

## COURSE SYLLABUS

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

**Semester:** Fall 2011  
**Class Hours:** 10:00am-10:50am, Fridays  
**Class Location:** CHB 337

**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 10/14/11. Students will complete the evaluations in class using the Design-2-Learn system.**

# **BSE 5111 Scientific Integrity in Research**

## **Association of Schools of Public Health Master's Degree in Public Health Core Competencies (Version 2.3)**

This course addresses the following MPH Core Competencies:

### **Discipline-specific Competencies**

#### **A. Biostatistics**

- A. 1 Describe the roles biostatistics serves in the discipline of public health.

#### **C. Epidemiology**

- C. 5 Comprehend basic ethical and legal principles pertaining to the collection, maintenance, use and dissemination of epidemiologic data.

### **Interdisciplinary/Cross-cutting Competencies**

#### **F. Communication and Informatics**

- F. 5 Apply legal and ethical principles to the use of information technology and resources in public health settings.

#### **G. Diversity and Culture**

- G. 1 Describe the roles of, history, power, privilege and structural inequality in producing health disparities.
- G. 2 Explain how professional ethics and practices relate to equity and accountability in diverse community settings.
- G. 5 Use the basic concepts and skills involved in culturally appropriate community engagement and empowerment with diverse communities.

- G. 6 Apply the principles of community-based participatory research to improve health in diverse populations.
- G. 7 Differentiate among availability, acceptability, and accessibility of health care across diverse populations.
- G. 9 Cite examples of situations where consideration of culture-specific needs resulted in a more effective modification or adaptation of a health intervention.
- G. 10 Develop public health programs and strategies responsive to the diverse cultural values and traditions of the communities being served.

## **H. Leadership**

- H. 1 Describe the attributes of leadership in public health.
- H. 2 Describe alternative strategies for collaboration and partnership among organizations, focused on public health goals.
- H. 3 Articulate an achievable mission, set of core values, and vision.
- H. 4 Engage in dialogue and learning from others to advance public health goals.
- H. 6 Demonstrate transparency, integrity, and honesty in all actions.
- H. 8 Apply social justice and human rights principles when addressing community needs.

## **J. Professionalism**

- J. 1 Discuss sentinel events in the history and development of the public health profession and their relevance for practice in the field.
- J. 2 Apply basic principles of ethical analysis (e.g. the Public Health Code of Ethics, human rights framework, other moral theories) to issues of public health practice and policy.
- J. 5 Promote high standards of personal and organizational integrity, compassion, honesty and respect for all people.
- J. 10 Appreciate the importance of working collaboratively with diverse communities and constituencies (e.g. researchers, practitioners, agencies and organizations).

## **L. Systems Thinking**

- L. 6 Explain how the contexts of gender, race, poverty, history, migration, and culture are important in the design of interventions within public health systems.

## 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: 12 one-hour discussions in BSE 5111 'Scientific Integrity in Research'. **If you miss a class then you must write a 2 page report on the missed topic due at the next class period.**
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 will be provided on D2L at <https://ouhsc.desire2learn.com/>
4. 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. 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.)

*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*

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*

“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 11, 2011**  
**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.

**Course Materials** Required Textbook: Macrina, Francis L. Scientific Integrity 3rd edition, 2005. 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 2011:

<b>Date</b>	<b>Instructor</b>	<b>Topic</b>	<b>Text</b>
Fri Aug 26	June Eichner	History of Human Subjects' Protection	
Fri Sept 2	Aaron Wendelboe	Methods, Manners and Ethics	Chs 1 & 2
Fri Sept 9	Laura Beebe	Conflicts of interest	Ch 7
Fri Sept 16	Tabitha Garwe	Ethical Issues in International Research	
Fri Sep 23	David Thompson/Sara Vesely	Peer Review	Chap 4 (part)
Fri Sep 30	June Eichner/ Janis Campbell	Community Ethics	
Fri Oct 7	Fall break-no class	OU-Texas	
Fri Oct 14	Dee Terrell	Professional Ethics	
Fri Oct 21	Elisa Lee	NIH Data: Protections, Ownership, Sharing	
Fri Oct 28	Aaron Wendelboe/ Janis Campbell	Public Health Information	
Fri Nov 4	Julie Stoner	Collaborative Research	
Fri Nov 11	Pamela Cedeno/Laura Beebe	Human subjects: IRB and NIH applications	
<b>Thurs Nov 17</b>	Jill Raines	Discrimination and Harassment/Reporting misconduct	

### **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 online at [http://www.ouhsc.edu/admissions/handbook/Academic\\_Misconduct.htm](http://www.ouhsc.edu/admissions/handbook/Academic_Misconduct.htm) . 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 Suzette Dyer at 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 go to

[http://www.ouhsc.edu/admissions.handbook/Reasonable\\_Accommodation.htm](http://www.ouhsc.edu/admissions.handbook/Reasonable_Accommodation.htm)

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/>.