

LONG SIGNATURE SHEET



UNC CHARLOTTE

Proposal Number: GRAD 2-2-12

Proposal Title Professionalism and the Responsible Conduct of Research

Originating Department Graduate School

TYPE OF PROPOSAL: UNDERGRADUATE _____ GRADUATE UNDERGRADUATE & GRADUATE _____
 (Separate proposals sent to UCCC and Grad. Council)

DATE RECEIVED	DATE CONSIDERED	DATE FORWARDED	ACTION	SIGNATURES
		2/7/12	Approved	<u>DEPARTMENT CHAIR</u> [print name here] Katherine Hall-Hartley
		2/8/12	Approved	<u>COLLEGE CURRICULUM COMMITTEE CHAIR</u> Print name: Susan Sell
			Approved	<u>COLLEGE FACULTY CHAIR</u> Print name:
		2/24/2012	Approved	<u>COLLEGE DEAN</u> Print name here if signing on behalf of Dean:
			Approved	<u>UNDERGRADUATE COURSE & CURRICULUM COMMITTEE CHAIR</u> (for undergraduate courses)
2/26/12	3/13/12	7/27/12	Approved	<u>GRADUATE COUNCIL CHAIR</u> (for graduate courses)
			Approved	<u>FACULTY GOVERNANCE SECRETARY</u> (noting Faculty Council approval on Consent Calendar)
				<u>FACULTY EXECUTIVE COMMITTEE</u> (if decision is appealed)

GRAD2/2/12

I. LONG FORM COURSE PROPOSAL

University of North Carolina at Charlotte

New Graduate Course

Proposal from the Graduate School

Title: *Responsible Conduct of Research*

II. Content of Proposal

- a. Summary: The Graduate School proposes this course, GRAD 8002/6002, be required of doctoral students in STEM disciplines and students in PSM programs, where the conduct of research is likely to involve laboratories, animals or human subjects. Graduate students receiving support through NIH or NSF grants will also be required to take this course. While this training will meet the institutional and grant-related requirements for Responsible Conduct of Research (RCR) education (except for students already satisfying such requirements via another course, as discussed below), the intent is to provide context to research training. The course will be open to master's students and doctoral students in other disciplines, as space allows.

- b. Proposed Catalog Copy: (2 credits) GRAD 8002/6002 is designed to benefit graduate students across the university and is an introduction to several aspects of a successful professional career emphasizing research. The focus is on practical skills and critical thinking about the responsible conduct of research, highlighting the nine areas of instruction required by the National Institutes of Health (NIH) and National Science Foundation (NSF). The course will feature several different speakers with expertise in various areas of professionalism and research ethics. Spring Semester - Friday afternoons.

III. Justification

- a. This course responds to the requirements of the Office of Research Integrity (ORI)/NIH/NSF and the Research Services Office for face-to-face instruction on the Responsible Conduct of Research. The course is intended for doctoral students in the sciences, but can accommodate master's students, as the course numbering indicates. This course will be part of the comprehensive approach to the responsible conduct of research at UNC Charlotte.

- b. Impact - This course will be required for STEM doctoral students during their first year of coursework. The intent is to ensure that students

conducting research understand, not just the rules, but the context in which these expectations apply. Because some master's students will conduct research, this course is open to master's level students. Professional science master's students (PSM) in relevant programs will be required to take the course in their first year of coursework.

- c. Other courses – While there are some courses offered on campus that address research ethics, it is not clear that any of the existing courses cover the content required by NIH/NSF. By requiring the course for doctoral students in the STEM disciplines, we anticipate that approximately 80 students will enroll annually. A program could request that this requirement be waived for their students provided that a similar course covering very similar content is required within their program. One example might be in the Biology Department, where students are currently required to take “Scientific Integrity and Responsible Conduct of Research in the Biological and Behavioral Sciences” (PHIL 6240/8240). To request a waiver, a program would provide a syllabus of the course and indicate where each of the nine RCR areas is addressed. If a particular topic is not relevant to a discipline (i.e. animal research) then the program can make the argument that that topic does not need to be covered in their course.
- d. Catalog copy for doctoral programs and PSMs would be edited to include this requirement.

IV. Resources Required

- a. Personnel – Initially, this course would be taught by a team of faculty from various programs. Dr. Lisa Rasmussen would serve as the IOR for the initial year of the course. Faculty affiliates from the Center for Graduate Life would supplement the teaching. For the first semester, this would increase the teaching load of several faculty members. However, by limiting each to a couple of class sessions, this demand is manageable. Eventually, the Center for Graduate Life will hire a faculty member to deliver this and other courses.
- b. Faculty committed to teaching in this course include:
Dr. Lisa Rasmussen, Dept. of Philosophy
Dr. Suzanne Boyd, Dept. of Social Work & ISC Faculty Research Scientist
Dr. Anita Blanchard, Dept. of Psychology
Dr. Susan Sell, Bioinformatics and the Graduate School
Invited faculty include: Dr. Yvette Huet, Department of Biology; Dr. Banita Brown, Department of Chemistry; Dr. Jay Wu, Dept. of Civil

Engineering; Dr. Shawn Long, Dept. of Communication Studies; Dixie Airey, Research and Federal Relations; Lesley Brown, Research and Federal Relations.

- c. The course will be taught in a lecture hall, with breakout space reserved as needed.
- d. A smart podium would be needed, but no other computer support is required.
- e. No A/V support needed
- f. Additional costs are expected to be minimal. (e.g. some copying may be necessary.)
- g. The Center for Graduate Life budget will absorb reasonable costs associated with this course.

V. Consultations

- a. Library consultation (attached)
- b. List other departments consulted in the writing of this proposal and dates of consultation
 - 1. Discussion meeting with Dr. Bob Wilhelm and the Research and Federal Relations staff about the need to develop and offer required training date, Spring, 2011 and Fall, 2011
 - 2. Discussions with Department of Philosophy faculty regarding existing course and the resources available to support this new course (multiple dates beginning in 2008).
 - 3. A survey of doctoral program directors was conducted in Fall of 2011. Approximately half of the directors support the creation of this course, while others believe RCR is addressed through existing courses (see attached)

VI. Initiation of the Proposal

- a. The Graduate School is initiating this proposal after consultation with the Office of Research and Federal Relations. Additional conversations with Dr. Larry Mays and Provost Lorden indicated support for a required course.

VII. Attachments

- a. Letters of support
- b. Survey of Doctoral Program Directors

Professionalism and the Responsible Conduct of Research
GRAD 8002/6002
Spring 2013
UNC Charlotte

Course Description: Designed to benefit graduate students throughout the university, this course is an introduction to several aspects of a successful professional career. The focus is on practical skills and critical thinking about the responsible conduct of research, highlighting the nine areas of instruction required by the National Institutes of Health (NIH) and National Science Foundation (NSF)¹. The course will feature several different speakers with expertise in various areas of professionalism and research ethics.

Pre- or Co-requisites: Students must be enrolled in a master's or doctoral degree program. Doctoral students in STEM disciplines have priority enrollment.

Course Objectives:

By the end of this course, students should:

- 1) be able to describe ethical issues arising in the nine areas of responsible conduct of research required by the National Science Foundation and National Institutes of Health (see footnote);
- 2) be aware of and able to describe the different career paths in academia and the standards for success in academia;
- 3) have a good understanding of the practical skills required in academia, including presenting one's ideas, offering peer review and critique, preparing publications, and compiling a CV and other professional documents;
- 4) have a good general understanding about the process and standards of grant-writing;
- 5) be able to discuss issues of diversity as they arise in academia; and
- 6) have a good general understanding of copyright and other forms of intellectual property.

Instructional Method: Lecture and small group discussion, with some on-line components through Moodle.

Student Evaluation/ Grading Methods:

* 30% of the course grade will be based on attendance, which will be monitored via Moodle in a computer-equipped classroom. Attendance is required, but each student is allowed up to 3 absences without penalty.

* 50% of the course grade will be based on in-class comprehensive quizzes based on material discussed in class during that course period and the previous period. Quizzes will be taken on Moodle in a computer-equipped classroom.

¹ The nine areas are: 1. Data Management; 2. Animal Subjects in Research and Societal Impacts; 3. Human Subjects of Research; 4. Conflict of Interest; 5. Peer Review; 6. Collaboration; 7. Publication/Autorship; 8. Mentorship; 9. Research Misconduct.

* 20% of the course grade will be based on a final reflection paper in which students reflect on what lessons for their professional development and responsible conduct of research they plan to take from the course. (Grading will be based on thoroughness, depth of consideration, and effort, and given one of the following scores: Excellent, Good, Satisfactory, or Unsatisfactory.)

Grading scale:

90-100%: A

80-89%: B

70-79%: C

Below 70: U

Required texts: Students are expected to download the free copy of *Introduction to the Responsible Conduct of Research*, <http://ori.hhs.gov/documents/rcrintro.pdf>; readings will be available via course reserve at Atkins and/or via the Moodle page for the course.

Proposed Weekly Schedule (Subject to change):

August 24: Introduction

Included: Introduction to course and syllabus; Introduction to Center for Graduate Life - to include pre-test

Lecturer: Dr. Lisa Rasmussen & Dr. Katherine Hall-Hertel

August 31: Mapping Your Career: Setting Goals and Learning What it Takes to Achieve Them

Included: Introduction to possible career paths; leadership discussions; the three areas of academic success (teaching/scholarship/service)

Lecturer: Dr. Tom Reynolds

September 7: Practical Skills

Included: Publishing; CV and Resume Writing; Communication (written/oral/public/electronic/social media)

Lecturer: Dr. Suzanne Boyd

September 14: Practical Skills Continued

Included: Diversity, Social Justice and Societal Impact in Education

Lecturer: TBD

September 21: Practical Skills Continued

Included: Data Management (**RCR Area 1**); Authorship/Credit (**RCR Area 7**); Collaboration (**RCR Area 6**)

Lecturer: Dr. Lisa Rasmussen and faculty to be named

September 28: Topics in Professionalism: Conflict of Interest (**RCR Area 4**) and Commitment

Lecturer: Dr. Lisa Rasmussen

October 5: Topics in Professionalism: Grantsmanship

Lecturer: Leslie Brown

October 12: Topics in Professionalism: Professional Critique & Peer Review (**RCR Area 5**)

Lecturer: TBD

October 19: No Classes, Spring break

October 26: Topics in Professionalism: Copyright and Intellectual Property

Lecturer: Peggy Hoon

November 2: Topics in Professionalism: Leadership and Mentoring (RCR Area 8)

Lecturer: Center for Graduate Life Faculty Affiliate; Drs. Suzanne Boyd and Anita Blanchard

November 9: Topics in Responsible Conduct of Research: Research Misconduct (RCR Area 9)

Lecturers: Dr. Lisa Rasmussen and Dixie Airy

November 16: Plagiarism - TBD

November 23: Thanksgiving Break

November 30: Topics in Responsible Conduct of Research: Human Subject Research (RCR Area 3) Speaker: Dr. Lisa Rasmussen

December 7: Topics in Responsible Conduct of Research: Animal Subject Research (RCR Area 2)

Lecturer: TBD

December 14 : Exam week – Post-test; Papers due; Course Evaluations; Wrap-up

APPLICABLE UNIVERSITY POLICIES

1. Academic Integrity

Academic honesty and integrity are essential to the existence and growth of an academic community. Without maintenance of high standards of honesty, members of the instructional faculty are defrauded, students are unfairly treated, and society itself is poorly served. Maintaining the academic standards of honesty and integrity is ultimately the formal responsibility of the instructional faculty; and this responsibility is shared by all members of the academic community.

All UNC Charlotte students have the responsibility to be familiar with and to observe the requirements of The UNC Charlotte Code of Student Academic Integrity (see the Catalog). This Code forbids cheating, fabrication or falsification of information, multiple submission of academic work, plagiarism, abuse of academic materials (such as Library books on reserve), and complicity in academic dishonesty (helping others to violate the Code). Any further specific requirements or permission regarding academic integrity in this course will be stated by the instructor, and are also binding on the students in this course. Students who violate the Code can be punished to the extent of being permanently expelled from UNC Charlotte and having this fact recorded on their official

transcripts. The normal penalty is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to “U.” If you do not have a copy of the Code, you can obtain one from the Dean of Students Office or access it online at <http://www.legal.uncc.edu/policies/ps-105.html> Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty they become aware of to the course instructor who is responsible for dealing with them.

2. Disability Services: Students with documented disabilities are eligible to receive assistance from the Office of Disability Services located in Fretwell 230.

3. Diversity: UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

4. IT Needs: UNC Charlotte students may utilize the computer labs at various sites across campus. For information on locations of computer labs and equipment availability, call 547-3100 and select option one (1) or check UNC Charlotte on the World Wide Web: <http://www.uncc.edu/lis>.

5. Code of Student Responsibility: The primary purposes for the imposition of discipline in the University setting are to protect the campus community and to maintain an environment conducive to learning. Consistent with those purposes, efforts also will be made to foster the personal and social development of those students who are held accountable for violations of University regulations. The complete code is available at: <http://legal.uncc.edu/policies/ps-104.html>



UNC CHARLOTTE
J. Murrey Atkins Library

Consultation on Library Holdings

To: Katherine Hall-Hertel
From: Frada Mozenter
Date: September 6, 2011
Subject: GRAD8002/6002

Summary of Librarian's Evaluation of Holdings:

Evaluator: Frada Mozenter Date: September 6, 2011

Please Check One:

- Holdings are superior _____
Holdings are adequate _____ X _____
Holdings are adequate only if Dept. purchases additional items. _____
Holdings are inadequate _____

Comments:

I support this proposal in its general form. It is noted that professors in a number of disciplines will be teaching this course. There is no specificity as to what those individual courses will entail or what type (if any) research using Library resources will be involved. Thus, I suggest that as courses are designed, and if library resources are needed, the professors check with the appropriate library liaison to evaluate holdings.

Frada L. Mozenter
Evaluator's Signature

September 6, 2011
Date

February 22, 2012

Dr. Thomas L. Reynolds
Associate Provost and Dean of the Graduate School
UNC Charlotte

Dear Tom:

I write to express my strong and enthusiastic support for your proposal for a new graduate course on the *Responsible Conduct of Research* (GRAD 8002/6002). The course will help UNC Charlotte address an important area of graduate education and will help us ensure we are complying with federal regulations that require us to provide such training to graduate students.

The America Competes Act, signed into law in 2007, requires that institutions receiving awards from the National Science Foundation (NSF) provide training in the responsible conduct of research (RCR), survival skills, and research ethics. The National Institutes of Health (NIH) have long had a requirement that every NIH-supported trainee receive RCR instruction in the following areas: conflict of interest, responsible authorship, policies for handling misconduct, data management, data sharing, and policies regarding the use of human and animal subjects. NIH further stipulates that online instruction is not sufficient to meet this requirement. NIH requires “[s]ubstantial face-to-face discussions among the participating trainees; [and] a combination of didactic and small-group discussions (e.g. case studies).” Online training is to be used as a supplement only.

Formalizing our instruction in the norms that govern effective research practices will strengthen graduate education at the University. While I understand that this course will initially be required only for PhD students in the STEM disciplines and for Professional Science Master’s students, I believe that we should work to eventually require this course for all of our graduate students.

Sincerely,



Robert G. Wilhelm, Ph.D.
Vice Chancellor for Research and Economic Development
Executive Director, Charlotte Research Institute
Professor of Mechanical Engineering and Engineering Science



UNC CHARLOTTE
College of Computing and Informatics

Department of Bioinformatics and Genomics

9201 University City Blvd, Charlotte, NC 28223-0001
t/ 704.687.8541 www.bioinformatics.uncc.edu

February 14, 2012

Dean Thomas Reynolds
The Graduate School
University of North Carolina at Charlotte

Dear Tom:

I wholeheartedly endorse the development of a graduate course in the Responsible Conduct of Research (GRAD 6002/8002) under the direction of Dr. Lisa Rasmussen. As you are aware, when we presented our proposal for the Ph.D. in Bioinformatics and Computational Biology to the GA Graduate Council in Chapel Hill, the most pointed questions revolved around how we would meet the obligation to meet the NIH/NSF requirements in this area. We received two very clear messages. One was that our original plan to use on-line RCR training was unacceptable, and the second was that the face-to-face instruction must specifically (and demonstrably) address the nine RCR areas required by NIH and NSF. It is quite clear to me that proposals for any new graduate STEM degrees must include a course like GRAD 6002/8002) in order to be approved.

For us, the only RCR training option (other than creating another course) was Dr. Rasmussen's PHIL 6240/8240, which is geared toward Biology and Psychology students. While this is a very good course, an RCR course with broader appeal to the STEM disciplines is a better idea, and the fact that the proposed course is only 2 credit hours means that it will be a better fit for many students.

I am delighted to see the GRAD 6002/8002 proposal. I only wish it had been in existence when I faced the GA Graduate Council two years ago.

Sincerely,

A handwritten signature in black ink, appearing to read "Lawrence Mays". The signature is fluid and cursive, with a large initial "L" and "M".

Lawrence Mays, Ph.D.
Professor and Chair

RCR Survey Results 1/18/2012

Program	Main method for addressing RCR	Interest in 1-2hr course for students	Interest in info for Faculty
Health Psychology	Dedicated courses, integration	perhaps	no
Criminal Justice and Criminology	Optional and integration	yes	no
Special Education	dedicated courses, mentoring	no	yes
Counseling	integration, informal	no	yes
HSR	dedicated course, as defined not relevant to program	perhaps	no response
Anthropology, Gerontology	informal, integration	perhaps	no
	informal	perhaps	yes
PHS/MSPH	online, integration	no	yes
English	informal	perhaps	no
Evolutionary Biology and Genomics	informal, optional courses	yes	yes
Kinesiology	informal, optional courses	yes	no
Urban Design	informal	no	yes
MDSK MAT - SECD MAT - MDLG	informal, not relevant	perhaps	no
	informal, optional courses	perhaps	yes
Chemistry	informal, integration	no	yes
Social Work	on-line	no	yes
INES	informal, integration	perhaps	yes
	informal, optional courses	no	no

Philosophy, Cert. Applied Ethics, Ethics and Applied Philosophy	Informal, optional courses	yes	yes
Biology	Informal, on-line, dedicated course	perhaps	yes
History	informal, integration in optional cou	no	yes

Legend
integration-information incorporated in existing courses
program interested in additional support for students and faculty
program interested in additional support for <i>either</i> students <i>or</i> faculty