Terrell	<b>History of Human Subjects' Protection</b>	Textbook chapter 5 <b>*Quiz 1</b>
	Samantha Harbert	<b>Human Subjects: IRB Applications, Informed Consent</b>	
Aug 29	Aaron Wendelboe	<b>Methods, Manners and Ethics</b>	Textbook chapters 1& 2 <b>*Quiz 2</b>
	Dee Terrell	<b>Professional Ethics</b>	D2L readings <b>*Quiz 3</b>
Sep 5	Amanda Janitz Michael Peercy	<b>Community Ethics</b>	D2L readings <b>*Quiz 4</b>
	Janis Campbell	<b>Public Health Information</b>	D2L readings <b>*Quiz 5</b>
Sep 12	Lori Garman Tauqeer Ali	<b>NIH Data Resources</b>	D2L readings <b>*Quiz 6</b>
	Amanda Janitz	<b>NIH application: Human Subjects</b>	D2L readings
Sep 19	Laura Beebe	<b>Conflicts of Interest</b>	Textbook chapter 7 <b>*Quiz 7</b>
	Gina McMillen	<b>Intellectual Property</b>	Textbook chapter 9
Sep 26	Sara Vesely	<b>Authorship/Ghost Writing</b>	Textbook chapter 4 D2L readings <b>*Quiz 8</b>
	Jennifer Peck	<b>Peer Review</b>	Textbook chapter 4, D2L readings <b>*Quiz 9</b>
Oct 3	Jill Raines	<b>Reporting Misconduct/ HIPAA in Research</b>	
	Rachel McCombs	<b>Discrimination and Harassment</b>	
Oct 10	Natasha Mickel	<b>Mentoring</b>	Textbook chapter 3
	Julie Stoner	<b>Collaborative Research</b>	Textbook chapter 8 D2L readings <b>*Quiz 10</b>

This syllabus is intended as a guide for this course. Dates, assignments, and evaluation are subject to revision by the instructor. Any such revisions will be announced in advance.

### **Copyright**

This syllabus and all related course material are protected under US Copyright Law and may not be further disseminated in any form or format without the prior explicit written consent of the faculty member. Failure to comply with this provision may subject the student to disciplinary action and/or state or federal action.

### **Student Professional Behavior in an Academic Program**

Ethical and professional behaviors are considered a core competency in an academic program and thus are key factors in a student's good academic standing. Upon acceptance of an offer of admission, the student commits to comply with all professional conduct regulations established by the University, respective college, and program. The complete Student Professional Behavior in an Academic Program policy is at [www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf](http://www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf).

### **Academic Misconduct Code**

The Academic Misconduct Code describes academic misconduct as any acts intended to improperly affect the evaluation of a student's academic performance or achievement. Academic Misconduct includes but is not limited to cheating, plagiarism, fabrication, fraud, destruction, bribery or intimidation, assisting others in any act proscribed by the Code, or attempting to engage in such acts. The policy and procedures related to academic misconduct are detailed in the Academic Misconduct Code found in Appendix C of the Faculty Handbook at [www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf](http://www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf).

### **Academic Appeals**

The Academic Appeals policy outlines the procedure a student must follow to request a hearing for appeals related to evaluation in a course, thesis or dissertation defense, or general or comprehensive exam. It also outlines the appeal process for a suspension or dismissal or under the Student Professional Behavior in an Academic Program Policy and for appeals of decisions resulting in dismissal, expulsion, or suspension from a program or of being required to repeat a semester of year. The sole basis for an academic appeal is an alleged prejudiced or capricious academic evaluation or decision. Policy and procedure details are in Appendix C of the Faculty Handbook at [www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf](http://www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf).

### **Accommodation on the Basis of Disability**

The University of Oklahoma is committed to the goal of achieving equal educational opportunity and full participation for students with disabilities. Accommodations on the basis of disability are available by contacting the Disability Resource Center (DRC) by email at [drc@ou.edu](mailto:drc@ou.edu) or by calling (405) 325-3852 or Voice (405) 325-4173/TDD. Information on policies and registration with the Disability Resource Center may be found on the DRC website at: [www.ou.edu/drc](http://www.ou.edu/drc). Students requesting accommodations related to work in a course must contact the DRC as soon as possible; accommodations are not made retroactively.

### **Sexual Misconduct**

For issues regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including Advocates-On-Call 24/7, counseling services, mutual “No Contact orders,” scheduling adjustments, and disciplinary sanctions against the perpetrator. Information is available from the Sexual Misconduct Office at (405) 325-2215 (8AM-5PM) or the Sexual Assault Response Team at (405) 605-0013 (24/7).

### **Adjustment for Pregnancy/Childbirth Related Issues**

Students needing modifications or adjustments to course requirements because of documented pregnancy-related or childbirth-related issues should contact the college’s Assistant/Associate Dean for Student Affairs (or academic advisor) or the Disability Resources Center ([www.ou.edu/drc](http://www.ou.edu/drc)) as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. See [www.ou.edu/content/eoo/faqs/pregnancy-faqs.html](http://www.ou.edu/content/eoo/faqs/pregnancy-faqs.html) for answers to commonly asked questions.

### **Course Drop/University Withdrawal**

The student is responsible to submit required University paperwork before the deadlines to drop or withdraw from a course, shown in the Academic Calendar at <http://admissions.ouhsc.edu/AcademicCalendar.aspx>. Missed homework and examination grades will be entered as a grade of zero if a student fails to formally drop the course or withdraw from the University.

### **Encryption**

Students and trainees must have personally-owned and University-issued laptops, smartphones, and external storage devices, such as flash drives and hard drives, that are used for University Business, encrypted by Campus IT through a Device Security Clinic <http://ouhsc.edu/registerdevice> or similar, prior to using the device for University Business (unless they have been notified by College or Department personnel that they are specifically, individually exempt). University Business does include checking HSC email. Removal of encryption by Campus IT is required upon a student’s departure from the University.

Approved by OUHSC Legal Counsel/Academic Programs Council 8.2.2018