

**Graduate Program in Scholarship and Research Integrity**  
**College of Health and Human Development**  
**The Pennsylvania State University**  
**Academic Year 2015-16**

Commencing academic year 2009-2010, students entering Master's or Doctoral programs in the College of Health and Human Development (CHHD) (with the exception of students in the Master of Health Administration<sup>1</sup> program) will be required to undertake training in Scholarship and Research Integrity (SARI). CHHD offers graduate degrees in eight programs: Biobehavioral Health; Communication Sciences and Disorders; Health Policy and Administration; Hospitality Management; Human Development and Family Studies; Kinesiology; Nutritional Sciences; and Recreation, Park, and Tourism Management. In addition, the College participates in three intercolleage graduate programs: Genetics, Neuroscience and Physiology. The SARI requirement will be included in online descriptions of all CHHD graduate programs and described to new student recruits during orientation. The SARI program in CHHD will couple disciplinary breadth with maximum flexibility in order to accommodate the broad range of scholarship and student interests found within our departments and centers. It will consist of three complementary components: 1) a university component consisting of an online program offered through the Office of Research Protections (ORP), 2) a CHHD component consisting of a series of interactive sessions aimed at the timely exploration of universal issues related to the responsible conduct of research, and 3) a departmental component consisting of approved content in discipline-specific research ethics and integrity. Consistent with University guidelines, all students will complete a minimum of ten (10) hours of SARI training, one-half (5 hours) of which must include the online university component taken in the first year of graduate study. The remaining five hours may be customized and distributed within the university-wide, college-wide or departmental offerings as determined by each student in consultation with his or her advisor. Doctoral students must meet the entire ten-hour minimum requirement prior to taking their candidacy examination while Master's students must fulfill the requirement in order to graduate.

### **University Component**

The SARI@PSU Portal (<http://www.research.psu.edu/training/sari>) offered by the Office of Research Protections provides access to the required online training program specifically designed for Penn State by the Collaborative Institutional Training Initiative (CITI: [www.citiprogram.org](http://www.citiprogram.org)). Information, teaching tools, and links to other resources to support SARI program activities are also provided. The CITI program offers both the Responsible Conduct of Research (RCR) and the Training on the Protection of Human Research Participants (IRB) courses. The RCR includes seven required modules and one elective module. The IRB consists of Biomedical (Biomed) and Social-Behavioral-Educational (SBE) modules. Based on the type of research you are conducting, students will be required to complete multiple pre-selected modules in addition to one or more elective modules. Either the RCR or IRB are acceptable; consult with your graduate program professor in charge for the departmental recommendation. Students should forward a copy of the certificate indicating that they successfully completed a CITI course to their graduate administrative support person for record-keeping purposes. Students

<sup>1</sup>Students in the MHA program are required to successfully complete the Penn State Health Insurance Portability and Accountability Act of 1996 (HIPPA) Training and the Family Educational Rights and Privacy Act (FERPA) Training.

may earn up to two hours of SARI credit from ORP sponsored RCR workshops and seminars toward the ten hour requirement.

*Rise Up: Research Integrity in Science and Engineering (BIOET 504)*, offered through the Rock Ethics Institute, is a 2 credit, pass/fail course introducing a broad view of research ethics. Completion of this course satisfies the five hour discussion-based SARI requirement.

### **Health and Human Development Component**

CHHD will offer three 100 minute RCR workshops per academic year, two during fall semester and a third during the spring term. Each workshop will be in the evening, beginning with a light meal or finger foods at 5:00 pm and then followed by an interactive, discussion-based session to run between 5:20 until 7:00 pm. Workshops will be open to all CHHD graduate students and will be announced college-wide approximately one month prior to the scheduled date. Attendance will be recorded using college forms specifically designed for SARI documentation. The form will specify the workshop attended, the total hours and dates of delivery of delivery and the signatures of student and course instructor to verify delivery and attendance.

The college component of the SARI program will focus on more universal issues related to ethical scholarship and the responsible pursuit of research irrespective of discipline. A non-comprehensive list of potential topics is provided below.

- Acquisition, management, sharing, and ownership of data
- Publication practices and responsible authorship
- Conflict of interest and commitment
- Research misconduct
- Peer review
- Mentor/trainee responsibilities
- Collaborative science
- Human subjects protections
- Animal welfare
- Whistleblowing
- Research ethics in global health

Workshops will be delivered by instructors trained by ORP staff in the effective delivery of RCR educational materials. Two to three trained instructors will direct each workshop. The typical format will include short introductory lectures and/or case study presentations with heavy doses of Socratic questioning, explorative breakout sessions either with the entire class, in small groups or in pairs and a final closing session to summarize findings and opinions.

### **Departmental Component**

The departmentally delivered component of the CHHD SARI program is intended to provide RCR instruction aimed at specific academic disciplines and/or domains of research. This component takes advantage of course content and program requirements already in existence in some HHD graduate programs. It is expected new qualified courses will be added as they are developed. To qualify for SARI credit hours, a course must explicitly include RCR material in its content as reflected by the course syllabus. The

number of hours devoted to RCR instruction must also be explicitly stated. Students wishing to use SARI approved course content to satisfy their SARI requirement will at the time of instruction procure, complete, and return a brief college form from the departmental graduate administrator. The form, the same as that used for college-wide workshops, will specify the course in question, the total hours and dates of RCR content delivery and the signatures of student and course instructor to verify delivery and attendance. The balance of college versus departmental SARI training will vary across academic units and individual students. In some college departments the amount of available RCR instruction will preclude the need for some students to attend college workshops. In other college departments, all students will be required to attend at least three college workshops due to the complete absence of departmental RCR training. Our long term goal is to more formally implement at least two hours of discipline-specific SARI training in all eight of our academic units. The following departmental graduate course offerings have been approved for use in the CHHD SARI program.

- Department of Biobehavioral Health

No courses that include RCR content at this time.

- Department of Communication Sciences and Disorders

Course #: CSD 500                      Credit hours devoted to RCR: 3 hours

Course name: *Research Methods in Communication Sciences and Disorders*

Instructor(s) of record: Carol Miller

Frequency of offering: Once per academic year

RCR content as described in syllabus:

“Ethical conduct of research” covers informed consent, voluntary participation, confidentiality, etc. “Authorship and citing” covers ethical issues related to writing and publication. In addition, students are required to address ethical considerations in two of their major assignments: they must prepare research proposals as teams, and one point in the rubric is to discuss ethical issues and protections; and they also must critique other teams' proposals, including how each team has handled the ethical issues. The instructor places the entire class in the context of evidence-based practice, and emphasizes to the students that EBP is an ethical issue.

- Department of Health Policy and Administration

No courses that include RCR content at this time.

- School of Hospitality Management

No courses that include RCR content at this time.

- Department of Human Development and Family Studies

Required training in Scholarship and Research Integrity in HDFS occurs in three ways:

1. First year student orientation (2 days in August) Hours devoted to RCR: 2

Instructor of record: E. Lefkowitz

Frequency of offering: Once per academic year; required of all 1<sup>st</sup> year incoming students

RCR content:

- Research assistantships (expectations, integrity, working with mentor)
- Teaching assistantships (expectations, serving as model for students, FERPA and confidentiality, working with instructor)
- Academic integrity (research ethics, classroom ethics, cheating, plagiarism, collaboration, faculty responsibilities)

2. Course #: HDFS 597A                      Credit hours devoted to RCR: 4

Course name: *First year orientation*

Instructor of record: E. Lefkowitz

Frequency of offering: Once per academic year; required of all 1<sup>st</sup> year graduate students.

RCR content as described in syllabus:

- Social expectations and professional interactions
- Advising relationships
- Presenting online presence and ethically navigating social media and other online platforms
- Research ethics (ethical treatment of human participants)

3. Course #: HDFS 515                      Credit hours devoted to RCR: 7

Course name: *Professional Issues in Human Development and Family Studies*

Instructor(s) of record: E. Lefkowitz

Frequency of offering: Once per academic year; required of all 2<sup>nd</sup> year graduate students.

RCR content as described in syllabus:

- General ethical principles in research
  - Ethical data management (violations of ethical data management, case studies, best practices)
  - Responsible reporting (Irresponsible reporting, interpreting/reporting statistical significance, preregistration of hypotheses)
  - Mentoring, authorship, and collaboration
  - Ethical issues in publishing & peer review (plagiarizing, self-plagiarizing, responsible peer review)
  - Academic freedom
- Department of Kinesiology

1. Course #: MCIBS 591                      Credit hours devoted to RCR: 5 hours

Course name: *Ethics in the Life Sciences*

Instructor(s) of record:

Frequency of offering: Fall and Spring Semesters

RCR content as described in syllabus:

- Animal Subjects
- Human Subjects/Participants
- Research Misconduct, Research Security, Governmental “Meddling”
- Mentor-Student Relationships, Whistleblowing, Challenges of Collaborative Research
- Authorship and Peer Review
- Diversity in the Sciences

2. Course #: KINES 530                      Credit hours devoted to RCR: 2 hours

Course Name:     *Experimental Design and Methodology in Kinesiology*

Instructor(s) of record: Robert B. Eckhardt

Frequency of offering: Spring Semesters

RCR Content as described in syllabus:

Attention will be given to hypothesis generation and testing, literature review, choosing a research problem, selection of appropriate methodologies and (where appropriate) instruments, as well as the writing of research reports and articles.

- Research Ethics – an overview
- Basic understanding of historical and philosophical basis of scholarly research

3. Course #: KINES 588                      Credit hours devoted to RCR: 2 hours

Course name: *Scientific Writing in Kinesiology*

Instructor(s) of record: W. Larry Kenney

Frequency of offering: Usually once per year, typically in the fall

RCR content as described in syllabus: Topics include mentoring; ethics, authorship, and scientific publications; human subjects and IRB interactions.

- Department of Nutritional Sciences

Course #: NUTR 520                      Credit hours devoted to RCR: 2 hours

Course name: *Readings in Nutrition*

Instructor(s) of record: B. Rolls

Frequency of offering: SARI credit for Spring Semester

RCR content as described in syllabus:

Purpose of course: The purposes of this course include:

1. To expose students to the depth and breadth of nutrition as a field of inquiry.
2. To nurture students' appreciation and understanding of research design, statistics, and research methodology.
3. To develop critical thinking and the analytic skills necessary to examine and appraise the nutrition research literature.
4. To provide students with the opportunity to learn effective presentation techniques (via both observation and personal experience).
5. To give students practice at delivering a professional seminar.
6. To provide all participants an opportunity to share their expertise and to question and discuss different perspectives relevant to current issues.
7. To provide an overview of the ethical issues encountered by research scientists in conducting research, analyzing data, and publishing study results (presented spring semester).

- Department of Recreation, Park and Tourism Management

1. Course #: HNDRE 575                      Credit hours devoted to RCR: 5 hours

Course name: *Ethical Issues in Human Dimensions of Natural Resources and the Environment*

Instructor(s) of record: Brad Woods

Frequency of offering: Once every other year

RCR Content as described in syllabus:

This course deals with ethical issues in human dimensions of natural resources and the environment. It approaches these issues from a practical viewpoint as opposed to a purely philosophical perspective. Integral to such an approach is the discussion of ethical issues surrounding management, use, conservation, and preservation of natural resources and the environment. Following the mission of Penn State's HDNRE program, this course is designed to investigate these issues through the "integration of separate disciplines." To accomplish this, course readings are drawn from a multitude of disciplines. This course also includes topics about the practice and conduct of research and scholarship. Many course readings and class discussions are either explicitly or implicitly related to The Office of Research Integrity's ten dimensions for responsible conduct of research, which include:

- Data acquisition, management, sharing, and ownership
- Conflict of interest and commitment
- Human subjects
- Research involving animals
- Research misconduct
- Publication practices and responsible authorship
- Mentor/Trainee responsibilities
- Peer review
- Collaborative science
- The role of the scientist/scholar as a responsible member of society and the environmental and societal impacts of scientific research and scholarship

2. Course #: RPTM 530                      Credit hours devoted to RCR: 2 hours

Course name: *Research Methods in Recreation, Park and Tourism Management*

Instructor(s) of record: Andrew Mowen

Frequency of offering: Fall semesters

RCR content as described in syllabus:

The topics covered in this course are intended to assist each student in preparing an independent research project and to facilitate an appreciation for and basic understanding of contemporary research in the field. The specific topics that cover RCR content are as follows:

- The Belmont Principles

- Research integrity. **Note:** *Students are asked to read a handout on the topic prepared by Penn State's Office of Research Protections prior to attending class.*
- Sample PRAMS submissions: **Note:** *While reviewing two separate submissions, the instructor points out and asks students to discuss key IRB requirements.*
- Questionable research practices (e.g., not retaining data or maintaining inadequate research records, unmerited credit for authorship, duplicate publications or the salami effect," refusal to share research materials or data, using inappropriate statistical methods, misrepresentation, poor supervision).

## Documentation

The professors in charge of graduate education in each of our eight academic units are responsible for proper documentation, oversight and system compliance. Records documenting student participation will be maintained by departmental graduate education administrative assistants. Beginning fall 2009 each student record/progress checklist will include the ten hour SARI requirement. Students should deliver a copy of the online CITI course and/or university RCR seminar documentation to their program administrator for record-keeping purposes. Signed forms for verifying attendance at college-wide workshops will be distributed to the departmental homes of those students attending to be entered into student records. SARI hours from approved departmental coursework will be documented internally using the same form. Academic units should submit tracking forms (via Angel) to ORP each year no later than June 15.

Approved January 20, 2009

Revised December 23, 2009 (addition of NUTRN 520)

Revised August 23, 2010 (addition of IBIOS 591)

Revised October 25, 2010 (addition of KINES 590)

Revised November 29, 2010 (addition of KINES 588, update University requirements and documentation)

Revised January 24, 2011 (addition of KINES 530) (added 2/21/13)

Revised September 6, 2011 (removal of HPA 511)

Revised September 20, 2012 (approved 2/27/12) (addition of HPA 835 for MHA students)

Revised August 5, 2013 (removal of KINES 590 at the request of the Kinesiology department)

Revised September 3, 2013 (MHA requirement clarification)

Revised October 2, 2013 (addition of RPTM 530)

Revised November 12, 2013 (addition of HDNRE 575)

August 29, 2014 Academic year changed in title

Revised May 20, 2015 (University – Update University online component, add Rock Ethics BIOET504; Departmental - Delete IBIOS597, HPA835; Add HDFS orientation week, HDFS597 for first year students; HDFS515 reduced RCR hours from 10 to 7; NUTRN to NUTR, and IBIOS to MCIBS due to curriculum changes)