

FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—COURSE CHANGE REQUEST¹

UGPC APPROVAL _____
 UFS APPROVAL _____
 SCNS SUBMITTAL _____
 CONFIRMED _____
 BANNER POSTED _____
 CATALOG _____

DEPARTMENT: BIOMEDICAL SCIENCE	COLLEGE: CES COLLEGE OF MEDICINE
COURSE PREFIX AND NUMBER: MS PROGRAM REQUIREMENT	CURRENT COURSE TITLE:
CHANGE(S) ARE TO BE EFFECTIVE (LIST TERM):	TERMINATE COURSE (LIST FINAL ACTIVE TERM):
CHANGE TITLE TO: CHANGE DESCRIPTION TO: Thesis-track Requirement: Responsible Conduct of Research Certification All Biomedical Science thesis students must receive certification of completion of the Responsible Conduct of Research program. The RCR program, which is offered jointly through the Graduate College and Division of Research, covers the nine instructional areas of RCR. <u>All four components are mandatory in order to receive certification of completion.</u>	CHANGE PREREQUISITES/MINIMUM GRADES TO*: CHANGE COREQUISITES TO*: CHANGE REGISTRATION CONTROLS TO: *Please list both existing and new pre/corequisites, specify AND or OR, and include minimum passing grade.
Attach syllabus for ANY changes to current course information.	
Should the requested change(s) cause this course to overlap any other FAU courses, please list them here.	Please consult and list departments that might be affected by the change(s) and attach comments. ³

Faculty contact, email and complete phone number:
 Mahyar Nouri-Shirazi, Ph.D., Associate Professor; email: mnourish@fau.edu; tel: 561-297-0935

Approved by: Department Chair: _____ College Curriculum Chair: _____ College Dean: _____ UGPC Chair: _____ Graduate College Dean: _____ UFS President: _____ Provost: _____	Date: _____ 11-7-12 11-7-12 11/7/12 _____ _____	<ol style="list-style-type: none"> 1. Syllabus must be attached; see guidelines for requirements: www.fau.edu/provost/files/course_syllabus.2011.pdf 2. Review Provost Memorandum: Definition of a Credit Hour www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf 3. Consent from affected departments (attach if necessary)
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Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.



Charles E. Schmidt College of Medicine
777 Glades Road
Boca Raton, FL 33431
(561) 297-2216
Fax: (561) 297-2519

November 7, 2012

MEMORANDUM

TO: FAU Graduate Programs Committee

FR: Mahyar Nouri-Shirazi, Ph.D., Chair
Graduate Program Committee

A handwritten signature in black ink, enclosed within a hand-drawn oval. The signature appears to be 'Mahyar Nouri-Shirazi'.

RE: Addition of RCR workshops to MS in Biomedical Science thesis-track degree requirement

The Graduate Program Committee in the CES College of Medicine approved a change to our MS thesis-track degree requirement making the completion of the Responsible Conduct of Research certification mandatory for all students. This addition is to ensure that all Biomedical Science research students have the same exposure to RCR information in a formal, systematic way and it supports our Learner Outcomes Plan of the FAU Assessment Plan.

University Catalog addition:

Thesis-track Requirement: Responsible Conduct of Research Certification

All Biomedical Science thesis students must receive certification of completion of the Responsible Conduct of Research program. The RCR program, which is offered jointly through the Graduate College and Division of Research, covers the nine instructional areas of RCR. All four components are mandatory in order to receive certification of completion.



Responsible Conduct of Research

Quality graduate education includes the responsible conduct of research (RCR). Florida Atlantic University (FAU) is committed to promoting RCR and maintaining high standards of ethics and accountability in research activities at FAU. The Division of Research and the Graduate College together provide RCR training and education for FAU graduate students.

Responsible conduct of research is defined as the practice of academic investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to research and other scholarly activities. Recent changes by the National Science Foundation (NSF) and the National Institutes of Health (NIH) requiring RCR training for all postdoctoral, graduate, and undergraduate students supported by NSF or NIH funding underscore the importance of the proper conduct of research.

Responsible conduct of research training for graduate students at FAU is provided in two ways:

1. CITI (Collaborative Inter-Institutional Training Initiative) online training
2. RCR Workshop series held each spring and fall semester at the Boca Raton campus

It is highly recommended that graduate students engaged in active research complete both the CITI online training and the RCR Workshop series. FAU graduate students working on funded research projects should check with their principal investigator to confirm RCR training requirements for their particular grant.

RCR Areas of Instruction

The nine instructional areas of focus for RCR education and training include:

- **Data Acquisition, Management, Sharing and Ownership.** Managing research data properly touches on trade secrets, patents, copyrights and intellectual property.
- **Conflict of Interest and Commitment.** The legal term “conflict of interest” spans behaviors and actions involving personal gain or financial benefit.
- **Human Subjects.** Numerous entities govern the use of human subject research ranging from safe practices to informed consent.
- **Animal Welfare.** The use of animals in experiments is an important research tool and must be conducted in a humane manner.
- **Research Misconduct.** In order to advance knowledge, research must be performed ethically and accurately.
- **Publication Practices and Responsible Authorship.** Properly preparing research findings for dissemination is an important facet of the responsible research process.
- **Mentor / Trainee Responsibilities.** Mentors are responsible for the guidance and development of their mentee to include academic, career, technical and ethical growth.
- **Peer Review.** Peer review refers to the process of ensuring research proposals and manuscripts meet established standards.
- **Collaborative Science.** In today’s technical world, most researchers collaborate with other institutions, agencies and private industry to share knowledge and funding.

The Office of Research Integrity, part of the U.S. Department of Health and Human Services, has numerous resources available online for each of the nine instructional areas of RCR education. Please click [here](#) to view available materials.

CITI Training in RCR

CITI – the Collaborative Inter-Institutional Training Initiative – provides access to courses that are designed to be used by institutions and organizations to provide comprehensive training in a variety of areas such as Institutional Review Board (IRB), Good Clinical Practices, Responsible Conduct of Research (RCR) and other areas.

Florida Atlantic University provides access to the CITI courses on the Responsible Conduct of Research (RCR) through partial funding by the Department of Health and Human Services, Office of Research Integrity.

CITI offers online training in RCR through five discipline-specific topics listed below. FAU graduate students need only complete **one** of the CITI course topics to meet RCR training requirements.

Biomedical Sciences

Social and Behavioral Sciences

Physical Sciences

Engineering

Scholarly Activities in the Humanities

Not sure which CITI course to take for RCR? Click on the CITI course topics to locate your degree program/major. If your degree program/major is listed, that CITI course will be best suited for your discipline. Please note this is simply a guide; your research might require a CITI course different than your area of study.

Each CITI course covers the following RCR topic areas: Research Misconduct, Data Management, Conflict of Interest, Collaborative Science, Responsible Authorship, Mentoring, Peer Review, Lab Animals, and Human Subjects.

To access the CITI RCR Training courses, follow these steps:

1. Go to www.citiprogram.org
2. As a new user, you will need to click Register Here to register
3. Select Florida Atlantic University from the Participating Institutions and click submit
4. Create a unique username and password and click submit
5. Enter your personal information (first name, last name, e-mail) and click submit
6. Continue entering additional information (gender, degree, etc.) and click submit
7. You should now be able to access the training courses menu. Please scroll down the page for a listing of the RCR Courses and select the course appropriate to your discipline.

You will have the opportunity to print a Training Certificate upon completion of the training course and exam. **Please keep an original copy for your records.**

RCR Workshops at FAU

The Graduate College, in partnership with the Division of Research, offers a series of workshops each fall and spring semester on the Responsible Conduct of Research for all currently-enrolled graduate students at FAU. The workshops are led by FAU faculty and cover the nine instructional areas of RCR.

Responsible Conduct of Research (RCR) is a **mandatory course for all students working on NSF or NIH-funded programs.**

- Sessions for fall are tentatively scheduled to take place on Fridays in September (Session 1) and Tuesdays in October (Session 2).

All four components are mandatory in order to receive certification of completion. You may choose classes from either Session 1 or Session 2 to work with your schedule as long as you complete all four mandatory components. Lunch will be provided at 11:45 at no cost. You must register in advance as seating is limited.

Note: All classes to be held in the Student Services Building, Room 132. Lunch served at 11:45. Workshop starts promptly at noon and ends at 1:50.

To obtain the most benefit from the RCR workshops, students should complete CITI online training prior to attending RCR workshops. Please note that CITI training need be completed only once and covers general RCR education. In conjunction with CITI training, FAU's RCR workshops offer more specific instruction and satisfy NSF and NIH requirements.

For questions about the RCR workshops at FAU, please contact pgarrido@fau.edu or 561-297-3624 (Graduate College).

Responsible Conduct of Research

NSF and NIH Responsible Conduct of Research (RCR) Training Requirements and Procedures

The National Science Foundation (NSF) and the National Institutes of Health (NIH) require that institutions offer programs and verify completion in Responsible Conduct of Research (RCR) training. These requirements are applicable to students, trainees, participants, scholars and postdoctoral fellows receiving grant support from these agencies. As a result of these requirements, the Graduate College and the Division of Research have developed and implemented a comprehensive training program to satisfy these requirements. NSF and NIH are seen as the first in what is expected to be a general movement toward increased RCR oversight from both federal and non-federal

sponsors.

National Science Foundation

Effective January 4, 2010, the NSF requires that, at the time of proposal submission to NSF, a proposing institution's Authorized Organizational Representative must certify that the institution has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research (RCR) to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. NSF award conditions stipulate that institutions are responsible for verifying that undergraduate and graduate students, and postdoctoral researchers supported by NSF to conduct research, have received RCR training. www.nsf.gov/bfa/dias/policy/rcr.jsp

National Institutes of Health

NIH requires that all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive RCR instruction. This policy took effect for all new (Type 1) and renewal (Type 2) applications submitted on or after January 25, 2010, and for all continuation (Type 5) applications with deadlines on or after January 1, 2011. Each application type has specific requirements for the inclusion of the RCR training plan or related information. grants1.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html

Collaborative Institutional Training Initiative (CITI) RCR Training

Effective March 1, 2010, FAU requires evidence of Collaborative Institutional Training Initiative (CITI) RCR training for all Personnel Action Forms (PAFs) and Electronic Personnel Action Forms (EPAFs) for students (undergraduate and graduate) and postdoctoral fellows paid from federal or federal flow through accounts (organizational codes for all federal and federal flow through accounts are identified ending in 41 or 42). CITI is an online training program that FAU will use for various compliance training requirements.

FAU Implementation Process

Prior to submitting a student or postdoctoral PAF or EPAF form March 1, 2010 or after that includes a federal or federal flow through account, the student or postdoctoral fellow's department must take the following steps:

1. Advise the student or postdoctoral fellow that they must complete the CITI RCR training
2. Obtain and keep on file a copy of the student or postdoctoral fellow's CITI training certificate
3. Indicate in the comments section of the PAF/EPAF that the "CITI RCR training certificate is on file in the department"
4. Add Research Accounting to the PAF/EPAF approving queue
5. The final approver in the college Dean's office must check to see that the department has completed step 3 above before forwarding the PAF/EPAF to Research Accounting. PAFs/EPAFs without the CITI RCR training certificate confirmation will be returned to the submitting college.

The Division of Research and the Graduate College together provide RCR training and education for FAU graduate students. For more information regarding RCR Training please visit the [Graduate College](#).