

## COURSE SYLLABUS

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

**Semester:** Fall 2014  
**Class Hours:** 10:00am-11:50am, Fridays  
**Class Location:** CHB 302

**Instructor:** Dee Terrell, PhD and staff  
**Office:** CHB 333  
**Telephone:** (405) 271-8001 extension 48386  
**Email:** [Dee-Terrell@ouhsc.edu](mailto:Dee-Terrell@ouhsc.edu)  
**Office Hours:** By appointment

#### Syllabus Modifications

The instructors reserve the right to modify the syllabus in any way during the course of the semester.

#### 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

## **Information for students regarding the MPH 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.

### **Student evaluations of the course**

There will be an end of course student evaluation on October 3, 2014. Students will complete the evaluations in class using the Desire-2-Learn system.

## 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 ½ -day "Human Participant Protection in Research" course offered by the OUHSC Institutional Review Board. **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 instructors 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 Friday class period and must be completed by 8 am Friday 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.**
5. Collaboration with colleagues, including other students, is an important aspect of professional education and development. Students are expected to engage in class/seminar discussions.
6. The course will follow all applicable OUHSC policies and procedures, including those that govern acts of academic misconduct.

## Instructions for Completing Outside of Class Requirements

(Certificates of completion for each of these three components must be presented to your major advisor 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) “Human Participant Protection in Research”

Offered by the OUHSC Institutional Review Board. Students must go online and register for the course they wish to attend using the following link [http://www.ouhsc.edu/irb/Education\\_MainPg.asp](http://www.ouhsc.edu/irb/Education_MainPg.asp)

#### **Early registration is recommended.**

The ½ day “Human Participant Protection Research” course will be offered on the following date this semester:

**Date:** Tuesday, **October 21, 2014**  
**Location:** Bird Library Auditorium, Room 299  
**Video Site:** Schusterman Campus, Room TBA  
**Time:** 8:30 a.m. to 1:00 p.m

### **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.

**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)

## BSE 5111 Scientific Integrity in Research Course Outline-Fall 2014:

<b>Date</b>	<b>Presenter</b>	<b>Topic</b>	<b>Required Readings</b>
Aug 22	Julie Stoner	<b>Collaborative Research</b>	Chap 8 D2L readings <b>*Quiz 1</b>
	Aaron Wendelboe	<b>Methods, Manners and Ethics</b>	Chaps 1 & 2 <b>*Quiz 2</b>
Aug 29	Dee Terrell	<b>History of Human Subjects' Protection</b>	Chap 5 D2L readings <b>*Quiz 3</b>
	June Eichner	<b>Community Ethics</b>	D2L readings <b>*Quiz 4</b>
Sep 5	Elisa Lee	<b>NIH Data: Protections, Ownership, Sharing</b>	D2L readings <b>*Quiz 5</b>
	Laura Beebe	<b>NIH application: Human Subjects</b>	Application guide pages 203-205
Sep 12	Jill Raines	<b>Whistleblowing/Reporting Misconduct</b>	
		<b>Discrimination and Harassment/Reporting Misconduct</b>	
Sep 19	Sara Vesely	<b>Authorship/Ghost Writing</b>	Textbook Chap 4 D2L readings <b>*Quiz 6</b>
	Dave Thompson	<b>Peer Review</b>	Textbook Chap 4, D2L readings <b>*Quiz 7</b>
Sep 26	Laura Beebe	<b>Conflicts of Interest</b>	Textbook Chap 7 <b>*Quiz 8</b>
	Kennon Garrett	<b>Intellectual Property</b>	Textbook Chap 9
Oct 3	Pamela Cedeno	<b>Human Subjects: IRB Applications, Informed Consent</b>	
	Janis Campbell	<b>Public Health Information</b>	D2L readings <b>*Quiz 9</b>
<b>Oct 10</b>	<b>No class Fall break</b>		
Oct 17	Tabitha Garwe/Helene Carabin	<b>Ethical Issues in International Research</b>	D2L readings <b>*Quiz 10</b>
	Dee Terrell	<b>Professional Ethics</b>	D2L readings <b>*Quiz 11</b>

## **Academic Misconduct**

The hallmark for all public health professionals is professional and academic integrity. The administration and faculty adhere to these standards and we believe it is our obligation and responsibility to impart these values to you as emerging professionals. In this regard, the College enforces the University policies for Academic Misconduct and we remind you that you are responsible for being familiar with and adhering to the requirements of the OUHSC Academic Misconduct Code. According to the Code:

“Academic Misconduct includes any act which improperly affects the evaluation of a student’s academic performance or achievement, including but not limited to the following: (a) Cheating: the use of unauthorized materials, methods, or information in any academic exercise, including improper collaboration; (b) Plagiarism: the representation of the words or ideas of another as one’s own, including: 1) direct quotation without both attribution and indication that the material is being directly quoted; e.g., quotation marks; 2) paraphrase without attribution; 3) paraphrase with or without attribution where wording of the original remains substantially intact and is represented as the author’s own; 4) expression in one’s own words, but without attribution, of ideas, arguments, lines of reasoning, facts, processes, or other products of the intellect where such material is learned from the work of another and is not part of the general fund of common academic knowledge; (c) Fabrication: the falsification or invention of any information or citation in an academic exercise; (d) Fraud: the falsification, forgery, or misrepresentation of academic or clinic work, including the resubmission of work performed for one class for credit in another class without the informed permission of the second instructor; or the falsification, forgery, or misrepresentation of other academic or medical records or documents, including admissions materials, transcripts, and patient records; or the communication of false or misleading statements to obtain academic advantage or to avoid academic penalty; (e) Destruction, misappropriation, or unauthorized possession of University property or the property of another; (f) Bribery or intimidation; (g) Assisting others in any act proscribed by this Code; or (h) Attempting to engage in such acts. It is the responsibility of each faculty member and each student to be familiar with the definitions, policies, and procedures concerning academic misconduct.”

The code may be found in Appendix C of the OUHSC Faculty Handbook, available on-line <http://www.ouhsc.edu/provost/documents/FacultyHandbookOUHSC.pdf>.

You are cautioned to be particularly aware of the definition and consequences of plagiarism, cheating, fabrication and fraud.

## **Reasonable Accommodation for Disabilities**

The University of Oklahoma complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students with disabilities who require special accommodations related to work in a course are recommended to notify the course instructor in writing within the first week of the course. Students must also formally request reasonable accommodations for documented disabilities through the OU Disability Resource Center (620 Elm Avenue, Suite 166, Goddard Health Center, Norman Campus). 405.325.3852 (Voice), 405.325.4173 (TDD), 405.325.4491 (FAX). The center will confirm the disability and work with the course instructor in making reasonable accommodations. Please see the student Handbook for additional information, policies, procedures and additional resources.

**Registration and Withdrawal**

You are responsible for being sure that all University paperwork required for this course is done correctly and turned in before the deadline. In particular, if you choose to withdraw from this course you must complete the appropriate University form, obtain the required signatures, and turn the form in before the deadline. If you stop attending the course and doing the course work without doing the required paperwork your grade will be calculated with missed homework and examination grades entered as zero. This could result in receiving a grade of F in the course. Deadlines are shown in the Academic Calendar, which is available from the Office of Admissions and Records or online at <http://www.ouhsc.edu/admissions/>.

**Syllabus Modifications**

The instructors reserve the right to modify the syllabus in any way during the course of the semester.



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
Core 1	Describe the roles biostatistics serves in the discipline of public health	1	Literature examples	Weekly quizzes	P: Wk 1
Core 11	Promote high standards of personal and organizational integrity, compassion, honesty and respect for all people	1-8	Literature examples	Weekly quizzes	P: Wk: 1-8
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
Inter 4	Demonstrate ethics, values, and social justice to public health practice	1-8	Literature examples	Weekly quizzes	P: Wk 1-8
Inter 2	Understand and apply concepts of cultural diversity in its context of public healthcare practice	2, 8	Literature examples	Weekly quizzes	P: Wk 2, 8